DRAFT ENVIRONMENTAL IMPACT REPORT

SAND CANYON RESORT PROJECT
STATE CLEARINGHOUSE NUMBER 2018101039

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NOVEMBER 2020

Printed on 30% post-consumer recycled material.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
2016 RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
AFY	acre-feet per year
ANSI	American National Standards Institute
AQMP	Air Quality Management Plan
BMP	best management practice
C&D	construction and demolition
C&DMMP	Construction and Demolition Materials Management Plan
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFP	California Fully Protected
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historical Research Information System
City	City of Santa Clarita
CLWA	Castaic Lake Water Agency
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act

Acronym/Abbreviation	Definition
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FINDS	Facility Index System/Facility Registry System
FTA	Federal Transit Authority
GHG	greenhouse gas
GSP	Groundwater Sustainability Plan
GWP	global warming potential
HAP	hazardous air pollutant
HAZNET	Facility and Manifest Data
HBW	home-based work
HMS	Los Angeles County Hazardous Materials Site Database
HRA	health risk assessment
in/sec	inches per second
IRWMP	Integrated Regional Water Management Plan
kBTU	thousand British thermal units
kWh	kilowatt-hour
LACFD	Los Angeles County Fire Department
LACM	Natural History Museum of Los Angeles County
LACSD	Los Angeles County Sanitation District
LASD	County of Los Angeles Sheriff's Department
LCFS	Low Carbon Fuel Standard
L_{eq}	noise equivalent level
LID	Low Impact Development
LOS	level of service
LST	localized significance threshold
MEIR	maximally exposed individual resident
MEISR	maximally exposed individual sensitive receptor
mgd	million gallons per day
MM	Mitigation Measure
MMT	million metric tons
MPO	Metropolitan Planning Organization
MS^4	municipal separate storm sewer system
MT	metric tons
Mw	moment magnitude
N^2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards

Acronym/Abbreviation	Definition
NAHC	Native American Heritage Commission
NHTSA	National Highway Traffic Safety Administration
NHTSA	National Highway Traffic Safety Administration
NO^2	nitrogen dioxide
NOP	Notice of Preparation
NO_x	oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Administration
PGA	peak ground acceleration
PM_{10}	particulate matter with an aerodynamic diameter equal to or less than 10 microns
$PM^{2.5}$	particulate matter with an aerodynamic diameter equal to or less than 2.5 microns
ppm	parts per million
PPV	peak particle velocity
project	Sand Canyon Resort Project
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RFS	renewable fuel standard
RMS	root mean square
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SCT	City of Santa Clarita Transit
SCV Water	Santa Clarita Valley Water Agency
SCVCTM	Santa Clarita Valley Consolidated Traffic Model
SGMA	Sustainable Groundwater Management Act
SLF	Sacred Lands File
SLIC	Spills, Leaks, Investigations and Cleanup Database
SMBMI	San Manuel Band of Mission Indians
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SO_x	sulfur oxides
SR	State Route
SRA	source receptor area
SRRE	Source Reduction and Recycling Element
SSC	California Species of Special Concern

Acronym/Abbreviation	Definition
SSUSD	Sulphur Springs Union School District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TCR	tribal cultural resource
TIA	Traffic Impact Analysis
TISG	Caltrans Draft Transportation Impact Study Guide
TMDL	Total Maximum Daily Load
UDC	Unified Development Code
UST	underground storage tank
UWMP	Urban Water Management Plan
VCP	vitrified clay pipe
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	waste discharge requirement
WRP	Water Reclamation Plant
WSHUHSD	William S. Hart Union High School District
ZEV	zero-emissions vehicle

1 Executive Summary

This section provides a summary of the Draft Environmental Impact Report (EIR) for the proposed Sand Canyon Resort Project (project). Included in this summary are areas of known controversy and issues to be resolved, a summary of project alternatives, a summary of all project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

1.1 Document Purpose

This Draft EIR was prepared by the City of Santa Clarita (City), as lead agency, to inform decision makers and the public of the potential significant environmental impacts associated with the proposed project. This Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) Statute (California Public Resources Code, Section 21000 et seq.) and Guidelines (14 CCR 15000 et seq.) published by the Public Resources Agency of the State of California.

The purpose of this Draft EIR is to focus the discussion on those potential impacts on the environment of the project that the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

1.2 Document Organization

This EIR is organized as follows:

Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and provides a summary of the proposed project and the project alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in the EIR along with the associated mitigation measures proposed to reduce or avoid each impact.

Chapter 2, Introduction, serves as a forward to the EIR, introducing the project, the applicable environmental review procedures, and the organization of the EIR.

Chapter 3, Project Description, provides a thorough description of the setting, objectives, characteristics, operation, and construction of the proposed project and required discretionary approvals.

Chapter 4, Environmental Analysis, describes the potential environmental effects of the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 4 is organized by 17 environmental issue areas as follows:

- Aesthetics
- Air quality
- Biological resources
- Cultural and tribal cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Noise
- Population and housing

- Public services
- Recreation
- Transportation
- Utilities and service systems
- Wildfire

For each environmental issue area, the analysis and discussion are organized into subsections as described below:

- **Environmental Setting –** This subsection describes the physical environmental conditions in the vicinity of the proposed project at the time of publication of the Notice of Preparation (NOP). The environmental setting establishes the baseline conditions by which the City will determine whether specific project-related impacts are significant.
- **Regulatory Framework –** This subsection describes the laws, regulations, ordinances, plans, and policies applicable to the environmental issue area and the proposed project.
- **Thresholds of Significance –** This subsection identifies a set of thresholds by which the level of impact is determined.
- **Impact Analysis –** This subsection provides a detailed analysis regarding the environmental effects of the proposed project and whether the impacts of the proposed project would meet or exceed the thresholds of significance.
- **Mitigation Measures –** This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse project impacts.
- **Level of Significance After Mitigation –** This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.

In addition to the subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

Chapter 5, Cumulative Effects, discusses the cumulative effects of the project in combination with the effects of other projects in the vicinity.

Chapter 6, Other CEQA Requirements, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed project, growth-inducing impacts associated with the proposed project, and potential secondary effects of mitigation measures included for the proposed project.

Chapter 7, Alternatives, discusses alternatives to the proposed project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 7 includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 8, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed project, as listed in the Table of Contents.

1.3 Project Location

The 77-acre project site collectively consists of the proposed resort site, which is approximately 75 acres in size and is located at 27734 Sand Canyon Road at the northeast corner of Sand Canyon Road and Robinson Ranch Roach, south of State Route 14 in the Sand Canyon area of the City, as shown in Figure 3-1, Project Location, and a 1.9-acre detention basin site located south of the proposed resort site. The City is located approximately 35 miles north of the City of Los Angeles. Specifically, the project site is located in Township 4 North, Range 15 West, Sections 23 and 24, as shown on the U.S. Geological Survey 7.5-minute Mint Canyon Quadrangle topographic map. The project site is currently vacant and undeveloped but was formerly part of the Mountain Course within the Robinson Ranch Golf Course.

1.4 Project Description

1.4.1 Project Overview

In an effort to create a premiere golf resort destination in northern Los Angeles County, the project applicant is proposing to replace existing open space that was formerly the Mountain Course of the Robinson Ranch Golf Course with a new resort and spa consisting of a hotel with a three-story building; a spa garden inn within three three-story buildings; villas associated with the hotel (23 buildings); three restaurants; a spa/gym/salon; conference and ballroom space; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, and a nine-hole "chip and putt" golf course; and a total of 400 new parking stalls, including 18 parking spaces in villa garages. The project also includes the expansion of the existing 1-acre off-site detention basin to approximately 2 acres in size.

1.4.2 Project Objectives

The primary objectives of the proposed project include the following:

- Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.
- Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.
- Provide additional dining, spa, and commercial sports and recreational opportunities for Santa Clarita residents.
- Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.
- Provide publicly accessible open spaces, including natural and active open space areas and pedestrian pathways within the project.
- Provide a publicly accessible pedestrian network through the project site.
- Incorporate environmental sustainability features into the project design, including the installation of solar panels, and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.
- Improve upon and expand high-quality meeting and conference spaces within the City of Santa Clarita.

1.5 Areas of Known Controversy

In accordance with the CEQA Guidelines, an NOP was distributed on October 17, 2018, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City planned to prepare an EIR and to solicit input on the scope and content of the EIR. Approximately 60 copies of the NOP were distributed and over 30 written comment letters were received from various agencies, organizations, and individuals. These letters and the NOP are included in Appendix A.

A scoping meeting was held at the City of Santa Clarita City Hall on October 30, 2018. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed project. Approximately 60 people attended the scoping meeting. The public comments, questions, and concerns that were received at the scoping meeting generally included the following areas:

- Aesthetics – changes to existing visual character and nighttime lighting
- Air quality – emissions during construction and from operational traffic
- Biological resources – disruption in animal travel patterns, nighttime lighting impacts to wildlife movement, impacts to sensitive wildlife and vegetation, loss of oak trees
- Hazards and hazardous materials – wildland fire, emergency evacuation routes becoming jammed
- Hydrology and water quality – water quality conditions beneath the site
- Land use and planning – change from Open Space general plan and zoning designations, consistency with the Sand Canyon Special Standards District
- Noise – construction noise and noise increases from operational traffic, noise from weddings and events
- Public services – additional demands for police and fire services
- Recreation – loss of recreational open space
- Transportation – event traffic, adequate parking, bicycle/pedestrian safety along Sand Canyon Road, equestrian safety along Sand Canyon Road, emergency evacuation along Sand Canyon Road, cut-through traffic on Sand Canyon Road, traffic on Highway 14, additional/secondary access to the project site
- Wildfire – the project site burned in 2016 during the Sand Fire, and during this fire, residents of Sand Canyon had a difficult time evacuating the community due to congestion along Sand Canyon Road

Following the initial NOP and scoping period, modifications were made to the project and a Revised NOP was prepared and circulated. The Revised NOP was published on April 2, 2019, and the second scoping comment period closed on May 2, 2019. Approximately 70 additional comment letters were received during the second scoping period raising similar concerns. These letters and the Revised NOP are also included in Appendix A.

This EIR focuses on all potential environmental impacts, including the comments received in response to the NOP and Revised NOP.

1.6 Required Permits and Approvals

The City is the lead agency for the proposed project pursuant to CEQA Guidelines Section 15367. The proposed project would require a number of permits and approvals by the City, listed as follows:

- Tentative Tract Map No. 78248 to subdivide the project site from one lot into four lots
- Conditional Use Permit 18-001 for new development in the Planned Development (PD) overlay zone, building heights greater than 35 feet, and grading in excess of 100,000 cubic yards of earth
- Development Review 18-003 for the proposed physical layout and building designs, styles, and forms of the project
- Landscape Plan Review 18-003 for the proposed project landscaping
- Oak Tree Permit (Class 4) 18-001 for encroachment or removal of 21 protected oak trees
- Minor Use Permit 19-028 for a shared parking agreement
- Zone Change 18-001 to change the zone from Open Space (OS) to Community Commercial (CC) for two of the four proposed lots
- General Plan Amendment 18-002 to change the general plan designation from Open Space (OS) to Community Commercial (CC) for two of the four proposed lots
- Hillside Review (Class 4) 19-001 for development projects on a hillside with average cross slopes of 10% or more
- EIR 18-001 certification to disclose any significant environmental impacts of the proposed project

1.7 Summary of Environmental Impacts and Mitigation Measures

Table 1-1 provides a summary of the impact analysis related to the project. Table 1-1 identifies a summary of the significant environmental impacts resulting from the project pursuant to the CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4 of this Draft EIR. Table 1-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
AES-1. Would the project have a substantial adverse effect on a scenic vista?	Less than Significant	N/A	N/A
AES-2. Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact	N/A	N/A
AES-3. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) In the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant	N/A	N/A
AES-4. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant	N/A	N/A
AES-5. Would the project result in changes to the topography of a Primary or Secondary Ridgeline?	Less than Significant	N/A	N/A
Air Quality			
AQ-1. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	N/A	N/A
AQ-2. Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
federal or state ambient air quality standard?			
AQ-3. Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant	**MM-AQ-1**. During project construction, project's construction contractor shall adhere to the following measures to reduce diesel particulate emissions, including, but not limited to: a. All construction equipment greater than 75 horsepower shall be equipped with Tier 4 Interim diesel engines or better. b. The engine size of construction equipment shall be the minimum size suitable for the required job. c. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any one time. d. Construction equipment shall be maintained in tune per the manufacturer's specifications. e. The prime contractor will provide the City of Santa Clarita with verification of equipment type used during construction.	Less than Significant
AQ-4. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	N/A	N/A
AQ-5. Would the project exceed the most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook"?	Potentially Significant	See **MM-AQ-1**.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Biological Resources			
BIO-1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant	**MM-BIO-1. Special-Status Wildlife** Beginning no more than 2 weeks prior and ending no more than 3 days prior to ground-disturbing construction at the project site, pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species, shall be conducted by a qualified biologist and submitted to the City of Santa Clarita Planning Division prior to commencement of any ground or vegetation disturbance. The pre-construction surveys shall incorporate appropriate methods and timing to detect the special-status wildlife species that could potentially occur at the site, as well as appropriate methods to identify and relocate potentially occurring San Diego desert woodrats and their nest materials, if this species is determined to be present. If a special-status species is found, project activities shall avoid disturbing the special-status species. If avoidance is not feasible, these species shall be captured, when possible, and transferred to adjacent appropriate habitat and location where they would not be harmed by project activities, preferably within the open space areas either on site or directly adjacent to the project area. Only a California Department of Fish and Wildlife (CDFW) approved biologist shall perform this. The CDFW and the City of Santa Clarita Planning Division shall be	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		formally notified and consulted regarding the presence of these species on site. If a federally listed species is found prior to grading of the site, the U.S. Fish and Wildlife Service shall also be notified. A letter report summarizing the methods and results of the surveys and relocation efforts, if applicable, shall be submitted to the City of Santa Clarita and CDFW prior to commencement of project activities. **MM-BIO-2. Nesting Birds** Project activities, including but not limited to site preparation, construction, or fuel modification activities, with potential to disturb suitable bird-nesting habitat shall be prohibited within the breeding/nesting season for native bird species (typically February 1 through August 31). If the breeding/nesting season cannot be avoided, then no earlier than 7 days prior to ground- or vegetation-disturbing activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site, a qualified biologist shall perform two field surveys to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the disturbance zone, within 300 feet of the disturbance zone for songbirds, or within 500 feet of the disturbance zone for raptors and special-status bird species. The second nesting bird survey shall be conducted within 3 days of the start of ground- or vegetation-disturbing activities. A letter report summarizing the	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		methods and results of the surveys shall be submitted to the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife prior to commencement of project activities. In the event an active nest is found within the survey area, site preparation, construction, and fuel modification activities shall stop until the biologist can establish an appropriate setback buffer around the nest. Buffer size will be determined on a case-by-case basis by the biologist based on site conditions, the species' life history and disturbance tolerance, the nest's distance to construction activities, and the type of construction ongoing in the vicinity of the nest. Buffers will be clearly delineated (e.g., using rope, flagging, signage), or they may also be defined by natural or constructed features that are deemed sufficient to prohibit access (e.g., tree rows, fences). Project activities within the buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.	
BIO-2. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant	**MM-BIO-3. Sensitive Plan Communities** Grading and fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities shall be mitigated at a 2:1 ratio in an area to be preserved as permanent open space. Compensatory mitigation shall be accomplished by one or a combination of the	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		following methods and shall be based on the following preference hierarchy: 1. Mitigation bank credits 2. Contribution of an in-lieu fee program 3. On-site restoration of in-kind habitat 4. Off-site restoration of in-kind habitat The mitigation method(s) shall be approved by the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife (CDFW) (if applicable). Prior to issuance of a grading permit for the project, the limits of fuel modification shall be mapped and a qualified biologist shall determine the final acreage of fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities. If impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities are to be mitigated by mitigation bank credits or by contribution of an in-lieu fee, the applicant shall provide evidence of purchase of mitigation bank credits or payment of the in-lieu fee prior to issuance of the first grading permit for the project. The in-lieu fee shall be based on the cost per acre to restore or create in-kind habitat and the acreage of	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		the plant community impacted. In-lieu fees shall be used for the restoration of in-kind habitat. If compensatory mitigation is to be accomplished by on-site or off-site restoration, a Mitigation and Monitoring Plan shall be developed by a qualified biologist, restoration ecologist, or resource specialist, and approved by the City of Santa Clarita Planning Division and CDFW (if applicable) prior to issuance of the grading permit for the project. The plan shall at a minimum include the following: • Description of the project/impact and mitigation sites • Specific objectives • Success criteria • Plant palettes • Implementation plan • Maintenance activities • Monitoring plan • Contingency measures Off-site restoration shall be in the vicinity of the project site, or if off-site restoration in the vicinity of the project site is infeasible, off-site restoration shall be conducted within the same watershed. Restoration should be implemented only where suitable conditions exist to support viable in-kind habitats. Disturbed habitats within the Santa Clara River Significant Ecological Area immediately adjacent to the northeastern portion of the subject property may provide a suitable opportunity for off-site restoration that is proximal to the impacted areas and within the same watershed.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		The plant palettes shall include dominant species for each community (Fremont cottonwood, California brittlebush, California sagebrush, and creeping wildrye) as well as a diversity of appropriate native species that occur within these plant communities at the site. Success criteria shall at a minimum be evaluated based on percent cover of planted native species, as well as control of invasive plant species within the restoration area. The performance standards for the Mitigation and Monitoring Plan shall be at a minimum the following: • Within 5 years of the introduction of the native plants to the mitigation site, the acreage of restored plant communities shall be no less than two times the acreage lost to project construction. • Within 5 years of the introduction of the native plants to the mitigation site, the absolute cover of native species shall be no less than 80% within the restoration area. • Non-native species in the treated area shall be less than 15% relative cover by the end of the third year of treatment and less than 5% relative cover by the end of the fifth year of treatment. • Restoration will be considered successful after the success criteria have been met for a period of at least 2 years without any maintenance or remediation activities other than invasive species control. Prior to issuance of a grading permit, the applicant shall secure a bond for an amount equal to the cost	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		of the restoration effort. The bond shall be released by the City of Santa Clarita Planning Division upon satisfaction of the approved performance criteria. The restoration project shall be initiated prior to issuance of the first grading permit for the project, and shall be implemented over a 5-year period. The restoration project shall incorporate an iterative process of annual monitoring and evaluation of progress, and allow for adjustments to the restoration plan, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the restoration project shall be submitted to City of Santa Clarita Planning Division and CDFW (if applicable). Five years after project start, a final report shall be submitted to the City of Santa Clarita Planning Division and CDFW (if applicable), which shall at a minimum discuss the implementation, monitoring, and management of the restoration project over the 5-year period, and indicate whether the restoration project has been successful based on established success criteria. The annual reports and the final report shall include as-built plans submitted as an appendix to the report. The project shall be extended if success criteria have not been met at the end of the 5-year period to the satisfaction of the City of Santa Clarita Planning Division and CDFW (if applicable). If restoration cannot be achieved, compensation for the loss or modification of Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		wildrye herbaceous alliance shall be accomplished by on-site preservation of an in-kind habitat at a 3:1 ratio in an area to be preserved as permanent open space, subject to approval by City of Santa Clarita Planning Division and CDFW (if applicable). To the extent possible, preservation shall be accomplished on site, or if on-site preservation is not feasible, at a location within the same watershed.	
BIO-3. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant	**MM-BIO-4. Habitat Mitigation and Monitoring Plan** The applicant shall compensate for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of California Department of Fish and Wildlife jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of Regional Water Quality Control Board waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The same or similar habitat shall be restored as close to the impact area as possible. If a location in the general area of the project is not feasible, as determined by the Director of Community Development of the City of Santa Clarita (City), then the applicant shall restore another appropriate area within the City limits as close to the impacted area as possible. If a location in the City is determined infeasible, mitigation shall occur elsewhere in the watershed but as close to the project site as possible, or an in-lieu fee to compensate for the loss of habitat may be provided to a qualified agency or other entity acceptable to the City and the regulatory agencies, as applicable.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		The appropriate in-lieu fee would be determined by the applicant and receiving entity/agency, as approved by the City of Santa Clarita Planning Division. The mitigation program or in-lieu fee contribution shall be initiated prior to development of the project, and shall be implemented over a 5-year period. A mitigation plan and monitoring program shall be prepared and submitted to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, for acceptance prior to issuance of a Grading Permit or Building Permit or the start of construction of the project, whichever is sooner. The mitigation plan and monitoring program shall outline methods of mitigation; planting sizes, quantities, and receiver sites; and performance standards, including maintenance and monitoring (with periodic status reports and documentation). Success criteria shall at a minimum be evaluated based on appropriate survival rates and percent cover of planted native species, which shall be determined by examining reference sites, as well as eradication and control of invasive species within the mitigation area. In the case of in-lieu fees, evidence of payment of such fees shall be provided to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, prior to issuance of a Grading Permit, a Building Permit, or prior to start of construction of the project, whichever occurs first.	
BIO-4. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			
BIO-5. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant	**MM-BIO-5. Protection Zone Fence Installation** To protect trees within the vicinity of major construction, trees should be temporarily fenced at the edge of the protected zone prior to the beginning of construction operations on the project site. The protected zone is an area surrounding a tree, defined within the City of Santa Clarita (City) oak tree ordinance. It includes all area within the dripline of the tree, plus 5 feet beyond the dripline. This distance must be no less than 15 feet from the trunk. The fence should be constructed of chain-link material and be a minimum of 5 feet in height. The project arborist will develop a fencing plan that will be approved by the City prior to fence installation. The fence will be removed at the completion of the construction upon approval by the City.	Less than Significant
BIO-6. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	N/A	N/A
BIO-7. Removal of any heritage oak tree, as defined in Uniform Development Code §17.16.090, removal of more than five (5) oak trees for a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees, proposed as part of any other project.	Potentially Significant	See **MM-BIO-5**.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
BIO-8. Disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita.	Potentially Significant	See **MM-BIO-4**.	
BIO- 9. Disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists.	Potentially Significant	See **MM-BIO-1** and **MM-BIO-2**.	
Cultural and Tribal Cultural Resources			
CUL-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	Less than Significant	N/A	N/A
CUL-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Potentially Significant	**MM-CUL-1. Inadvertent Discovery of Archaeological Resources** In the event that archaeological resources are inadvertently unearthed during excavation and grading activities for the proposed project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery. The project cultural resources professionals, including the appropriate tribe(s), shall evaluate the significance of the find and determine the appropriate course of action. Pursuant to California Public Resources Code Section 21083.2(b), avoidance is the preferred method of preservation for archaeological resources. If avoidance of the resources is not feasible, salvage operation requirements pursuant to Section 15064.5 of the California Environmental Quality Act (CEQA)	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Guidelines shall be followed and shall take in to account tribal preferences and sensitivity concerns. If potentially significant features or sites are discovered, an Evaluation Plan shall be developed by the project archaeologist and the Native American representative and shall contain, at a minimum, a research design and field methodology designed to address the criterion outlined in the California Register of Historical Resources (CRHR). If a site is determined to be significant, data recovery excavations may be necessary unless the resource is avoided and preserved/protected in place. Evaluation and treatment shall be supervised by an individual or individuals that meet the Secretary of the Interior's Professional Qualification Standards. After the find has been appropriately avoided or mitigated and cleared by the City of Santa Clarita, the project cultural resources professional and, if applicable, the Native American monitor, work in the area may resume.	
CUL-3. Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant	**MM-CUL-2. Inadvertent Discovery of Human Remains** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found within the project site, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		believed to be, Native American, they shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant of the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	
TCR-1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:			
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	Less than Significant	N/A	N/A
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	**MM-TCR-1. Inadvertent Discovery of Tribal Cultural Resources** While no tribal cultural resources (TCRs) have been identified that may be affected by the proposed project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources. Should a potential TCR be encountered, construction activities shall be temporarily halted within 50 feet of the discovery and the City of Santa Clarita (City) shall be notified. The City will notify Native American tribes that have been identified by the Native American Heritage Commission (NAHC) to	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		be traditionally and culturally affiliated with the geographic area of the project. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure (MM) CUL-1. If the City determines that the potential resource is a TCR (as defined by PRC, Section 21074), tribes consulting under Assembly Bill 52 and Senate Bill 18 would be provided a reasonable period of time, typically 5 days from the date of a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. A qualified archaeologist shall implement a plan for the treatment and disposition of any discovered TCRs based on the nature of the resource and considering the recommendations of the tribe(s). Implementation of proposed recommendations will be made based on the determination of the City that the approach is reasonable and feasible. All activities would be conducted in accordance with regulatory requirements.	
Energy			
ENG-1. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	N/A	N/A
ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Geology and Soils			
GEO-1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	No Impact	N/A	N/A
ii. Strong seismic ground shaking	Potentially Significant	**MM-GEO-1.** During final design, grading, and construction, the applicant shall implement all recommendations provided in the site-specific geotechnical investigation by RTF&A, included as Appendix F, Geotechnical Report, in this Environmental Impact Report.	Less than Significant
iii. Seismic-related ground failure, including liquefaction	Less than Significant	N/A	N/A
iv. Landslides	Less than Significant	N/A	N/A
GEO-2. Would the project result in substantial soil erosion or the loss of topsoil?	Less than Significant	N/A	N/A
GEO-3. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant	See **MM-GEO-1.**	Less than Significant
GEO-4. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Potentially Significant	See **MM-GEO-1.**	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
GEO-5. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact	N/A	N/A
GEO-6. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant	**MM-GEO-2. Paleontological Resources Monitoring** Prior to the commencement of any grading activity, the applicant shall retain a qualified paleontologist to ensure the implementation of a paleontological monitoring program. The Society of Vertebrate Paleontology (SVP 2010) defines a qualified paleontologist as having the following: 1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience. 2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts. 3. Proficiency in recognizing fossils in the field and determining significance. 4. Expertise in local geology, stratigraphy, and biostratigraphy. 5. Experience collecting vertebrate fossils in the field. The qualified paleontologist shall attend any preconstruction meetings and manage the	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		paleontological monitor(s) if he or she is not doing the monitoring. A paleontological monitor should be on site during all excavations below the depth of 5 feet below the ground surface in areas underlain by Quaternary alluvium and all excavations into areas underlain by the Mint Canyon Formation. The SVP (2010) defines a qualified paleontological monitor as having the following: 1. BS or BA degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or 2. AS or AA in geology, paleontology, or biology and demonstrated two years of experience collecting and salvaging fossil materials in the state or geologic province of the specific project, or 3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project. 4. Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques. The paleontological monitor shall be equipped with necessary tools for the collection of fossils and	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		associated geological and paleontological data. The monitor shall complete daily logs detailing the day's excavation activities and pertinent geological and paleontological data. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find. Following the paleontological monitoring program, a final monitoring report shall be submitted to the City of Santa Clarita for approval. The report should summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the proposed project.	
Greenhouse Gas Emissions			
GHG-1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	N/A	N/A
GHG-2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Hazards and Hazardous Materials			
HAZ-1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	N/A	N/A
HAZ-2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant	N/A	N/A
HAZ-3. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than Significant	N/A	N/A
HAZ-4. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?	Less than Significant	N/A	N/A
HAZ-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	No Impact	N/A	N/A
HAZ-6. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant	**MM-FIRE-1. Emergency Vehicle Access Plan** To avoid impeding emergency vehicle and evacuation traffic around construction vehicles and equipment, the project applicant, in consultation with the City of Santa Clarita, shall develop an	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Emergency Vehicle Access Plan that includes the following: • Evidence of advanced coordination with emergency service providers, including but not necessarily limited to police departments, fire departments, ambulance services, and paramedic services; • Notification of emergency service providers regarding the locations, nature, timing, and duration of any proposed project construction activities, and consultation for advice about any road access restrictions that could impact their response effectiveness • Project construction schedules and routes designed to avoid restricting movement of emergency vehicles to the best extent possible. Provisions to be ready at all times to accommodate emergency vehicles. Provisions could include the use of platings over excavations, short detours, and/or alternate routes	
HAZ-7. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant	See **MM-FIRE-1.** **MM-FIRE-2. Developer Fee Program** Concurrent with the issuance of building permits, the project applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita. **MM-FIRE-3. Emergency Access** Throughout the duration of construction, the construction contractor shall ensure that adequate access to all buildings on the project site be	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		provided for emergency vehicles during all building construction phases. **MM-FIRE-4. Water Supply Availability** Adequate water availability shall be provided to service all construction activities during all phases. **MM-FIRE-5. Fuel Modifications, Landscaping and Irrigation** The construction contractor shall ensure the implementation of all construction-phase fuel modification, landscape, and irrigation plan component prior to combustible building materials being delivered to the site. **MM-FIRE-6. Construction Fire Prevention Plan** The project applicant shall develop a Construction Fire Prevention Plan that addresses training of construction personnel and provides details of fire-suppression procedures and equipment to be used during construction. Information contained in the plan shall be included as part of project-related environmental awareness training. At minimum, the plan shall include the following: • Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days • Fire coordinator role and responsibility	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		• Worker training for fire prevention, initial attack firefighting, and fire reporting • Emergency communication, response, and reporting procedures • Coordination with local fire agencies to facilitate agency access through the project site • Emergency contact information • Demonstration of compliance with applicable plans and policies established by state and local agencies **MM-FIRE-7. Compliance with Code Requirements** The project applicant shall ensure that on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through project approvals or building plan reviews. **MM-FIRE-8. Los Angeles County Fire Department Approvals** Prior to the issuance of building permits, the project applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit. **MM-FIRE-9. Landscape Plan Filing** The project applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone. **MM-FIRE-10. Operations Fire Prevention Plan** The project applicant shall develop an Operations Fire Prevention Plan that addresses policies and procedures for minimizing wildfire potential. At minimum, the plan shall include the following: • Procedures for minimizing potential ignition during maintenance activities • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days • Fuel modification zone and landscape area maintenance procedures, including timing of work to reduce the likelihood of ignition and/or fire spread • Communication and reporting procedures with Los Angeles County Fire Department • Fire safety coordinator role and contact information • Other information as provided by responsible and commenting agencies, as applicable **MM-FIRE-11. Post-Fire Field Assessment** Following any wildfire that burns onto the proposed project site, a post-fire field assessment shall be conducted by an engineering geologist to identify any areas that may be subject to increased risk of post-fire flooding, landslide, or erosion. Any recommendations identified by the geologist to mitigate such risk shall be implemented by the project applicant.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Hydrology and Water Quality			
HYD-1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant	N/A	N/A
HYD-2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin?	Less than Significant	N/A	N/A
HYD-3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would:			
i. Result in substantial erosion or siltation on- or off-site?	Less than Significant	N/A	N/A
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	Less than Significant	N/A	N/A
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than Significant	N/A	N/A
iv. Impede or redirect flood flows?	No Impact	N/A	N/A
HYD-4. Would the project, in a flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation?	Less than Significant	N/A	N/A
HYD-5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Land Use and Planning			
LU-1. Would the project physically divide an established community?	Less than Significant	N/A	N/A
LU-2. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant	**MM-LU-1.** In order to address the permanent loss of 32.4 acres of open space within the Sand Canyon Resort area, prior to the issuance of building permits, the project applicant shall acquire and dedicate to the City of Santa Clarita at least 32.4 acres of open space land in a location deemed acceptable to the City Manager.	Less than Significant
Noise			
NOI-1. Would project construction occur outside of allowable hours or result in temporary noise levels above 90 dBA at existing vicinity residences?	Potentially Significant	**MM-NOI-1. Construction Noise** a. Noise construction activities whose specific location on the project site may be flexible (e.g., operation of compressors and generators) shall be conducted as far as possible from the nearest off-site land uses. b. When possible, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels. c. Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use. d. The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices. e. Barriers such as flexible sound control curtains shall be erected around heavy equipment to minimize the amount of noise on the surrounding land uses to the maximum extent feasible during construction.	Significant and Unavoidable

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		f. All construction truck traffic shall be restricted to truck routes approved by the City of Santa Clarita (City), which shall avoid residential areas and other sensitive receptors to the extent feasible. g. A construction notice shall be prepared and shall include the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City.	
NOI-2. Would on-site operational noise from the proposed project result in noise exposure levels at adjacent residences that exceed allowable limits?	Less than Significant	N/A	N/A
NOI-3. Would proposed project vehicle trips result in substantial increases in off-site roadway noise levels for noise sensitive land uses located along such roadways?	Potentially Significant	None available.	Significant and Unavoidable (Cumulative)
NOI-4. Would project construction or operation expose existing structures in the project vicinity to vibration levels exceeding 0.12 inches per second PPV, or expose residents to vibration levels of 72 VdB in residences where people normally sleep?	Potentially Significant	**MM-NOI-2. Construction Vibration** a. Vibration producing construction activities whose specific location on the project site may be flexible (e.g., materials stockpiling, cement mixing, compressor equipment) shall be conducted as far as possible from the nearest off-site land uses.	Significant and Unavoidable

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		b. On-site loaded trucks shall be routed as far as practicable from adjacent residences. c. The City of Santa Clarita's construction schedule limitations of 7:00 p.m. to 7:00 a.m. weekdays and 6:00 p.m. to 8:00 a.m. Saturdays shall be strictly adhered to.	
Population and Housing			
POP-1. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant	N/A	N/A
POP-2. Would the project displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	N/A	N/A
Public Services			
PUB-1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:			
i. Fire protection?	Less than Significant	N/A	N/A
ii. Police protection?	Less than Significant	N/A	N/A
iii. Schools?	Less than Significant	N/A	N/A
iv. Parks?	No Impact	N/A	N/A
v. Other public facilities?	Less than Significant	N/A	N/A
Recreation			
REC-1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
substantial physical deterioration of the facility would occur or be accelerated?			
REC-2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Potentially Significant	See **MM-AQ-1**. See **MM-BIO-1** through **MM-BIO-5**. See **MM-CUL-1** and **MM-CUL-2**. See **MM-TCR-1**. See **MM-GEO-1** and **MM-GEO-2**. See **MM-NOI-1** and **MM-NOI-2**. See **MM-TRA-1** through **MM-TRA-5**. See **MM-FIRE-1** through **MM-FIRE-11**.	Significant and Unavoidable (Construction noise, Construction vibration, Cumulative operational noise)
Transportation			
TRA-1. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant	N/A	N/A
TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Potentially Significant	**MM-TRA-1. Provide Ride-Sharing Programs for Employees** The project shall provide/promote ride-sharing programs to the resort employees by utilizing approaches such as designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading/unloading and waiting areas for ride-sharing vehicles, and providing a website or message boards for coordinating rides. Increasing the vehicle occupancy by utilizing ride sharing will result in fewer cars driving the same trip, thereby decreasing the vehicle miles traveled (VMT).	Significant and Unavoidable (Employee VMT)

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		As shown in Table 4.15-10 and Table 4.15-11, providing ride-sharing programs to approximately 25% of the resort employees would result in a 1.3% reduction in VMT. **MM-TRA-2. Implement Subsidized or Discounted Transit Program for Employees** The project shall provide subsidized or discounted daily or monthly public transit passes to the resort employees. Although subsidized or discounted transit program would be available to all staff, the vehicle miles traveled (VMT) reduction calculation conservatively assumes that the program would be available and utilized by 25% of staff members. As shown Table 4.15-10 and Table 4.15-11, implementing subsidized or discounted transit program to approximately 25% of the resort employees would result in a 0.8% reduction in VMT. **MM-TRA-3. Encourage Telecommuting and Alternative Work Schedules for Employees** According to the California Air Pollution Control Officers Association, encouraging telecommuting and alternative work schedules would reduce the number of commute trips, thereby reducing the project's vehicle miles traveled (VMT). Staggered start times, flexible schedules, or compressed work weeks are examples of alternative work schedules. Because resort operations require most of the employees to be on site 24 hours per day, telecommuting and alternative work schedules may not be feasible for a majority of the employees. The project shall implement a 4-day/40-hour work	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		schedule for approximately 10% of the resort employees. As shown in Table 4.15-10 and Table 4.15-11, with 10% employee participation in an alternate work schedule consisting of a 4-day/40-hour work week, a VMT reduction of 1.5% would result. **MM-TRA-4. Implement Commute Trip Reduction Marketing** The project shall implement marketing strategies to reduce commute trips. The marketing strategies would include new employee orientation regarding trip reduction and alternative mode options, event promotions, and publications. Although the marketing would target all employees, a conservative assumption of marketing to only 25% of the employees was utilized in the reduction calculation. As shown in Table 4.15-10 and Table 4.15-11, implementing/promoting commute trip reduction marketing to approximately 25% of the resort employees would result in a 1.0% reduction in vehicle miles traveled. **MM-TRA-5. Provide Employer-Sponsored Vanpool/Shuttle** The project shall provide an employer-sponsored vanpool and shuttle for use by employees for commutes to work; the shuttle shall service the nearby transit station. The vanpool and shuttle will be available to all employees; however, the calculations conservatively assume the program would be offered to/utilized by 25% of employees.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		As shown Table 4.15-10 and Table 4.15-11, providing employer-sponsored vanpool/shuttle to approximately 25% of the resort employees would result in a 1.7% reduction in vehicle miles traveled.	
TRA-3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant	N/A	N/A
TRA-4. Would the project result in inadequate emergency access?	Less than Significant	N/A	N/A
Utilities and Service Systems			
UTL-1. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?	Less than Significant	N/A	N/A
UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant	N/A	N/A
UTL-3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	N/A	N/A
UTL-4. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
infrastructure, or otherwise impair the attainment of solid waste reduction goals?			
UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	N/A	N/A
Wildfire			
FIRE-1. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Potentially Significant	**MM-FIRE-1. Emergency Vehicle Access Plan** To avoid impeding emergency vehicle and evacuation traffic around construction vehicles and equipment, the project applicant, in consultation with the City of Santa Clarita, shall develop an Emergency Vehicle Access Plan that includes the following: • Evidence of advanced coordination with emergency service providers, including but not necessarily limited to police departments, fire departments, ambulance services, and paramedic services; • Notification of emergency service providers regarding the locations, nature, timing, and duration of any proposed project construction activities, and consultation for advice about any road access restrictions that could impact their response effectiveness • Project construction schedules and routes designed to avoid restricting movement of emergency vehicles to the best extent possible. Provisions to be ready at all times to accommodate emergency vehicles. Provisions could include the use of platings over	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		excavations, short detours, and/or alternate routes	
FIRE-2. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	Potentially Significant	**MM-FIRE-2. Developer Fee Program** Concurrent with the issuance of building permits, the project applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita. **MM-FIRE-3. Emergency Access** Throughout the duration of construction, the construction contractor shall ensure that adequate access to all buildings on the project site be provided for emergency vehicles during all building construction phases. **MM-FIRE-4. Water Supply Availability** Adequate water availability shall be provided to service all construction activities during all phases. **MM-FIRE-5. Fuel Modifications, Landscaping and Irrigation** The construction contractor shall ensure the implementation of all construction-phase fuel modification, landscape, and irrigation plan component prior to combustible building materials being delivered to the site. **MM-FIRE-6. Construction Fire Prevention Plan** The project applicant shall develop a Construction Fire Prevention Plan that addresses training of construction personnel and provides details of fire-suppression procedures and equipment to be used during construction. Information contained in the	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		plan shall be included as part of project-related environmental awareness training. At minimum, the plan shall include the following: • Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days • Fire coordinator role and responsibility • Worker training for fire prevention, initial attack firefighting, and fire reporting • Emergency communication, response, and reporting procedures • Coordination with local fire agencies to facilitate agency access through the project site • Emergency contact information • Demonstration of compliance with applicable plans and policies established by state and local agencies **MM-FIRE-7. Compliance with Code Requirements** The project applicant shall ensure that on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through project approvals or building plan reviews.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-FIRE-8. Los Angeles County Fire Department Approvals Prior to the issuance of building permits, the project applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit. **MM-FIRE-9. Landscape Plan Filing** The project applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone. **MM-FIRE-10. Operations Fire Prevention Plan** The project applicant shall develop an Operations Fire Prevention Plan that addresses policies and procedures for minimizing wildfire potential. At minimum, the plan shall include the following: • Procedures for minimizing potential ignition during maintenance activities • Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days • Fuel modification zone and landscape area maintenance procedures, including timing of work to reduce the likelihood of ignition and/or fire spread • Communication and reporting procedures with Los Angeles County Fire Department • Fire safety coordinator role and contact information	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		• Other information as provided by responsible and commenting agencies, as applicable	
FIRE-3. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less than Significant	N/A	N/A
FIRE-4. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Potentially Significant	**MM-FIRE-11. Post-Fire Field Assessment** Following any wildfire that burns onto the proposed project site, a post-fire field assessment shall be conducted by an engineering geologist to identify any areas that may be subject to increased risk of post-fire flooding, landslide, or erosion. Any recommendations identified by the geologist to mitigate such risk shall be implemented by the project applicant.	Less than Significant

1.8 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the project should occur. As stated in this section of the Guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the project. Each alternative should be capable of avoiding or substantially lessening any significant impacts of the project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per Section 15126.6.

1.8.1 Alternatives Evaluated

This section discusses the alternatives to the project, including the No Project Alternative, under consideration. The No Project (No Development) Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if the project were not to proceed and no development activities were to occur. The other alternatives are discussed as part of the "reasonable range of alternatives" selected by the lead agency. The following alternatives are addressed in this section, followed by a more detailed discussion of each:

- Alternative 1 – No Project
- Alternative 2 – Reduced Project
- Alternative 3 – Land Use Consistency

Alternative 1 – No Project

Under Alternative 1, development of the project site would not occur as discussed in Chapter 3 of this Draft EIR. While no activity is currently occurring at the project site, it can be reasonably expected that the 75-acre portion of the project site north of Robinson Ranch Road could be re-landscaped and reopen as a golf course, as is currently allowed under existing conditions.

Alternative 2 – Reduced Project

Under Alternative 2, the Reduced Project Alternative, the project would be similar to the proposed project described within Chapter 3 of this EIR; however, the Oak Villas component of the project, located in the westernmost portion of the project site, would not be constructed. As such, Alternative 2 would result in nine fewer single-story villa units and 18 fewer parking spaces than the proposed project, and would increase the amount of open space by 5.4 acres, for a total of 47.9 acres. As such, Alternative 2 would consist of the components shown in Table 7-4.

Alternative 3 – Land Use Consistency

Under Alternative 3, Land Use Consistency Alternative, instead of constructing the resort on the project site, an outdoor soccer facility would be constructed, as allowed under existing general plan and zoning designations for the project site. The soccer facility would not require a zone change from Open Space, as this zone allows public and private parks, conservancy lands, nature preserves, wildlife habitats, water bodies and adjacent riparian habitat, wetlands areas dedicated to open space use, drainage easements, cemeteries, golf courses, and other open space areas dedicated for public or private use. Typical uses include recreation, trails, trailheads, paseos, horticulture, limited agriculture, animal grazing, and habitat preservation. Development of a recreational outdoor soccer facility would be consistent with the site's existing Open Space zoning.

The outdoor soccer facility would be built on approximately 58 acres of land and would include up to eight soccer fields, two multipurpose fields, associated field maintenance buildings, associated restrooms, and soccer equipment storage facilities. Half of the fields would contain lighting to support evening or nighttime recreational activities. The soccer facility would also include 953 parking spaces and overflow parking to accommodate increased vehicle trips to the site. The outdoor soccer facility could be utilized by school/community users on weekdays, with youth and/or adult league and club play on evenings and weekends. Typical hours of operation for the outdoor soccer facility would be from approximately 8:00 a.m. to 11:00 p.m. daily.

1.8.2 Environmentally Superior Alternative

As indicated in Table 1-2, Alternative 1, the No Project Alternative, would result in the least environmental impacts, and therefore would be considered the Environmentally Superior Alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the Environmentally Superior Alternative is the No Project Alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

Of the remaining alternatives previously evaluated, Alternative 2 was found to be environmentally superior over the proposed project (see Table 1-2) because it had the most reductions in impacts from the proposed project. Alternative 2 was found to have fewer environmental impacts for all environmental issue areas, with the exceptions of hydrology and water quality and population and housing. For both of these issue areas, Alternative 2 would result in comparable impacts to the proposed project. As such, Alternative 2 would be the Environmentally Superior Alternative and would achieve the same primary objectives as the proposed project.

Table 1-2. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project	Alternative 2 Reduced Project	Alternative 3 Land Use Consistency
Aesthetics	Less than Significant	▼	▼	▲
Air Quality	Less than Significant with Mitigation	▼	▼	▲
Biological Resources	Less than Significant with Mitigation	▼	▼	=
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation	▼	▼	=
Energy	Less than Significant	▼	▼	▲
Geology and Soils	Less than Significant with Mitigation	▼	▼	=
Greenhouse Gas Emissions	Less than Significant	▼	▼	▲
Hazards/Hazardous Materials	Less than Significant with Mitigation	▼	▼	=
Hydrology/Water Quality	Less than Significant	▼	=	=
Land Use and Planning	Less than Significant with Mitigation	▼	▼	▼
Noise	Significant and Unavoidable (construction and cumulative operations)	▼	▼	▲

Table 1-2. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project	Alternative 2 Reduced Project	Alternative 3 Land Use Consistency
Population and Housing	Less than Significant	▼	=	=
Public Services	Less than Significant	▼	▼	=
Recreation	Less than Significant with Mitigation	▼	▼	▲
Transportation	Significant and Unavoidable (operational vehicle miles traveled)	▼	▼	▲
Utilities and Service Systems	Less than Significant	▼	▼	=
Wildfire	Less than Significant with Mitigation	▼	▼	=

2 Introduction

This Environmental Impact Report (EIR) has been prepared by the City of Santa Clarita (City) to evaluate potential environmental effects that could result from development of the proposed Sand Canyon Resort Project (project). This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) Statute (California Public Resources Code, Section 21000 et. seq., as amended) and Guidelines (14 CCR 15000 et. seq.). The City is the lead agency under CEQA.

2.1 Summary of the Proposed Project

In an effort to create a premiere golf resort destination in northern Los Angeles County, the project applicant is proposing to replace existing open space that was formerly the Mountain Course of the Robinson Ranch Golf Course with a new resort and spa consisting of a hotel with a three-story building; a spa garden inn within three three-story buildings; villas associated with the hotel (23 buildings); three restaurants; a spa/gym/salon; conference and ballroom space; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, and a nine-hole "chip and putt" golf course; and a total of 400 new parking stalls, including 18 parking spaces in villa garages. The project also includes the expansion of the existing 1-acre off-site detention basin to approximately 2 acres in size.

2.2 The CEQA Process

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of the proposed project. The EIR process is intended to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the proposed project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed project's significant effects. In addition, CEQA requires that an EIR identify adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was distributed on October 17, 2018, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City plans to prepare an EIR and to solicit input on the scope and content of the EIR. Approximately 60 copies of the NOP were distributed to agencies and over 30 written comment letters were received from various agencies, organizations, and individuals. These letters and the NOP are included in Appendix A.

A scoping meeting was held at City Hall on October 30, 2018. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed project. Approximately 60 people attended the scoping meeting. The public comments, questions, and concerns that were received at the scoping meeting generally included the following areas:

- Aesthetics – changes of existing visual character and nighttime lighting
- Air quality – emissions during construction and from operational traffic
- Biological resources – disruption in animal travel patterns, nighttime lighting impacts to wildlife movement, impacts to sensitive wildlife and vegetation, loss of oak trees
- Hazards and hazardous materials – wildland fire, emergency evacuation routes becoming jammed

- Hydrology and water quality – water quality conditions beneath the site
- Land use and planning – change from Open Space general plan and zoning designations, consistency with the Sand Canyon Special Standards District
- Noise – construction noise and noise increases from operational traffic, noise from weddings and events
- Public services – additional demands for police and fire services
- Recreation – loss of recreational open space
- Transportation and traffic – event traffic, adequate parking, bicycle/pedestrian safety along Sand Canyon Road, equestrian safety along Sand Canyon Road, emergency evacuation along Sand Canyon Road, cut-through traffic on Sand Canyon Road, traffic on Highway 14, additional/secondary access to the project site
- Wildfire – the project site burned in 2016 during the Sand Fire, and during this fire, residents of Sand Canyon had a difficult time evacuating the community due to congestion along Sand Canyon Road

Following the initial NOP and scoping period, modifications were made to the project and a Revised NOP was prepared and circulated. The Revised NOP was published on April 2, 2019, and the second scoping comment period closed on May 2, 2019. Approximately 70 additional comment letters were received during the second scoping period raising similar concerns. These letters and the Revised NOP are also included in Appendix A.

This EIR focuses on all potential environmental impacts, including the comments received in response to the NOP and Revised NOP. The issue areas analyzed in detail in this EIR include aesthetics, air quality, biological resources, cultural and tribal cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning (including agricultural resources and mineral resources), noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire.

This Draft EIR is being circulated for 45 days for public review and comment. The timeframe of the public review period is identified in the Notice of Availability attached to this Draft EIR. During this period, comments from the general public, organizations, and agencies regarding environmental issues analyzed in the Draft EIR and the Draft EIR's accuracy and completeness may be submitted to the lead agency at the following address:

Hai Nguyen, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, California 91355
Email: hnguyen@santa-clarita.com

General questions about this EIR and the EIR process should also be directed to the address above. The City will prepare written responses to all comments pertaining to environmental issues raised in the Draft EIR submitted in writing and postmarked by the last day of the public review period identified in the Notice of Availability.

Prior to approval of the proposed project, the City, as the lead agency and decision-making entity, is required to certify that this EIR has been completed in accordance with CEQA, that the proposed project has been reviewed and the information in this EIR considered, and that this EIR reflects the independent judgment of the City. CEQA also requires the City to adopt findings with respect to each significant environmental effect

identified in the EIR (California Public Resources Code, Section 21081; 14 CCR 15091). For each significant effect, CEQA requires the approving agency to make one or more of the following findings:

- The proposed project has been altered to avoid or substantially lessen significant impacts identified in the Final EIR.
- The responsibility to carry out such changes or alterations is under the jurisdiction of another agency.
- Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives identified in the Final EIR.

If the City concludes that the proposed project will result in significant effects that cannot be substantially lessened or avoided by feasible mitigation measures and alternatives, the City must adopt a statement of overriding considerations prior to approval of the proposed project (California Public Resources Code, Section 21081[b]). Where the lead agency concludes that the specific economic, legal, social, technological, or other benefits outweigh the unavoidable environmental impacts, the lead agency may approve the proposed project after stating in writing the specific reasons to support its action.

In addition, public agencies, when approving a project, must adopt a Mitigation Monitoring and Reporting Program describing the changes that were incorporated into the proposed project or made a condition of project approval in order to mitigate or avoid significant effects on the environment (California Public Resources Code, Section 21081.6). Upon approval of the proposed project, the City will be responsible for implementation of the proposed project's Mitigation Monitoring and Reporting Program. This document will be attached to the Final EIR.

2.3 Organization of the EIR

This EIR is organized as follows:

Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and provides a summary of the proposed project and the project alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in the EIR along with the associated mitigation measures proposed to reduce or avoid each impact.

Chapter 2, Introduction, serves as a forward to the EIR, introducing the project, the applicable environmental review procedures, and the organization of the EIR.

Chapter 3, Project Description, provides a thorough description of the setting, objectives, characteristics, operation, and construction of the proposed project and required discretionary approvals.

Chapter 4, Environmental Analysis, describes the potential environmental effects of the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 4 is organized by 17 environmental issue areas as follows:

- Aesthetics
- Air quality
- Biological resources
- Cultural and tribal cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials

- Hydrology and water quality
- Land use and planning
- Noise
- Population and housing
- Public services
- Recreation
- Transportation
- Utilities and service systems
- Wildfire

For each environmental issue area, the analysis and discussion are organized into subsections as described below:

- **Environmental Setting –** This subsection describes the physical environmental conditions in the vicinity of the proposed project at the time of publication of the NOP. The environmental setting establishes the baseline conditions by which the City will determine whether specific project-related impacts are significant.
- **Regulatory Framework –** This subsection describes the laws, regulations, ordinances, plans, and policies applicable to the environmental issue area and the proposed project.
- **Thresholds of Significance –** This subsection identifies a set of thresholds by which the level of impact is determined.
- **Impact Analysis –** This subsection provides a detailed analysis regarding the environmental effects of the proposed project, and whether the impacts of the proposed project would meet or exceed the thresholds of significance.
- **Mitigation Measures –** This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse project impacts.
- **Level of Significance After Mitigation –** This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.

In addition to the subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

Chapter 5, Cumulative Effects, discusses the cumulative effects of the project in combination with the effects of other projects in the vicinity.

Chapter 6, Other CEQA Requirements, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed project, growth-inducing impacts associated with the proposed project, and potential secondary effects of mitigation measures included for the proposed project.

Chapter 7, Alternatives, discusses alternatives to the proposed project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 7 includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 8, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed project, as listed in the Table of Contents.

The City, as the designated lead agency for the proposed project, is responsible for enforcing and verifying that each mitigation measure is implemented as required. However, the project applicant shall be responsible for implementing the mitigation measures required for the proposed project. As part of the Final EIR process, a Mitigation Monitoring and Reporting program will be prepared.

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3 Project Description

This chapter provides a description of the proposed Sand Canyon Resort Project (project). The proposed project involves the redevelopment of a portion of a former, yet currently undeveloped, golf course with a new resort hotel and associated amenities. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15123, this chapter describes the location, objectives, and characteristics of the proposed project, followed by a statement describing the intended uses of this Environmental Impact Report (EIR).

3.1 Project Location

The 77-acre project site collectively consists of the proposed resort site, which is approximately 75 acres in size and is located at 27734 Sand Canyon Road at the northeast corner of Sand Canyon Road and Robinson Ranch Roach, south of State Route 14 in the Sand Canyon area of the City of Santa Clarita (City), as shown in Figure 3-1, Project Location, as well as a 1.9-acre detention basin site located south of the proposed resort site. The City is located approximately 35 miles north of the City of Los Angeles. Specifically, the project site is located in Township 4 North, Range 15 West, Sections 23 and 24, as shown on the U.S. Geological Survey 7.5-minute Mint Canyon Quadrangle topographic map. The project site is currently vacant and undeveloped but was formerly a part of the Mountain Course within the Robinson Ranch Golf Course.

3.2 Project Background

The project site, located within what is now known as Sand Canyon Resort, was once known as the Mountain Course within the Robinson Ranch Golf Course. The Robinson Ranch Golf Course was one component of the overall Hunters Green Residential Development and Golf Course, for which an EIR was certified and the project was approved in 1996. According to the environmental analysis in the EIR prepared for the Hunters Green Residential Development and Golf Course, significant and unavoidable impacts were identified related to air quality during construction and operations, biological resources associated with the substantial decrease in locally and regionally significant sensitive communities and impacts to sensitive wildlife species, aesthetics associated with irreversibly altering a City-identified secondary ridgeline, and noise during construction (City of Santa Clarita 1996a). Resolution 96-120, outlining the conditions of approval for the Hunter Greens Residential Development and Golf Course, included the following requirements of the project related to significant biological resources impacts and aesthetic impacts (City of Santa Clarita 1996b):

- Biological resources: “The creation of 300 acres of recreational open space and establishment of this permanent habitat would offset the biological loss due to site development.”
- Aesthetics: “Design elements of the project with the preservation of approximately 300 acres of the site as recreation/open space would offset this impact.”

Additionally, included within the resolution is the following language:

The City Council finds that the unavoidable environmental impacts of the project are acceptable when based upon the following factors and public benefits. The factors and public benefits are as follows:

a) The project provides a significant recreational facility in the Canyon Country area of the City. Significant economic benefits to the City and local business are anticipated with this project.

b) The project includes the dedication of land for the construction of the Live Oak Springs Canyon debris basin and appurtenant facilities.

c) The project would preserve approximately 300 acres of land into perpetuity as recreational/open space.

d) The annexation of a portion of the site will benefit the City of Santa Clarita by extending local government and control.

e) The widening of Sand Canyon Road, over the Santa Clara River, and the installation of a traffic signal at Lost Canyon Road and Sand Canyon Road are requirements of the project, and substantial benefits to the Sand Canyon area.

f) The project includes the realignment improvement and maintenance of Oak Spring Canyon Road on the project site.

g) The project includes the dedication and construction of multi-purpose trails through the project site.

h) The project includes the extension of a water mainline, including fire hydrants, from the project site west to Comet Way and east to the Angeles National Forest Boundary.

The project was approved in 1996. The Robinson Ranch Golf Course was assigned land use and zoning designations of recreational/open space, began operating in 2000, and was renamed to be Sand Canyon Resort in 2017.

3.3 Environmental Setting

The baseline for a project is typically the physical environmental condition that exists in the vicinity of a project when the Notice of Preparation is published (14 CCR 15125[a]). The first Notice of Preparation for the project was published on October 17, 2018. A second Notice of Preparation was published in April 2019 to clarify that the project description includes the 1.9-acre detention basin site. As such, October 2018 remains the environmental baseline for the project. The following summarizes the current and past use of the project site, adjacent and surrounding land uses, and the existing general plan and zoning designations applicable to the project site. The existing site conditions are shown in Figure 3-2, Existing Conditions.

3.3.1 Existing On-Site Uses

The approximately 77-acre project site (which collectively consists of the 75-acre resort site and the 1.9-acre detention basin site) is predominantly vacant and consists of an abandoned nine-hole golf course. There is an existing 1-acre detention basin at the project's detention basin site. The only building that currently exists on the project site is a small restroom structure, which is no longer in service. Additionally, there are remnant golf cart paths through the site. As shown in Figure 3-3, Sand Canyon Country Club, the project site is situated in and associated with the larger 230-acre Sand Canyon Country Club property (formerly Robinson Ranch Golf Club), which consists of a 27-hole golf course, a driving range, a maintenance building, and clubhouse; however, all of aforementioned features of the larger Sand Canyon Country Club property are outside of the project site boundaries.

Prior to 2016, the project site was utilized as a nine-hole golf course, known as the Mountain Course, at the overall Robinson Ranch Golf Club. However, in July 2016, the Sand Fire burned the project site. Following the wildfire in 2016, flooding from record rainfall covered the project site. As such, since April 2016, the project site has remained undeveloped and in its current abandoned state.

The project site is located within a Planned Development (PD) overlay zone and within the City's Sand Canyon Special Standards District, which was established in 1992 for the purpose of maintaining, preserving, and enhancing the rural and equestrian character of Sand Canyon. The site is currently designated as Open Space in the City of Santa Clarita General Plan and is currently zoned Open Space (OS).

3.3.2 Adjacent and Surrounding Uses

The project site is located within the Sand Canyon community in the City of Santa Clarita and generally located in the southeastern portion of the City limits at the base of the San Gabriel Mountains and Angeles National Forest, which are located further south and southeast of the City. The project site is within a Planned Development (PD) overlay zone and within the Sand Canyon Special Standards District, which is characterized as a rural and equestrian community. Uses immediately surrounding the project site include open space and residential ranch uses to the north; the Sycamore Bar and Grill, Sand Canyon Clubhouse, and Sand Canyon Golf Course to the east; and single-family residential uses to the south, southeast, and west.

3.4 Project Objectives

The primary objectives of the proposed project include the following:

- Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.
- Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.
- Provide additional dining, spa, and commercial sports and recreational opportunities for Santa Clarita residents.
- Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.
- Provide publicly accessible open spaces, including natural and active open space areas and pedestrian pathways within the project.
- Provide a publicly accessible pedestrian network through the project site.
- Incorporate environmental sustainability features into the project design, including the installation of solar panels, and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.
- Improve upon and expand high-quality meeting and conference spaces within the City of Santa Clarita.

3.5 Proposed Project Characteristics

In an effort to create a premier golf and resort destination in northern Los Angeles County, the applicant is proposing to replace existing open space that was formerly a part of the Mountain Course of the Robinson Ranch Golf Course with a new resort and spa consisting of a hotel with a three-story building; a spa garden inn within three three-story buildings; villas associated with the hotel (23 buildings); three restaurants; a spa/gym/salon; conference and ballroom space; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, and a nine-hole "chip and putt" golf course; and a total of 400 new parking stalls, including 18 parking spaces in villa garages. The overall development would include approximately 460,000 square feet of resort hotel amenities and support services. Table 3-1 summarizes the building area of proposed resort facilities within the newly renamed Sand Canyon Country Club. Figure 3-4, Proposed Project, provides an overview of the proposed project.

Table 3-1. Summary of Resort Facilities

Use	Building Area (square feet)
Main Hotel (three-story building with 241 rooms)	165,000
Function Building • Restaurants (3) • Ballrooms (2) • Meeting rooms • Pre-function space • Children's center • Snack bar • Celebration garden • Kitchen and back-of-house	64,000
Spa Building • Spa • Gym • Salon	35,000
Spa Garden Inn (three three-story buildings with 81 rooms)	67,500
View Villas Community (14 buildings with 56 units)	98,000
Oak Villas Community (nine one-story villas with nine units)	30,500
Outdoor recreation including: • Two outdoor pools • One tennis court • Two pickleball courts • Chip and putt golf course • Children's play area • On-site pedestrian pathways (approximately 2 miles)	—
Open Space	42.5 acres
Parking (400 proposed parking spaces plus 319 existing parking spaces)	—

In addition to the resort components of the project listed in Table 3-1, the project would also include the expansion of the existing approximately 1-acre water quality detention basin located south of the resort site and south of Robinson Ranch Road to a total of 1.9 acres. The proposed resort site would be connected to the detention basin via a new storm drain pipe. The resort would be located on the north side of Robinson Ranch Road and directly west of the existing Sand Canyon Country Club. The only component of the project located south of Robinson Ranch Road would be the enlargement of the existing detention basin.

In total, the proposed project would result in the development of approximately 47.6 acres of the 77-acre project site.

The project site would be divided over four lots along approximately 4,250 linear feet of Robinson Ranch Road. A zone change is proposed for two of the four lots from Open Space (OS) to Community Commercial (CC). The tentative parcel map is provided as Figure 3-5, Proposed Tentative Parcel Map. As shown, the lots would be divided, and zones changed as follows:

- Lot 1: 29.5 acres – remain as OS
- Lot 2: 5.4 acres – proposed as CC

- Lot 3: 27 acres – proposed as CC
- Lot 4: 13 acres – remain as OS

3.5.1 Resort Overview

As shown in Figure 3-4, the proposed resort would include the following buildings: Main Hotel Building, Spa Garden Inn, Function Building, Spa Building, View Villas Community, and Oak Villas Community. The resort would include a total of 389 rooms within hotel buildings and villas, 56,200 square feet of conference space in the form of ballrooms and meeting rooms, 25,000 square feet of restaurant space, and outdoor recreation with pedestrian pathways and a nine-hole par-3 "chip and putt" golf course. The resort would include a total of 400 new parking stalls and additional shared parking would be available at the adjacent clubhouse building.

3.5.2 Main Hotel Building

The Main Hotel would be located in Lot 3 and would consist of a three-story hotel building. The building would be approximately 165,000 square feet in size and 37 feet in height. The Main Hotel building would include the main lobby and lounge, 241 hotel rooms (73 rooms on Level 1, 84 rooms on Level 2, and 84 rooms on Level 3), a coffee shop, small retail sundry shop, business lounge, and a golf cart parking area. The conceptual layout of the lobby level of the hotel is shown in Figure 3-6, Main Hotel Building Concept.

The Main Hotel would include a subterranean back-of-house access tunnel and corridor system that is connected to the Function Building, for facilitating deliveries and services. The back-of-house access tunnel would be used by employees (pedestrian and golf carts) for deliveries, housekeeping, catering, room services, and other service needs.

3.5.3 Function Building

The Function Building would be located directly northwest of the Main Hotel building in Lot 3. The conceptual layout of the main level of the Function Building is shown in Figure 3-7, Function Building Concept. The Function Building would contain three restaurants, two ballrooms (one 9,700 square-foot Grand Ballroom and one 3,000 square-foot Junior Ballroom), meeting rooms, a pre-function space (enclosed space at the front of the ballrooms and meeting rooms), a children's center (including a nursery, an arcade, a lounge, and classrooms and hobby rooms), pool snack bar, a celebration garden and supporting facilities including kitchens, back-of-house, and storage. The back-of-house, which would provide service, deliveries, storage, housekeeping, administration, offices, and engineering would be located right below the Function Building and would be connected to the Main Hotel building through a tunnel facilitating deliveries and services. This tunnel would allow employees to move freely without interfering with the guest experience.

3.5.4 Spa Building

The Spa Building would consist of a spa, gym, and salon located directly north of the Function Building in Lot 3. The conceptual layout of the Spa Building is shown in Figure 3-8, Spa Building Concept. The approximately 35,000-square-foot Spa Building would be one story but would have two levels with a walk-out basement level linked to the main level by a sky-lit atrium. The building would include a beauty salon, 30 treatment rooms, locker facilities for

men and women, and a gym that includes yoga and cycling rooms. The building would be a maximum of 22 feet in height. Parking for the Spa Building would be in the main parking lot and valet parking at the Main Hotel entrance.

3.5.5 Spa Garden Inn and Wedding Grounds

The Spa Garden Inn would consist of three three-story hotel buildings located directly north of the Spa Building in Lot 3, as shown in Figure 3-9, Spa Garden Inn Concept. The Spa Garden Inn would include a total of 81 rooms spread throughout three buildings. The Spa Garden Inn would be approximately 67,200 square feet in size and 35 feet in height. The Spa Garden Inn would also include approximately 17,500 square feet of open, outdoor wedding grounds with a permanent trellis. The outdoor wedding grounds would consist of a grass area to allow temporary setup of chairs. The setup would be used for wedding ceremonies, which would last between 15 to 40 minutes. Weddings would be held on the outdoor wedding grounds on weekends, with the receptions and parties held afterward indoors at the Function Building, where restaurants, ballrooms, meeting rooms, and enclosed atriums are located. Guests would walk between the locations or be transported via electric golf carts.

Parking for the Spa Garden Inn would be provided as valet parking at the Main Hotel building lobby with guests and luggage being shuttled to their destination via electric golf carts. In addition, there would be 8 parking spaces in the court of Spa Garden Inn.

3.5.6 View Villas Community

The View Villas Community would be located directly west of the Main Hotel building in Lot 3, as shown in Figure 3-4. The View Villas Community would consist of 14 villa buildings to be rented out by guests for couples and family retreats. Each building would include four units, for a total of 56 units. Each villa building would be approximately 6,760 to 8,200 square feet in size and two stories, with a height of approximately 25 feet. Each unit would be configured as a two- or three-bedroom suite, with a living room and porch and/or balcony. Individual units would range from 1,690 to 2050 square feet in size.

3.5.7 Oak Villas Community

The Oak Villas Community would be located in Lot 2 and would consist of nine four-bedroom villa buildings to be rented individually by guests for couples and family retreats. The Oak Villas Community would be located on the western area of the project site, as shown in Figure 3-4, and was designed around, and to protect, the surrounding groups of oak trees. Each of the one-story units would be 19 feet in height, with approximately 3,400 square feet of livable space, and a two-car and one-golf-cart garage. A total of 18 parking spaces would be provided for the Oak Villas Community.

3.5.8 Outdoor Recreational Amenities

Pools

The resort would include two outdoor swimming pools within Lot 3: one family pool and one adult pool. The family pool would be located on the east side of the children's center, east of the Function Building. The family pool area would include a kid's pool, smaller toddler pool, a pool slide, lifeguard chair, restrooms, snack bar, cabanas, and

lounge chairs. The adult pool would be located between the Function and Spa Buildings. The adult pool would include cabanas and lounge chairs.

Tennis, Pickleball, and Chip and Putt Golf Course

The project would include one tennis court, two pickleball courts, and a miniature golf or "chip and putt" golf course located east of the Main Hotel building in Lot 4. Pickleball is a paddle sport involving elements of tennis, badminton, and ping-pong. The game is played on a badminton-sized court (or the size of half a tennis court) with a modified tennis net and a plastic ball with holes. Pickleball can be played as doubles or singles, similar to tennis. Chip and putt is an amateur sport, similar to golf. The maximum hole length for international competitions is 90 meters (100 yards) with a maximum total course length of 1,200 meters (1,310 yards). Players may only use three clubs, one of which must be a putter. The game is played from raised artificial teeing surfaces using a tee and it has its own handicap system. This is a family sport for all ages and all skill levels. A standalone restroom building is also proposed north of the tennis and pickleball courts.

Children's Play Area

The children's play area would be located directly west of the sport courts in Lot 4 and would include one children's playground with tot lot. A conceptual site plan is shown in Figure 3-4.

Pedestrian Pathways

The resort would include approximately 2 miles of walkable pathways meandering between different functions and attractions of the Sand Canyon Resort and providing access to native open space areas, as shown in Figure 3-10, Pedestrian Pathways. The pathway system would tie into the existing golf cart paths and provide new pedestrian pathways throughout the property. There are two types of surfaces proposed: hardscape concrete for golf carts and soft stabilized decomposed granite paths used solely by pedestrians for jogging and walking. The pedestrian pathways parallel to Robinson Ranch Road would include wood fencing that would match the existing fence installed along the existing Sand Canyon Golf Course.

3.5.9 Open Space

As shown in Figure 3-4, a total of 42.5 acres would remain as open space. A total of 29.5 acres (the entirety of Lot 1) would remain as undisturbed open space. A total of 13 acres in Lot 4 would be disturbed open space primarily used as outdoor recreational amenities.

3.5.10 Oak Trees

Throughout the project site are several oak woodlands. One woodland association occurs in patches scattered within the western portion of the project site with one smaller patch in the eastern portion of the project site. In this woodland association, the tree layer is dominated by coast live oak (*Quercus agrifolia*). Understory within these woodland associations within the survey area is generally dominated by the herbaceous layer, primarily comprised of grasses and forbs. A shrub layer is sometimes present, including California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*). This community is not considered sensitive by California Department of Fish and Wildlife (CDFW 2019).

Aside from the coast live oak woodlands, a number of individual coast live oak trees are scattered about the project site, primarily in the southwestern and western area. These are simply coast live oak trees that are too far apart to constitute woodlands but occupy a large enough area to be mapped. Individual coast live oaks do not possess any state, federal, or local special status, but are protected when meeting designated size criteria by the Los Angeles County oak tree ordinance. They do not constitute a plant community and therefore cannot be assessed as a potential sensitive plant community.

The Main Hotel, Function Building, and Spa Building would be located away from the biggest oak woodland grove and the Oak Villas Community buildings were designed and placed to take advantage of the vistas of the oak trees while at the same time preserving oak tree habitat. A total of 115 oak trees would preserved as part of the design while 21 trees would be removed. None of the removed oaks are considered heritage oak trees.

3.5.11 Circulation and Parking

Primary access to the project site is provided via Robinson Ranch Road, which is accessed via Sand Canyon Road. Internal access within the project site would include four private roads connected to Robinson Ranch Road. Road A and Road B provide the primary access to the Main Hotel, Function Building, and Spa Garden Inn, as well as the main parking lot. Road C and Road D provide access to the View Villas. Road E and Road F would provide access to the Oak Villas community.

Secondary emergency access would be provided through the Robinson Ranch community to the south via Robinson Ranch Road and Live Oaks Spring Canyon Road. In the event of an emergency, such as fire or flood, the gate at the intersection of Robinson Ranch Road and Live Oaks Spring Canyon Road would be opened to allow emergency access through the Robinson Ranch community via Robinson Ranch Road and Live Oaks Spring Canyon Road.

The main resort parking lot located near the Main Hotel and Spa Garden Inn buildings and the individual parking bays for the villas would contain 400 parking spaces for visitors and employees. The adjacent 27-hole Sand Canyon Country Club has an additional 319 parking spaces that would be available for use by resort visitors and guests through a shared parking agreement. As such, collectively a total of 719 parking spaces would be available for visitors, hotel guests, and employees. At least 12 of the parking spaces would include charging stations for electric vehicles.

The project would provide 24/7 valet service at the Main Hotel entrance and at the existing Sand Canyon Country Club clubhouse parking for the resort guests. Transportation within the resort would be handled via electric golf carts. The project proposes to implement a special event management plan with a dedicated valet service for special events, holidays, and weekends to ensure maximum utilization of the available parking spaces. In addition, shuttle service would be provided from the parking lot to the event venue and existing clubhouse.

3.6 Construction

Construction of the project would begin as early as approximately fourth quarter 2020 and occur over a period of approximately 18 months. Construction of the project would commence with grading and remedial earthwork excavation. No soil import or export would be required. Upon completion of earthwork, retaining walls would be constructed and utilities would be installed. Following this, the foundations for the buildings would be constructed, followed by vertical building construction, paving/concrete, and landscape installation. The resort would be open for business in approximately fall 2022.

3.7 Intended Uses of the EIR

An EIR is a public document used by a public agency to analyze the environmental effects of a project and to disclose possible ways to reduce or avoid significant environmental impacts, including alternatives to the proposed project. As an informational document, an EIR does not make recommendations for or against approving a project. The main purpose of an EIR is to inform public agency decision makers and the public about potential environmental impacts of a project (14 CCR 15121). This EIR will be used by the City, as the lead agency under CEQA, in making decisions with regard to the adoption of the proposed project described above and the related approvals described below.

3.8 Project Approvals Required

The City is the lead agency for the proposed project pursuant to CEQA Guidelines Section 15367. The proposed project would require a number of permits and approvals by the City, listed as follows:

- Tentative Tract Map No. 78248 to subdivide the project site from one lot into four lots
- Conditional Use Permit 18-001 for new development in the Planned Development (PD) overlay zone, building heights greater than 35 feet, and grading in excess of 100,000 cubic yards of earth
- Development Review 18-003 for the proposed physical layout and building designs, styles, and forms of the project
- Landscape Plan Review 18-003 for the proposed project landscaping
- Oak Tree Permit (Class 4) 18-001 for any encroachments or removals of 21 protected oak trees
- Minor Use Permit 19-028 for a shared parking agreement
- Zone Change 18-001 to change the zone from Open Space (OS) to Community Commercial (CC) for two of the four proposed lots
- General Plan Amendment 18-002 to change the general plan designation from Open Space (OS) to Community Commercial (CC) for two of the four proposed lots
- Hillside Review (Class 4) 19-001 for development projects on a hillside with average cross slopes of 10% or more
- Environmental Impact Report 18-001 certification to disclose any significant environmental impacts of the proposed project

3.9 Related Projects

A list of related projects has been developed as part of this environmental document. All projects that are proposed (i.e., with pending applications), recently approved, under construction, or reasonably foreseeable that could produce a cumulative impact on the local environment when considered in combination with the proposed project are included in an EIR. These projects can include, if necessary, projects outside of the lead agency's jurisdiction. CEQA Guidelines Section 15130 stipulates that EIRs must consider the significant environmental effects of a proposed project as well as "cumulative impacts." A cumulative impact is defined as an impact that is created as a result of the project evaluated in the EIR combined with the impacts of other projects, thereby causing related impacts (14 CCR 15355). As stated in CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result, at least in part, from

the project evaluated in an EIR. Cumulative impacts may be analyzed by considering past, present, and probable future projects with related or cumulative impacts (14 CCR 15130[b][1][A]).

In this Draft EIR, cumulative impact analyses are summarized within Chapter 5, Cumulative Effects. The study areas for the cumulative impact analyses vary by resource area. Table 3-2 lists the related projects that were considered in the cumulative impact analyses. The locations of the related projects are depicted in Figure 3-11, Related Projects.

Table 3-2. Related Projects

No.	Project Name	Status	Description		
1	Vista Canyon	In construction	Residential	834	DU
			Business Park	78	TSF
			Retail	40	TSF
2	Sand Canyon Plaza	Pending	Residential	580[b]	DU
			Commercial Retail	60	TSF
3	Mancara	Pending	Residential	109	DU

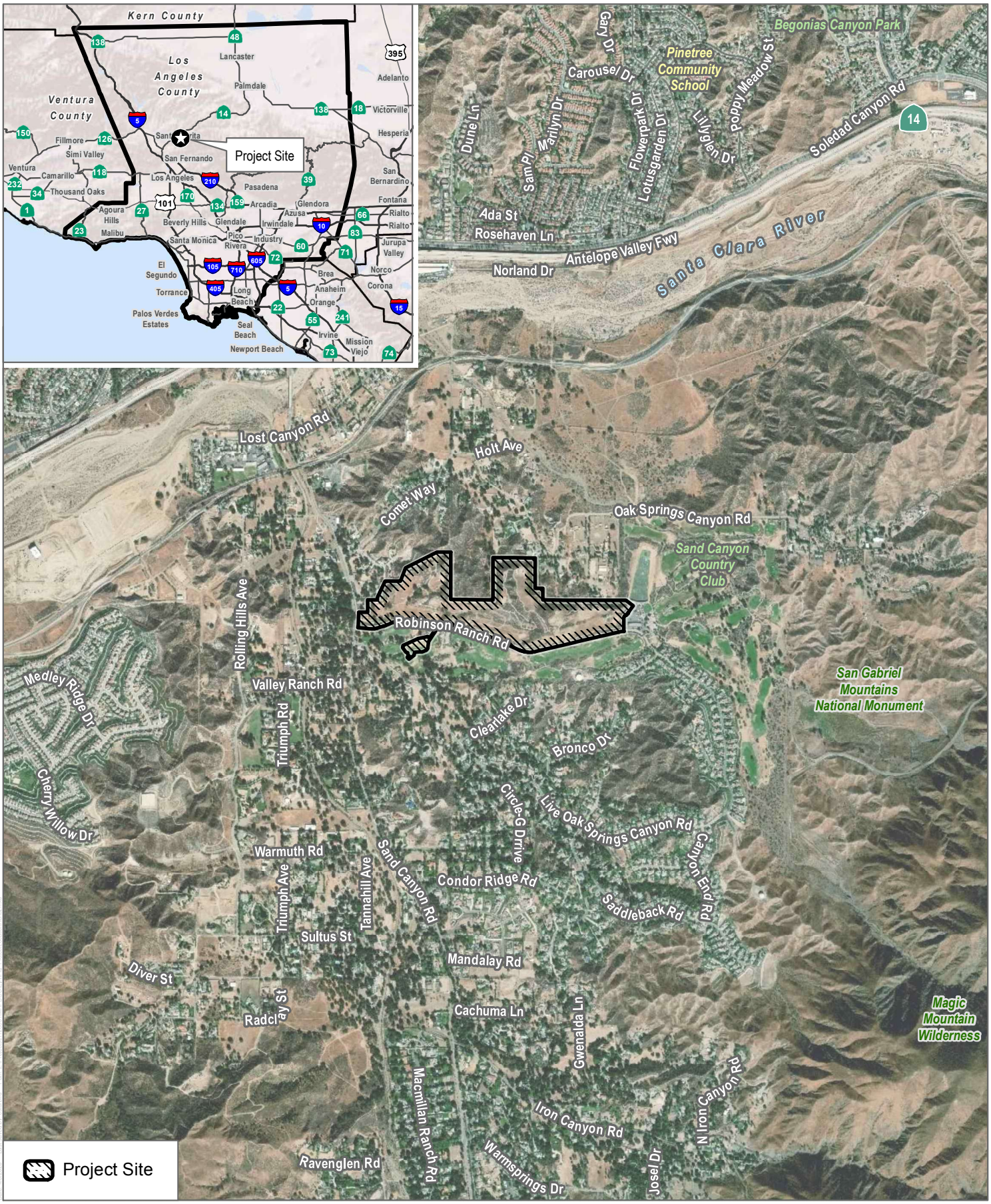
Source: Appendix J, Traffic Impact Analysis. See Figure 2-7 for related project locations.
DU = dwelling unit, TSF = thousand square feet
[a] The number of residential units is estimated based on the City's General Plan allowable land use density.
[b] 580 dwelling units = 119 single-family, 461 multi-family, 140-bed assisted living

3.10 References Cited

CDFW (California Department of Fish and Wildlife). 2019. "California Natural Community List." November 8, 2019. Accessed March 2020.https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

City of Santa Clarita. 1996a. *Hunters Green Project Environmental Impact Report*.

City of Santa Clarita. 1996b. *Resolution No. 96-120*.



SOURCE: USGS 7.5 minute serise Mint Canyon quadrangle

DUDEK

0 1,000 2,000 Feet

FIGURE 3-1

Project Location

Sand Canyon Resort Project

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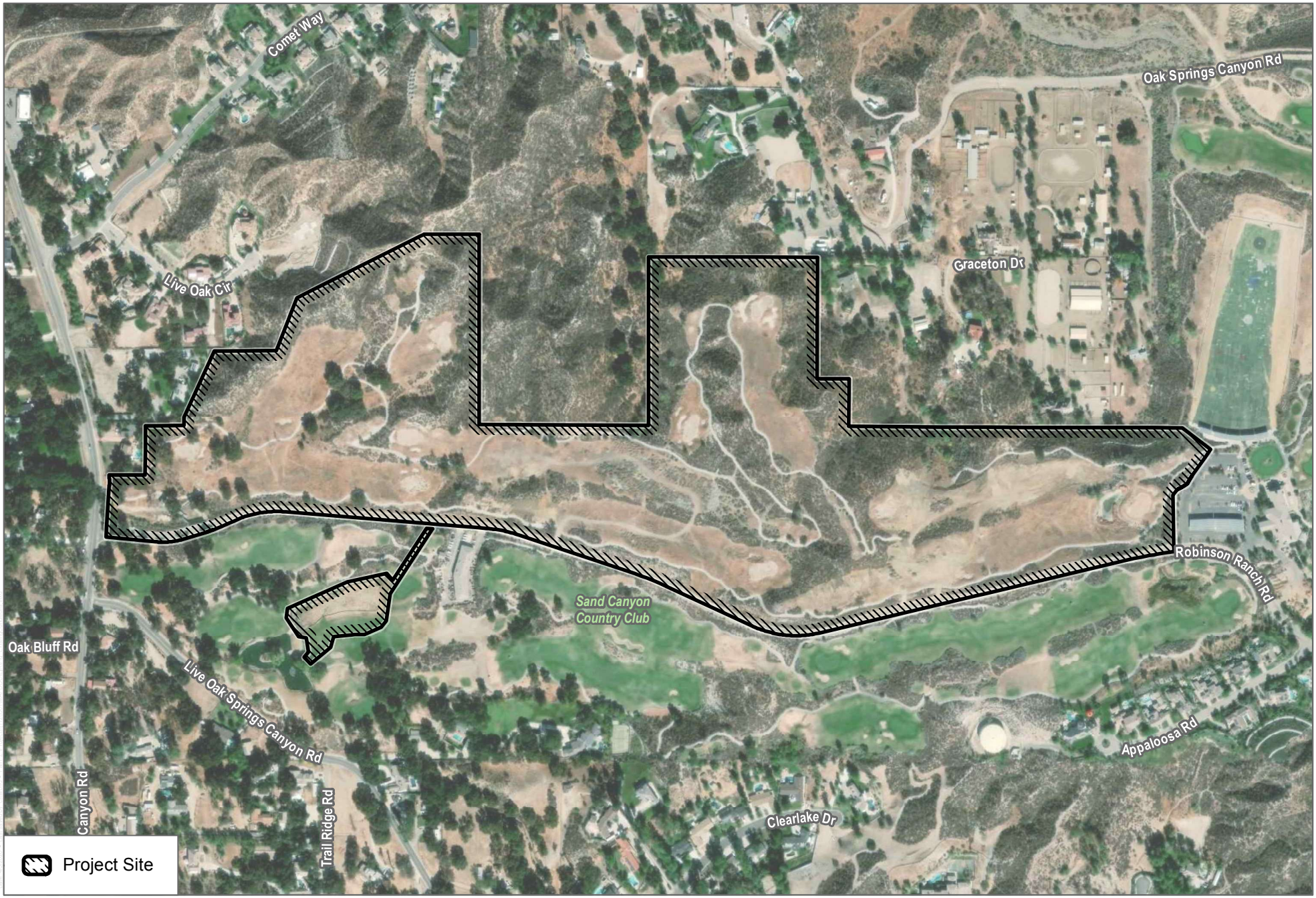

SOURCE: USGS 7.5 minute serise Mint Canyon quadrangle

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0 250 500 Feet

FIGURE 3-2

Existing Conditions

Sand Canyon Resort Project

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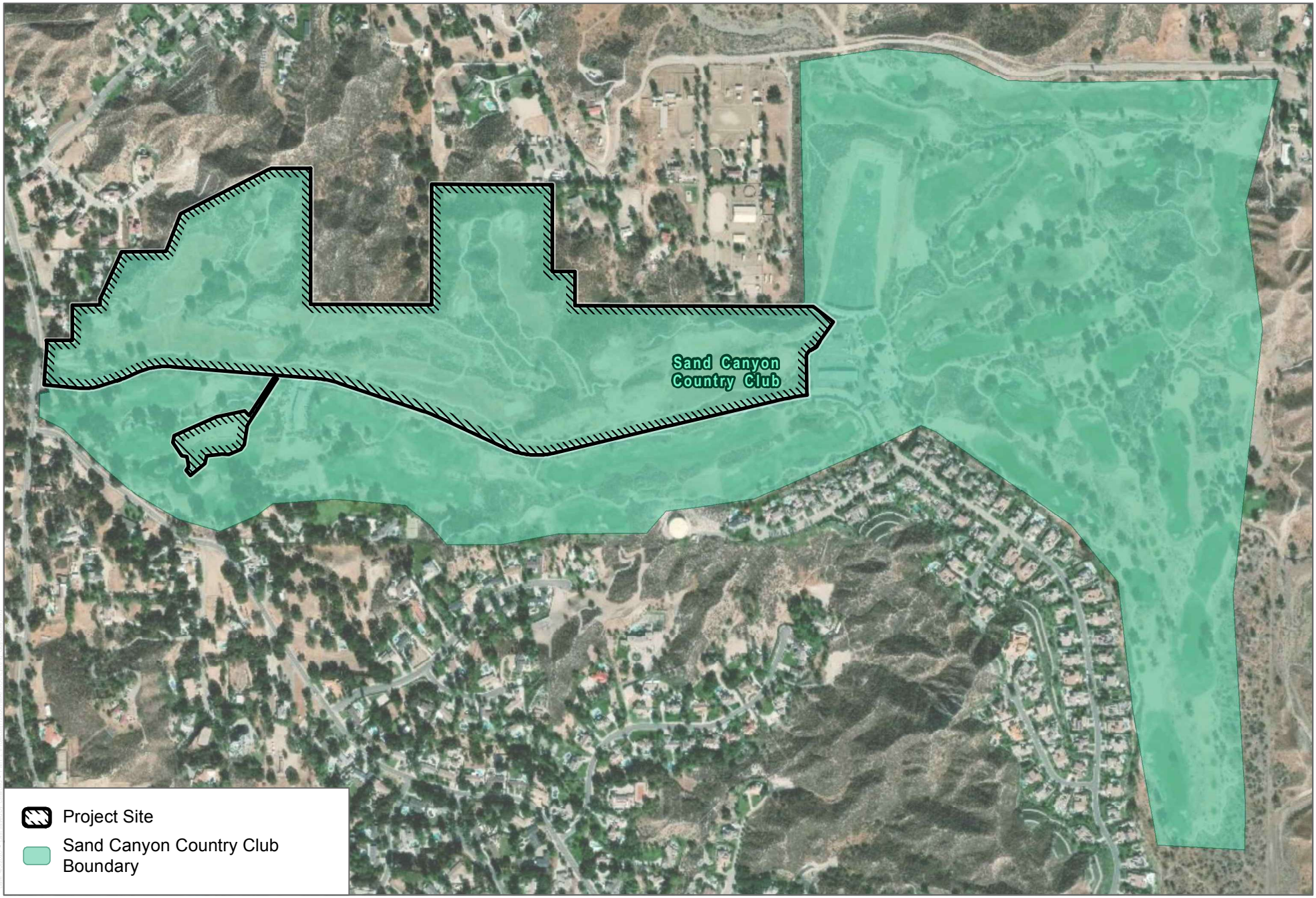

SOURCE: USGS 7.5 minute serise Mint Canyon quadrangle

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0 350 700 Feet

FIGURE 3-3

Sand Canyon Country Club

Sand Canyon Resort Project

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SPA GARDEN INN (27 KEYS)

SPA GARDEN INN
BUILDING "X":
A-0.01 = SPA GARDEN INN 3 BLGS SITE PLAN X,Y,Z
A-1.00 = FLOOR AREAS
A-1.01 = FLOOR PLAN - LEVEL 1
A-1.02 = FLOOR PLAN - LEVEL 2
A-1.03 = FLOOR PLAN - LEVEL 3
A-1.04 = ROOF PLAN
A-2.01= EXTERIOR ELEVATIONS
A-3.01 = SECTIONS

SPA GARDEN INN (27 KEYS)

SPA GARDEN INN
BUILDING "Z" :
A-0.01 = SPA GARDEN INN 3 BLGS SITE PLAN X,Y,Z
SEE BLG "X" FOR PLANS- MIRR.

SPA GARDEN INN (27 KEYS)

SPA GARDEN INN
BUILDING "Y":
A-0.01 = SPA GARDEN INN 3 BLGS SITE PLAN X,Y,Z
SEE BLG "X" FOR PLANS- MIRR.

SPA BUILDING

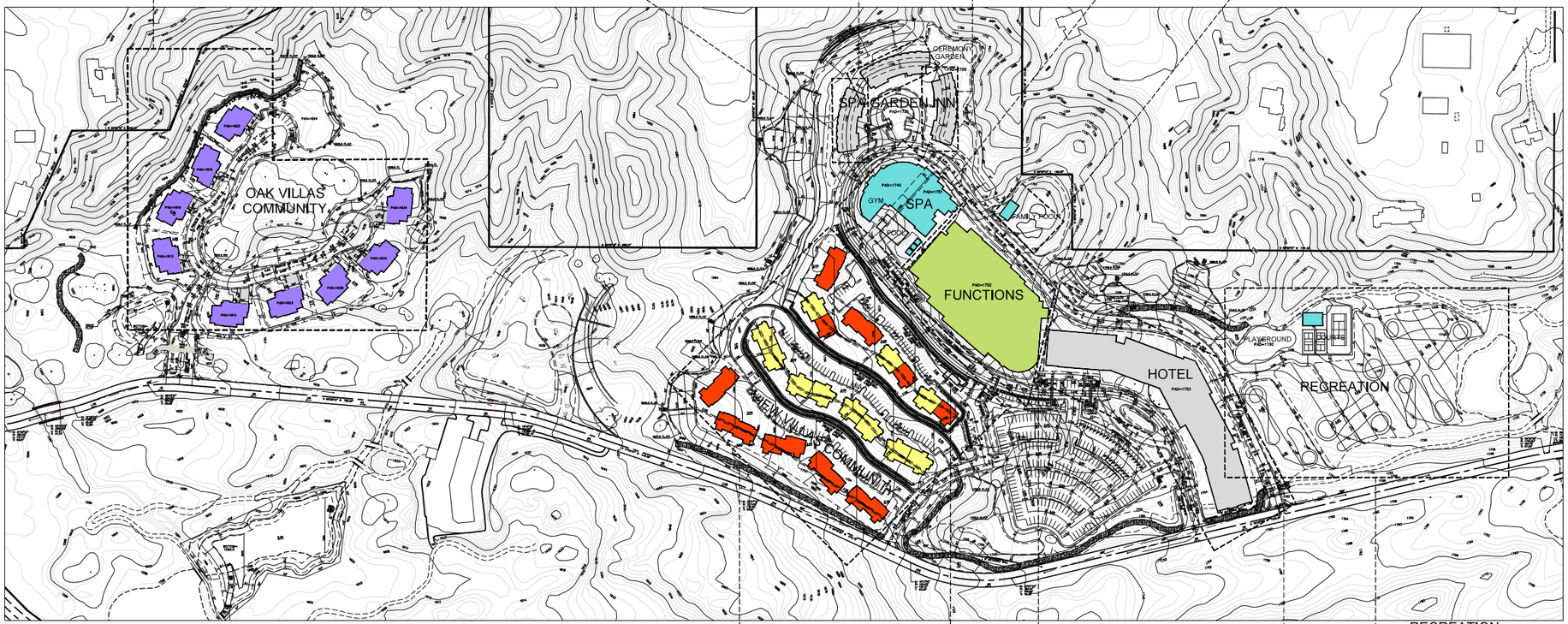
SPA-GYM- POOL-SALON
AS-11.1 = FLOOR PLAN LEVEL 1
AS-11.2 = BASE LEVEL FLOOR PLAN
AS-11.3 = ROOF PLAN
A-4.3S = SPA-POOL-GYM COLOR ELEVATIONS AND PERSPECTIVES
A-4.4S = SPA-POOL-GYM COLOR ELEVATIONS AND PERSPECTIVES

FAMILY POOL / KIDS POOL

FAMILY POOL, KIDS POOL, RESTROOMS, CHANGING AREA
A-4.9 = FAMILY POOL PLANS
A-4.9.1 = FAMILY POOL ELEVATIONS / SECTIONS

OAK VILLAS COMMUNITY (9 KEYS)

OAK COMMUNITY SFD VILLAS:
A-2.1SFD = FLOOR PLANS
A-3.1SFD = SECTIONS
A-4.1SFD = ELEVATIONS
A-4.2 SFD = COLOR ELEVATIONS AND RENDERINGS



BUILDING COLOR KEY LEGEND:

- (4) BEDROOMS - ONE STORY
- (2) BEDROOMS KEYS - TWO STORIES
- (3) BEDROOMS KEYS - TWO STORIES
- HOTEL (SPA GARDEN INN, MAIN HOTEL) THREE STORIES + BASEMENT
- SPA, GYM, POOL COMPLEX ONE STORY + DAYLIGHT BASEMENT
- FUNCTIONS: BALLROOMS, RESTAURANTS TALL ONE STORY + BASEMENT W/ B,O,H. ACCESS

VIEW VILLAS COMMUNITY(241 KEYS)

VIEW VILLAS :
A-2.1V = FLOOR PLANS
A-3.1V = SECTIONS
A-4.1V = ELEVATIONS
A-4.2V = COLOR / MATERIAL ELEVATIONS AND RENDERINGS

GREEN TRASH ENCLOSURE

GREEN VASTE ENCLOSURE
ES2 = FLOOR PLANS, ELEVATIONS COLOR / MATERIAL ELEVATIONS AND RENDERINGS

FUNCTIONS

BALLROOMS MEETING ROOMS PRE-FUNCTION
RESTAURANTS KIDS CLUB
AF-11.1 = FLOOR PLAN LEVEL 1
AF-11.2 = BASE LEVEL FLOOR PLAN
AF-32.1 = SECTIONS
A- 4.7F = FUNCTIONS- COLOR ELEVATIONS AND PERSPECTIVES
A- 4.8F = FUNCTIONS- COLOR / MATERIAL PERSPECTIVES

RECREATION

(1) TENNIS COURT, (2) PICKLE BOARD COURTS, (1) CHILDREN PLAYGROUND AREA, (1) MINI-GOLF AND (1) CHIP AND PUTT GOLF COURSE , RESTROOMS.
A-4.10 = FLOOR PLANS
A-4.11 = ELEVATIONS / SECTIONS

MAIN HOTEL (241 KEYS)

HOTEL
A-11.0.0 = BUILDING GROSS AREA
A-11.0 = HOTEL FLOOR PLAN - LEVEL 0-BASEMENT
A-11.1 = HOTEL FLOOR PLAN - LEVEL 1
A-11.2 = HOTEL FLOOR PLAN - LEVEL 2
A-11.3 = HOTEL FLOOR PLAN - LEVEL 3
A-11.4 = ROOF PLAN
A-22.1 = EXTERIOR ELEVATIONS
A-22.2 = EXTERIOR ELEVATIONS
A-22.3 = EXTERIOR ELEVATIONS
A-31.1 = SECTIONS
A-4.5 MH = COLOR ELEVATIONS AND PERSPECTIVE VIEWS
A-4.6 MH = COLOR ELEVATIONS AND PERSPECTIVE VIEWS

SOURCE: MGS Architecture 2020

FIGURE 3-4

Proposed Project

Sand Canyon Resort Project

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SOURCE: MGS Architecture 2020

FIGURE 3-5

Proposed Tentative Parcel Map

Sand Canyon Resort Project

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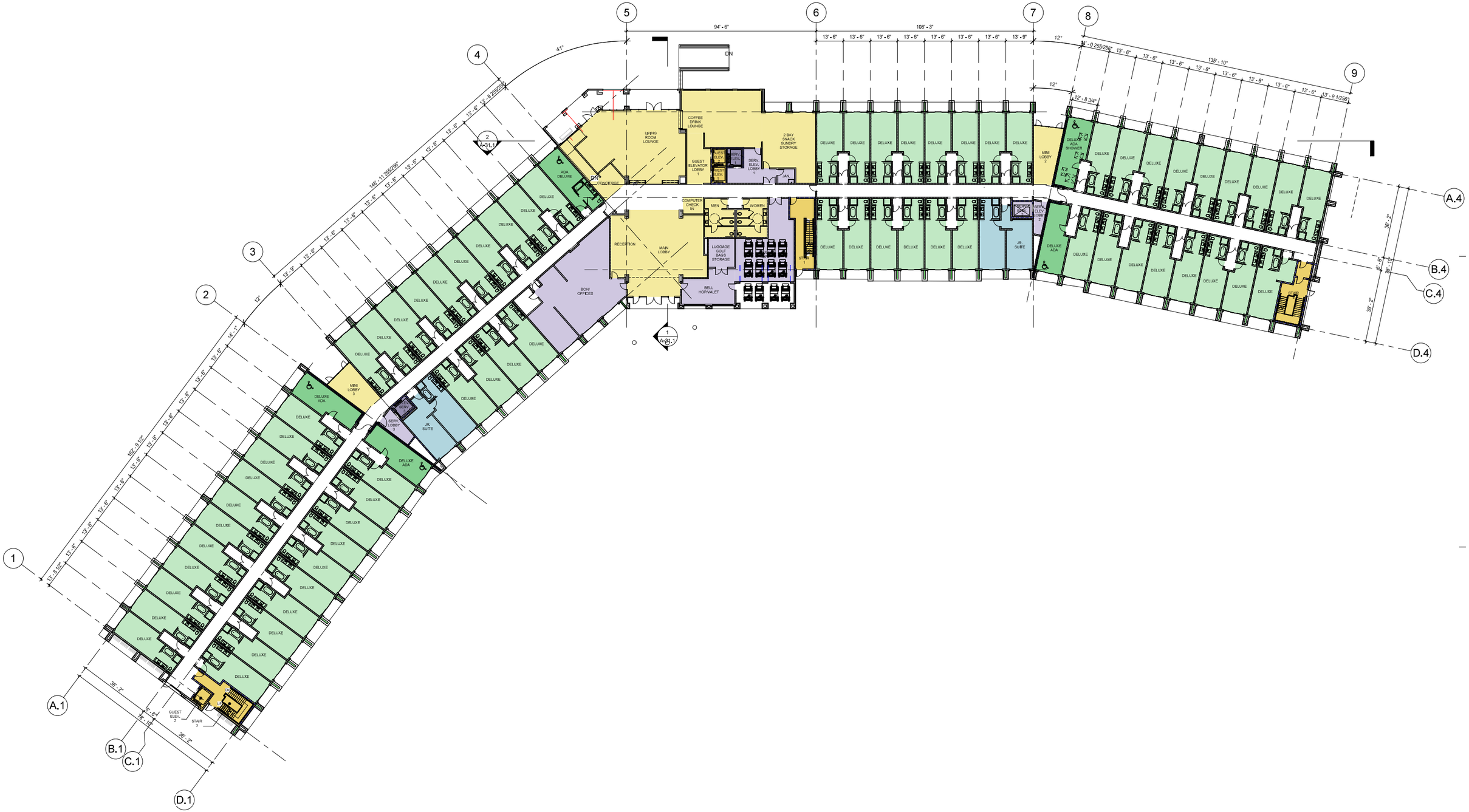

SOURCE: MGS Architecture 2020

FIGURE 3-6

Main Hotel Building Concept

Sand Canyon Resort Project

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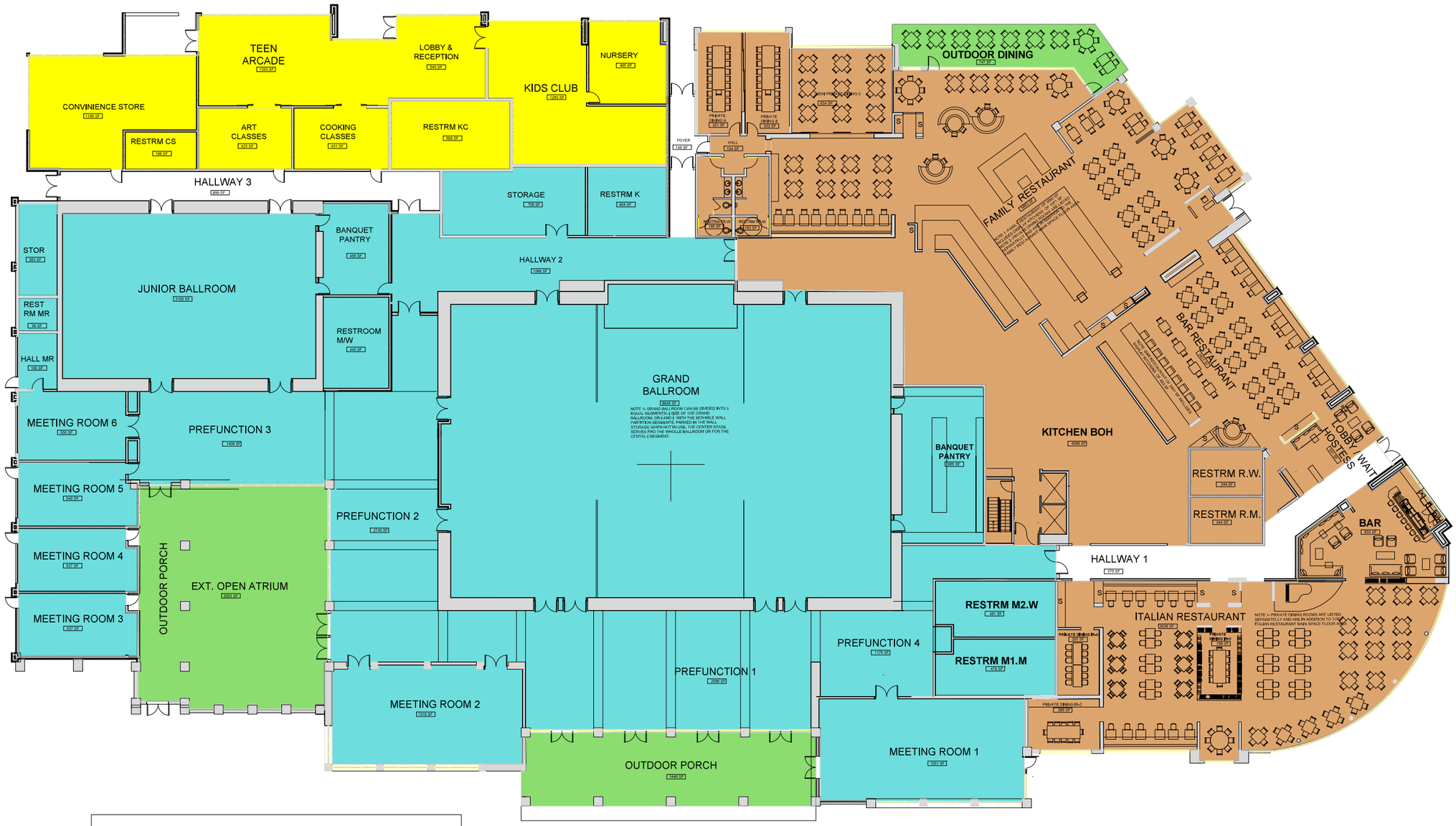

Functions- FIRST FLOOR AREA SUMMARY:

FUNCTIONS, MTNG ROOMS, BALLROOMS, ACCESSORY FUNCTIONS (RESTROOM, STORAGE ETC)	- 34.035 SF
RESTAURANTS, KITCHENS, B.O.H. AND ACCESSORY FUNCTIONS	- 20,833 SF
KIDS CLUB, TEEN ARCADE, NURCERY, ART ROOMS ETC. AND ACCESSORY FUNCTIONS	- 6,475 SF
PORCHES, ATRIUM- OUTDOORS	- 5,445 SF

SOURCE: MGS Architecture 2020

FIGURE 3-7

Function Building Concept

Sand Canyon Resort Project

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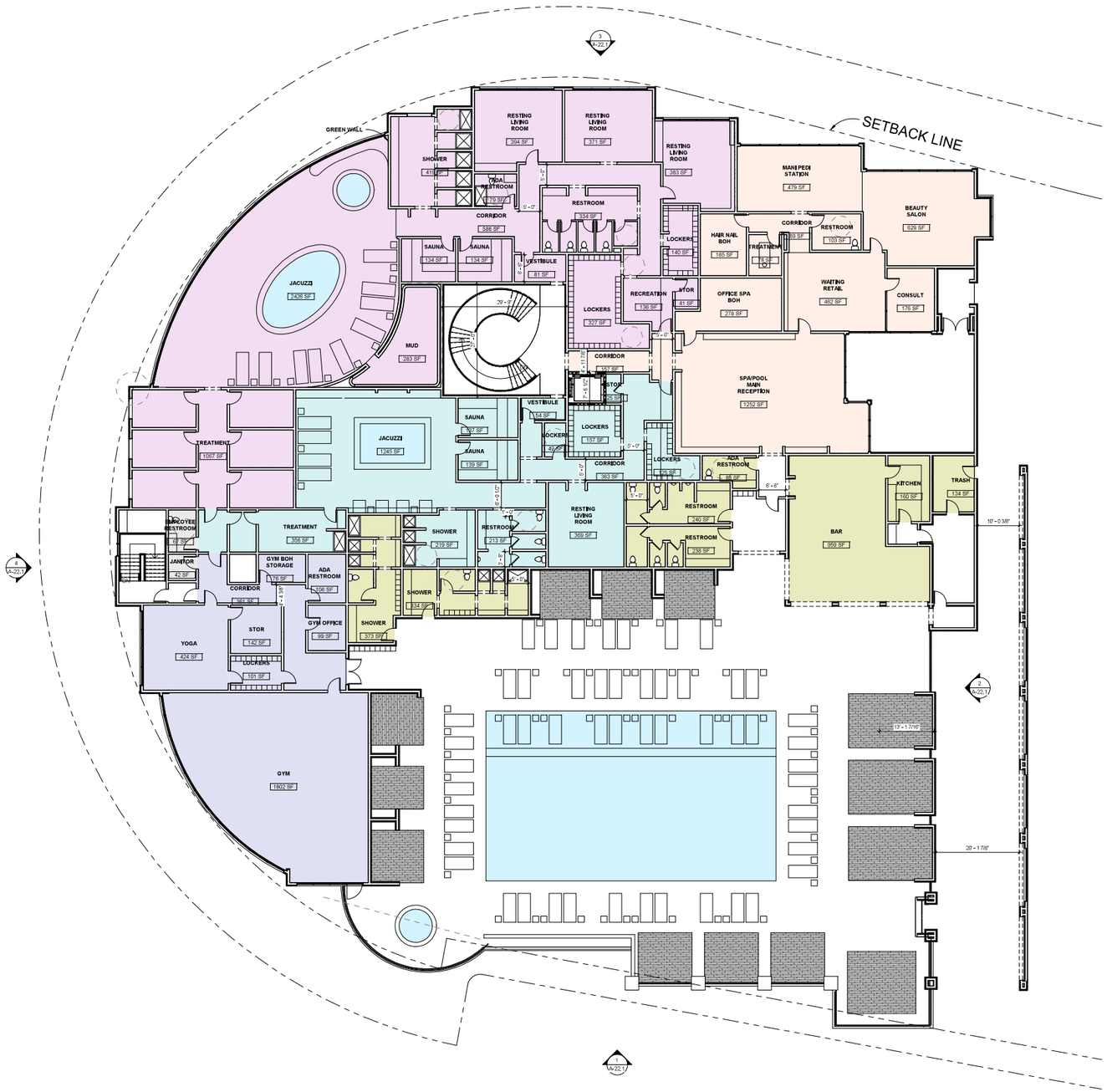

Room	Area
Level 1	
SPA WOMEN	
ADA RESTROOM	79 SF
CORRIDOR	586 SF
JACUZZI	2426 SF
LOCKERS	327 SF
LOCKERS	140 SF
MUD	283 SF
RECREATION	136 SF
RESTING LIVING ROOM	371 SF
RESTING LIVING ROOM	383 SF
RESTING LIVING ROOM	394 SF
RESTROOM	334 SF
SAUNA	134 SF
SAUNA	134 SF
SHOWER	419 SF
STOR	41 SF
TREATMENT	1067 SF
VESTIBULE	81 SF
SPA WOMEN: 17	7334 SF
SPA MEN	
CORRIDOR	363 SF
JACUZZI	1245 SF
LOCKERS	157 SF
LOCKERS	125 SF
LOCKERS	42 SF
RESTING LIVING ROOM	369 SF
RESTROOM	213 SF
SAUNA	137 SF
SAUNA	139 SF
SHOWER	219 SF
STOR	25 SF
TREATMENT	356 SF
VESTIBULE	54 SF
SPA MEN: 13	3444 SF
SPA	
BEAUTY SALON	629 SF
CONSULT	176 SF
CORRIDOR	157 SF
CORRIDOR	89 SF
HAIR NAIL BOH	165 SF
MANI PEDI STATION	479 SF
OFFICE SPA BOH	278 SF
RESTROOM	103 SF
SPA/POOL MAIN RECEPTION	1252 SF
TREATMENT	78 SF
WAITING RETAIL	462 SF
SPA: 11	3867 SF
POOL	
ADA RESTROOM	88 SF
BAR	959 SF
KITCHEN	160 SF
RESTROOM	240 SF
RESTROOM	238 SF
SHOWER	334 SF
SHOWER	373 SF
TRASH	134 SF
POOL: 8	2524 SF
GYM	
ADA RESTROOM	106 SF
CORRIDOR	361 SF
GYM	1802 SF
GYM BOH STORAGE	76 SF
GYM OFFICE	99 SF
LOCKERS	101 SF
STOR	142 SF
YOGA	424 SF
GYM: 8	3111 SF
BOH	
EMPLOYEE RESTROOM	67 SF
JANITOR	42 SF
BOH: 2	109 SF
Level 1	20389 SF

Room	Area
Level B1	
SPA	
CORRIDOR	967 SF
CORRIDOR	111 SF
COURTYARD	770 SF
RECREATION	1703 SF
RESTROOM	99 SF
RESTROOM	144 SF
RESTROOM	67 SF
TRTMT 1	254 SF
TRTMT 2	269 SF
TRTMT 3	219 SF
TRTMT 4	219 SF
TRTMT 5	173 SF
TRTMT 6	158 SF
TRTMT 7	165 SF
TRTMT 8	165 SF
TRTMT 9	165 SF
TRTMT 10	165 SF
TRTMT 11	232 SF
TRTMT 12	232 SF
TRTMT 13	151 SF
TRTMT 14	149 SF
TRTMT 15	149 SF
TRTMT 16	211 SF
TRTMT 17	211 SF
TRTMT 18	201 SF
TRTMT 19	165 SF
TRTMT 20	140 SF
TRTMT 21	236 SF
TRTMT 22	140 SF
TRTMT 23	140 SF
TRTMT 24	140 SF
SPA: 31	8308 SF
BOH	
CORRIDOR	412 SF
ELEVATOR	43 SF
ELEVATOR	59 SF
EMPLOYEES	500 SF
JANITOR	42 SF
KITCHEN	193 SF
LAUNDRY	308 SF
MEP	213 SF
MEP	424 SF
MEP	396 SF
MEP	427 SF
MEP	342 SF
MEP	64 SF
MEP	48 SF
MEP	48 SF
MEP	37 SF
POOL EQUIPMENT	664 SF
PREP	181 SF
RESTROOM	82 SF
RESTROOM	79 SF
STAIR	254 SF
STORAGE	119 SF
TREATMENT	161 SF
TREATMENT	203 SF
TREATMENT	164 SF
TREATMENT	160 SF
BOH: 26	5623 SF
Level B1	13930 SF
Grand total	34319 SF

SOURCE: MGS Architecture 2020

FIGURE 3-8

Spa Building Concept

Sand Canyon Resort Project

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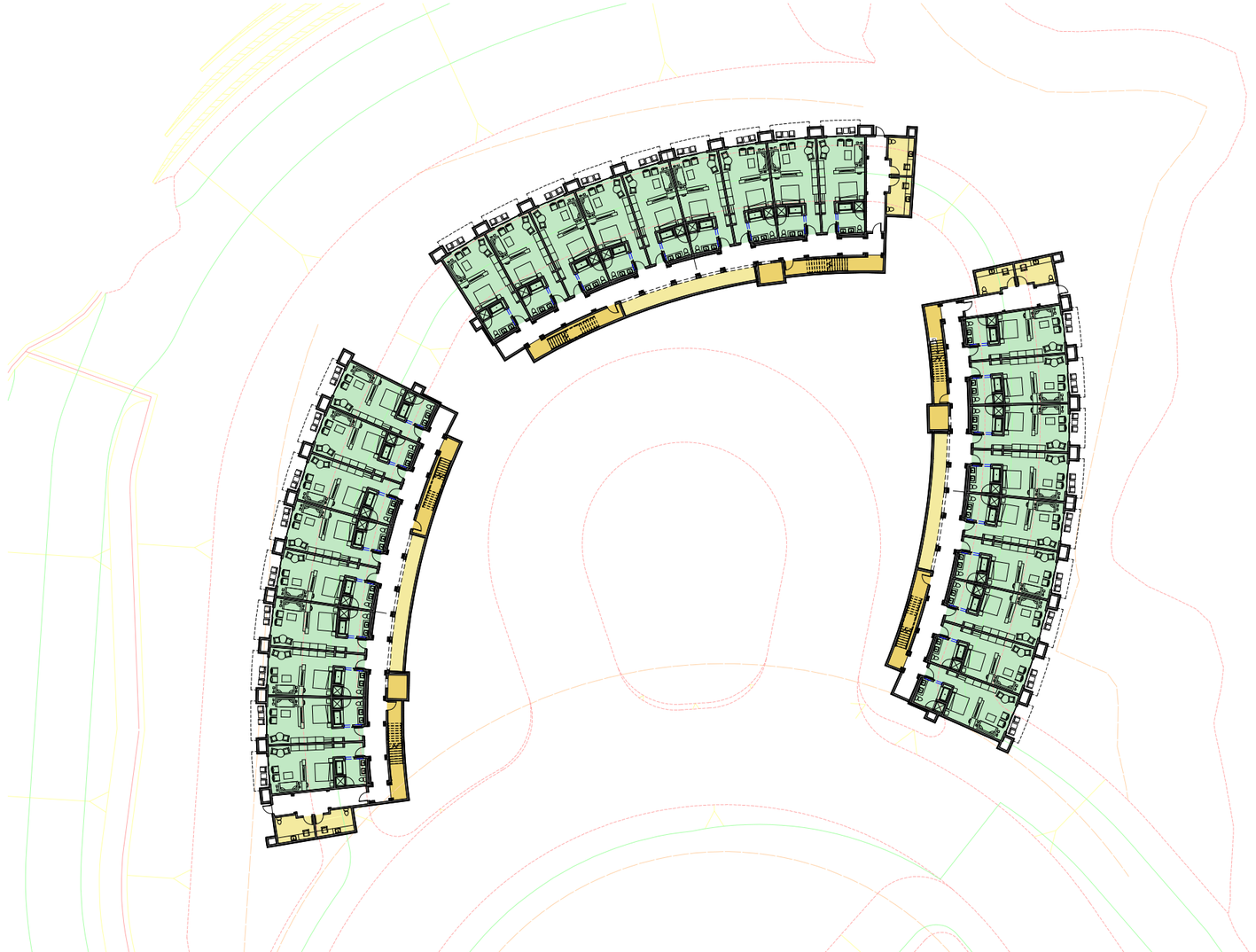

SOURCE: MGS Architecture 2020

FIGURE 3-9

Spa Garden Inn Concept

Sand Canyon Resort Project

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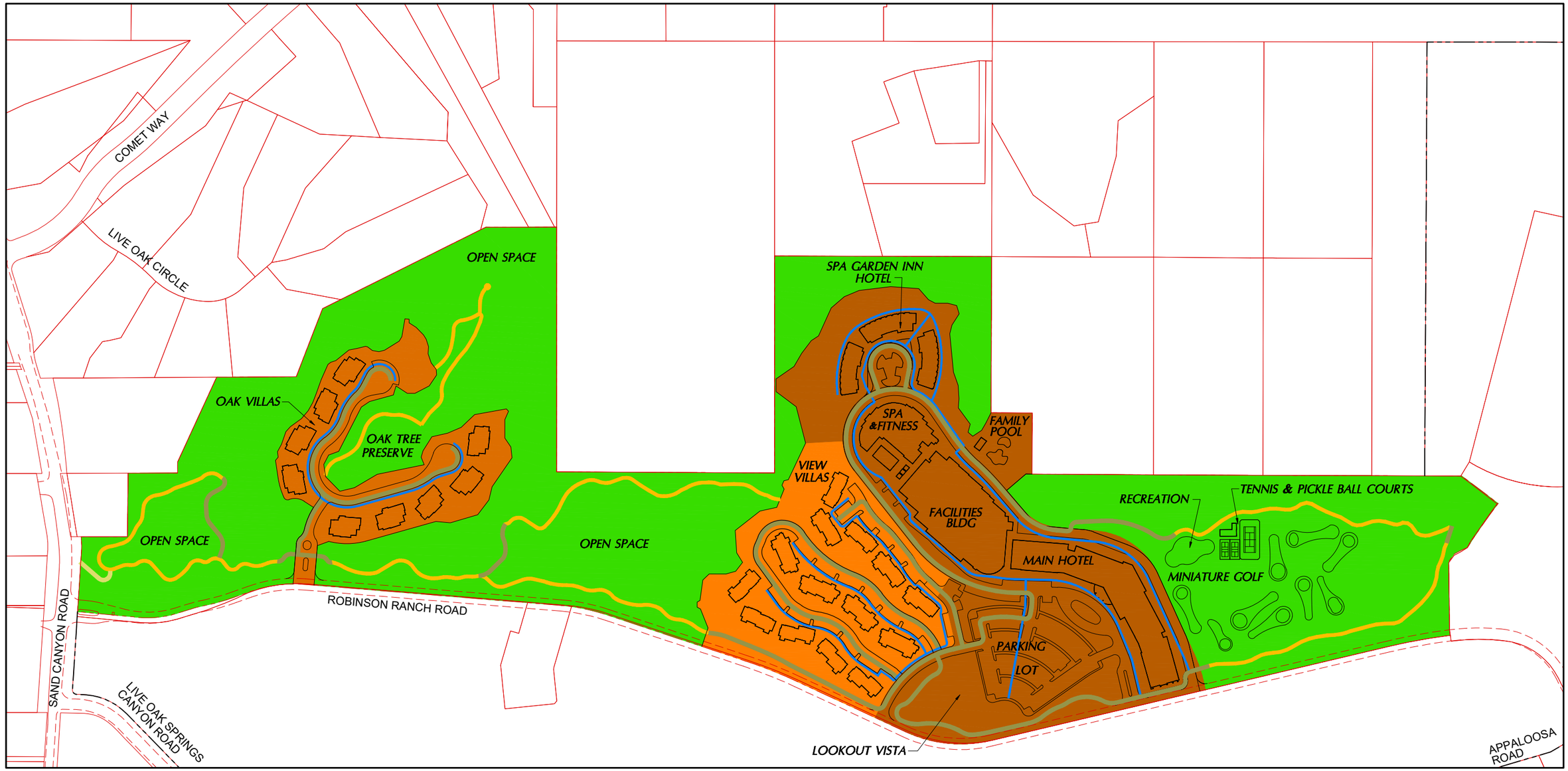

Trail/Path System Description:

Proposed multi use trail improvements include; approximately 6,230 LF of existing 10' wide golf cart path, originally used to provide transportation for golfers on one of two 18 hole golf courses. In order to maintain continuity through the project, where proposed development requires removal of portions of the existing golf cart path, proposed 12' wide sections of multi use path, totalling approximately 4,600 LF will be constructed, for a total of 10,600 LF of multi use trail.

The proposed 12' wide multi use path is to be constructed using the same surface/base section as the existing golf cart path. Maximum linear grade not to exceed 6%, 10% max will be allowed in special circumstances and for short runs, not to exceed 30' in length. The 12' path section will include room for City of Santa Clarita approved "Lodge Pole Fencing", see detail, location(s) to be determined by City of Santa Clarita Parks & Recreation.

Other connections will be available within the developed areas to provide transportation from Guest check in to the View Villas, the Oak Villas, and the other destinations/amenities located within the Resort. As well as ample footpath routes for pedestrian use, approximately 4,000 LF.

SOURCE: MGS Architecture 2020

FIGURE 3-10

Pedestrian Pathways

Sand Canyon Resort Project

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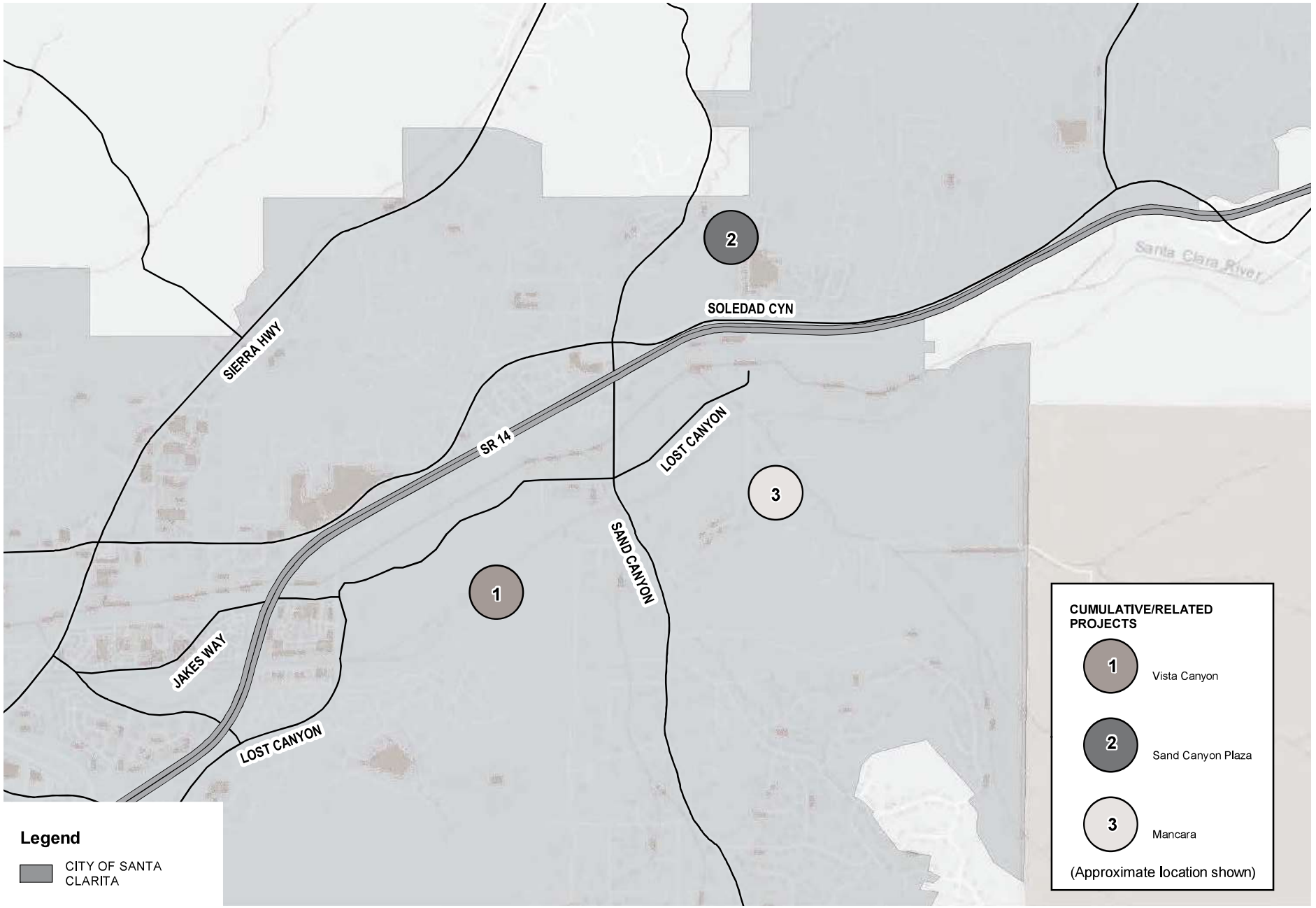

SOURCE: Stantec 2020

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FIGURE 3-11
Related Projects
Sand Canyon Resort Project

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4 Environmental Impact Analysis

The purpose of this Draft Environmental Impact Report (EIR) is to evaluate the potential environmental effects of the proposed Sand Canyon Resort Project (project). The City of Santa Clarita (City) circulated a Notice of Preparation (NOP) beginning on October 18, 2018, with the public review period ending on November 17, 2018. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and property owners immediately adjacent to and across the street from the project site to solicit issues and concerns related to the project. Following the initial NOP and scoping period, modifications were made to the project and a Revised NOP was prepared and circulated. The Revised NOP was published on April 2, 2019, and the second scoping comment period closed on May 2, 2019. The NOP, Revised NOP, and comment letters are contained in Appendix A of this Draft EIR.

Sections 4.1 through 4.17 of the Draft EIR contain the potential environmental impacts analysis associated with implementation of the project and focus on the following issues:

- Aesthetics
- Air quality
- Biological resources
- Cultural and tribal cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Noise
- Population and housing
- Public services
- Recreation
- Transportation
- Utilities and service systems
- Wildfire

Technical Studies

Technical studies were prepared in order to accurately analyze air quality/greenhouse gas emissions, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, public services, transportation, and utilities and service systems impacts, and were used in the preparation of this Draft EIR. These documents are identified in the discussions for the individual environmental issues and included as technical appendices on a CD attached to the Draft EIR. Hard copies are available at the City and will also be available on the City's website, www.santa-clarita.com.

Analysis Format

The Draft EIR assesses how the project would impact each of these issue areas. Each environmental issue addressed in this Draft EIR is presented in terms of the following subsections:

- **Environmental Setting**: This subsection describes the physical environmental conditions in the vicinity of the proposed project at the time of publication of the NOP. The environmental setting establishes the baseline conditions by which the City will determine whether specific project-related impacts are significant.
- **Regulatory Framework:** This subsection describes the laws, regulations, ordinances, plans, and policies applicable to the environmental issue area and the proposed project.
- **Thresholds of Significance**: This subsection identifies a set of thresholds by which the level of impact is determined.

- **Impact Analysis**: This subsection provides a detailed analysis regarding the environmental effects of the proposed project and whether the impacts of the proposed project would meet or exceed the thresholds of significance.
- **Mitigation Measures**: This subsection identifies potentially feasible mitigation measures that would avoid or substantially reduce significant adverse project impacts.
- **Level of Significance After Mitigation**: This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.

4.1 Aesthetics

This section describes the existing visual setting of the proposed Sand Canyon Resort Project (project) site and vicinity including the availability of public views, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project. The analyses in this section are largely based on information obtained from the City of Santa Clarita (City) General Plan, the City's Hillside Development Ordinance, and the City's Community Character Guidelines.

Aesthetics Concepts and Terminology

Scenic Vistas

A scenic vista is a unique view or panorama that characterizes and adds aesthetic value to a location. Scenic vistas can include long and broad views of mountain ranges, skylines, cityscapes, and, often, the ocean or other prominent bodies of water. Scenic vistas are characterized by features such as natural open spaces, topographic formations, or other landscapes that contribute to the visual quality of a specific area.

Visual Character

The visual character of a project site is determined by the distinct physical characteristics that distinguish the project site and its surroundings. For example, natural prevailing topography, site-specific vegetation, and buildings or other development all compose the visual character of a place or project site.

Visual Quality

The visual quality of a project site refers to the general cohesiveness and conformity of the visual characteristics as determined from a viewer's perspective. Factors that determine visual quality include unity, intactness, scenery, organization, form, color, and texture. Visual quality may be degraded by the existence, or addition, of infrastructure or elements that are not visually compatible with the project site and the surrounding location. For example, introducing aboveground electricity poles that obstruct a previously clear, dramatic mountain view would be considered a degradation of the visual quality of a project site. Low visual quality is usually associated with disorganized or chaotic views that appear random or discordant in nature.

Views

- **Viewing scene/view:** What a person sees when they look at a particular scene
- **Viewing location:** The place from which a viewer observes the viewing scene
- **View corridor:** The volume of space between the viewing location and the viewing scene

Viewer Sensitivity

Viewer sensitivity is a measure of people's perception of an existing or proposed view. The type of land use, the density of a land use, adjacent land uses, and scenery usually affect viewer sensitivity. For example, residents living in an area tend to have higher viewer sensitivity, whereas hikers commonly have low to moderate viewer sensitivity due to the short duration and transient nature of views from hiking trails.

Viewshed

A viewshed is the area visible from an observer's perspective. Viewsheds are usually most comprehensive when they include scenic vistas or unobstructed views of expansive landscape components. Viewsheds include the underlying topography (e.g., ridgelines, hillsides etc.) and the associated land cover (e.g., large trees, scrub, and exposed soil).

Light and Glare

For the purposes of this Draft EIR, "light" refers to the degree of brightness generated by a given source. Light may be direct (e.g., from an elevated city streetlamp) or indirect (e.g., light produced from an illuminated piece of reflective material). When light is cast sideways or outwards to the extent that it spills onto neighboring land uses, it can be considered a nuisance or a form of visual pollution. Similarly, nighttime lighting that is poorly placed, including street lighting and spot lighting, may also adversely affect sensitive receptors, especially those who are disturbed (e.g., disrupted sleep) by bright light.

"Glare" specifically refers to focused, intense light that is either directly produced from a source or indirectly cast from a reflective surface. Daytime glare is typically associated with bright sunlight reflecting off broad widths of materials such as glass, steel, and asphalt.

4.1.1 Environmental Setting

Visual Character and Quality

Regional Overview

Per the City General Plan, the City is surrounded by the Traverse Mountain Ranges, which comprises the Santa Susana Mountains to the south and west, the San Gabriel Mountains to the southeast, and the Sierra Pelona Mountains to the north. Well-defined ridgelines, slopes, and canyons provide a visual backdrop to urban portions of the City, create a sense of place for each neighborhood or district, and provide opportunities for residents throughout the Santa Clarita Valley to experience the natural environment (City of Santa Clarita 2011a). Additionally, the City and general regional planning area are bordered by the Angeles National Forest to the north and south, which forms a natural greenbelt and enhances the visual quality of views within the planning area.

Community Overview

Sand Canyon is considered a scenic resource within the City's General Plan, and is characterized by extensive stands of oak trees and large, rustic rural estates with abundant trees and views of the Valley floor from the upper reaches of the canyon. Woodlands and rivers, including oak trees that extend into the project site and the Santa Clara River, are considered scenic resources in the General Plan (City of Santa Clarita 2011a). The general terrain within the Sand Canyon planning area is moderately to steeply sloped, which provides the community with privacy and seclusion created by the enclosing effect of the surrounding ridgelines. The ridgelines in view from the project site include Mendenhall Peak (4,635 feet in elevation) to the southeast and Magic Mountain (4,878 feet in elevation) to the east (Rincon 1995).

Project Site and Surrounding Land Uses Overview

Visual Character and Quality

The project site is located within the Sand Canyon Special Standards District planning area, which was established in 2013 for the purpose of maintaining, preserving, and enhancing the rural and equestrian character of Sand Canyon (City of Santa Clarita 2013). The approximately 77-acre project site is located in the northern portion of the existing Sand Canyon Country Club, south of State Route (SR) 14, as shown in Figure 3-1, Project Location. The project site is situated in the foothills of the San Gabriel Mountains, and, as such, is characterized by gently undulating topography. Several minor westerly and easterly trending ridges descend onto the site from the northwest-trending bedrock ridge, which lies approximately 1 mile north of the project site. According to the General Plan Conservation Element's Hillsides and Ridgelines Map, slopes on the project site range from 0%–15% (City of Santa Clarita 2011a). Elevations range from approximately 1,600 feet above mean sea level in the northwest portion of the project site to 1,740 feet above mean sea level in the southeast portion of the project site.

The project site is located at the northeast corner of Sand Canyon Road and Robinson Ranch Road. The project site is currently vacant and consists of an abandoned (since 2016) nine-hole golf course and a small restroom structure, which is currently out of service. The project site has been subject to both fire and flooding since 2016, and the resultant groundcover is predominantly native and non-native grassland and scrub.

Robinson Ranch Road, a small (i.e., two-lane), east–west, private road that bisects the Sand Canyon Country Club property and connects Sand Canyon Road (west) to Live Oak Springs Canyon Road (east), borders the project site's southern perimeter and separates the proposed resort site from the detention basin site to the south. The Sand Canyon Country Club's operating golfing greens and single-family residential neighborhoods lie south of Robinson Ranch Road. The project site is bordered by a minor ridgeline in the north, which also visually separates the project site from additional residential development and equestrian land uses along Comet Way and Oak Springs Canyon Road. The Sycamore Bar and Grill and the Sand Canyon Country Club's Clubhouse lie east of the project site. Although single-family homes surround the project site in each direction, for the most part, the existing residential development is generally buffered from the project site by existing roadways, vegetation, topography, and the existing operational golf course.

The area surrounding the project site appears semi-rural but also includes estate-residential style development. Private residences near the project site are generally compatible with the rustic aesthetic and utilize neutral-colored building materials (e.g., stone, tan stucco). Residences are set back on large lots that are typically lined by wooden, ranch-style picket fences. Several residences in the vicinity of the project site include horse stables, arenas, and paddocks, as well as other homesteading facilities for small-scale animal husbandry. In addition, lots and residences are typically shaded by large and mature (primarily) oak trees. Local roads, including Sand Canyon Road and Live Oak Springs Canyon Road, are paved with one lane in each direction and do not include striping or sidewalks; however, they do include concrete curbs in places, specifically at storm drain locations. Overall, the visual quality of the surrounding residential neighborhood is high and only partially fragmented by the existence of overhead utility infrastructure on both sides of the streets, street lamps at intersections, and some roadway signage.

Sources of daytime and nighttime light and glare on the project site and in the surrounding area are generally low, given the semi-rural setting, large lot sizes, and set-back houses, although lights and associated glare from residences and other structures, including the Country Club's Clubhouse and the Sycamore Bar and Grill, contribute to the night lighting environment.

The photographs shown in Figures 4.1-1 through 4.1-2b illustrate the existing conditions at the project site. These photographs look towards the project site from several on- and off-site locations. Figure 4.1-1 shows the locations from which the photographs were taken, and Figure 4.1-2a and Figure 4.1-2b show the existing conditions at the project site. With the exception of Photograph 2, all photograph locations are off the project site. Further, only photograph locations 1, 3, and 6 are from public vantage points.

1. **Photograph 1, taken from the intersection of Sand Canyon Road and Robinson Ranch Road, looking northeast towards the project site.** As shown in Figure 4.1-2a, Photograph 1 looks northeast towards the project site from the intersection of Sand Canyon Road and Robinson Ranch Road. Photograph 1 represents views available to residents that live west of the project site and of motorists traveling north on Sand Canyon Road. Under existing conditions, Photograph 1 shows mature oak trees and ornamental vegetation with a short, stone wall in the foreground along Sand Canyon Road's eastern front. Photograph 1 shows the Sand Canyon Country Club entrance at the western terminus of Robinson Ranch Road and provides a partially screened view of the abandoned restroom structure, the project site, and the single residence adjacent to the Sand Canyon Country Club entrance. Views of the project site from this location are obscured by existing mature oak trees that line Sand Canyon Road and extend into the project site.
2. **Photograph 2, taken from the northwestern portion of the property boundary, looking south towards the project site.** As shown in Figure 4.1-2a, Photograph 2 looks south towards the project site from the ridgeline on the northwestern portion of the property. Photograph 2 illustrates the visual character of the project site. Under existing conditions, Photograph 2 includes extensive views of the San Gabriel and Santa Susana Mountains, which provide a scenic backdrop to the existing residential development to the southeast and southwest. From the Photograph 2 location, patches of the watered golfing green and several residential rooftops can be seen in the background; however, extensive vegetation predominantly comprising native oak tree stands, grassland, and scrub obscure these views.
3. **Photograph 3, taken from the Sycamore Bar and Grill, looking west towards the project site.** As shown in Figure 4.1-2a, Photograph 3 looks west towards the project site from the eastern boarder of the property, adjacent to the Sycamore Bar and Grill. Photograph 3 is representative of views available to the public who patronize the Sycamore Bar and Grill. Photograph 3 shows the abandoned nine-hole Mountain Golf Course, which is covered in scrub vegetation under existing conditions. As shown in Photograph 3, this area of the project site has been previously graded and is currently in a disturbed state. In the foreground of Photograph 3, the scar and depression from a previous golfing pond associated with the golf course can be seen.
4. **Photograph 4, taken from Robinson Ranch Road, looking northwest towards the project site.** As shown in Figure 4.1-2a, Photograph 4 looks northwest towards the project site from Robinson Ranch Road near the Sycamore Bar and Grill. Photograph 4 illustrates the views available to patrons/golfers utilizing the Sand Canyon Country Club's golf course. The prominent feature in the view from Photograph 4 is the minor ridgeline and the Sierra Pelona Mountains in the background, with a grassland area semi-enclosed behind an aged, wooden picket fence in the foreground.
5. **Photograph 5, taken from Robinson Ranch Road, looking north towards the project site.** Photograph 5, looking north towards the project site from Robinson Ranch Road, is representative of views available to patrons/golfers utilizing the Sand Canyon Country Club's golf course. To a lesser extent, Photograph 5 approximates views available to residents living approximately 580–780 feet from the project site within the single-family neighborhood off Appaloosa Road. The view from the Photograph 5 location shows a low vegetated berm in the foreground, which is semi-enclosed by an aged, wooden post and rail fence (see

Figure 4.1-2b). Distant views of the Sierra Pelona Mountains to the north are visible; however, they are obscured by the prevailing topography.

6. **Photograph 6, taken from the intersection of Live Oak Springs Canyon Road and Trail Ridge Road, looking north towards the project site.** As shown in Figure 4.1-2b, Photograph 6 looks north towards the project site from the intersection of Live Oak Springs Canyon Road and Trail Ridge Road. Photograph 6 is representative of views available to motorists traveling on Live Oak Springs Canyon Road and, to a lesser extent, residents along Live Oak Springs Canyon Road, between Trail Ridge Road and Sand Canyon Road. A portion of the project property's southernmost border and the existing Sand Canyon Country Club's golfing green are obscured by distance and vegetation. An aged, post-and-rail picket fence lines Live Oak Canyon Springs Road and is visible in Photograph 6. Under existing conditions, the Photograph 6 view includes mature oak trees, which partially obscure views of the Sand Canyon Country Club golf course and the project site.
7. **Photograph 7, taken from Robinson Ranch Road, looking northeast towards the project site.** Photograph 7 looks northeast towards the project site from Robinson Ranch Road (see Figure 4.1-2b). As viewed from the Photograph 7 location, which is situated lower in elevation, the project site is obscured by existing vegetation, including tall oak trees, shrubs and grasslands.

Scenic Vistas

The City's General Plan Conservation Element does not specifically list any local scenic vistas. However, because the City is aesthetically characterized by expansive views of the surrounding hillsides and mountains, these landforms would be considered important components of the City's scenic vistas.

Panoramic views of hillsides and mountains are available from both high and low elevations on the project site. For example, views to the distant San Gabriel Mountains, including the Mendenhall and Magic Mountain ridgelines, are available to the east and southeast and views to the Sierra Pelona Mountains are available to the north. In addition, the Santa Susana Mountains are visible from the project site to the southwest. As shown in Figure 4.1-2a (Photograph 4), there are also limited views across the project site from Robinson Ranch Road to the minor ridgeline that lies approximately 0.5 miles to the west. Although available views of the surrounding mountains and ridgelines are expansive and panoramic, the quality of the views varies by location, elevation, and presence of intervening features between the observer and visual element of interest. It is also important to note that for the purposes of CEQA, scenic vistas are typically public vantage points such as a public roadway or trail. As such, the panoramic views available from the privately owned project site are not public scenic vistas and are not further considered in this EIR and analysis.

Both Sand Canyon Road and Live Oak Springs Road are potential public vantage points for scenic views to hillsides and mountains. However, the quality of the views from the road near the project site is low due to intervening residential land uses and vegetation, including visually prominent oak trees, in the area. From these roads in the vicinity of the project site, hillsides and mountains are regularly obscured by foreground elements and views are typically narrow and short.

Viewer Groups and Viewer Response

Motorists

Motorists traveling on Sand Canyon Road are provided views that primarily comprise the residential development on either side of the public roadway. As demonstrated in Figure 4.1-2a (Photograph 1), views of the project site may

also be available to motorists; however, these views are fleeting and only available from small pockets along the road. Views of the project site are also limited due to the presence of existing oak trees and associated vegetation on adjacent properties. Similarly, motorists traveling on Live Oaks Springs Canyon Road south of the project site experience views that primarily comprise the residential development on either side of the public roadway. The project site is also screened from view of motorists on Live Oaks Springs Canyon Road by trees and other vegetation.

Residents

With the exception of residences on Appaloosa Road, views of surrounding land uses, including the project site, are generally obscured from surrounding residences, as follows:

- **Residences along Sand Canyon Road.** The residences located on Sand Canyon Road generally have limited views of the City's scenic vistas, including hillsides, due to intervening mature trees and vegetation. Additionally, aboveground utility infrastructure slightly degrades the quality of views available from these residences. Views of the project site from Sand Canyon Road are generally available to those residents whose homes are located immediately west of the project site, or immediately adjacent to the project site. In addition, distant and partially obscured views to the San Gabriel Mountains to the east, across the project site, may be available to the residences located immediately adjacent to the project site's western boundary.
- **Residences along Live Oak Springs Canyon Road (south).** The residences south of the project site along Live Oak Springs Canyon Road, from its intersection with Trail Ridge Road to its intersection with Sand Canyon Road, are afforded limited views of the project site and of the San Gabriel Mountains to the east. However, existing views from the residences along Live Oak Springs Canyon Road are obstructed by prevailing oak trees and associated vegetation. Additionally, the existence of aboveground utility infrastructure degrades the quality of the views from these view locations.
- **Residences along Live Oak Springs Canyon Road (north), Comet Way, and Live Oak Circle.** The residences north of the project site along Live Oak Springs Canyon Road, Comet Way, and Live Oak Circle are afforded views of the City's scenic vistas, specifically the San Gabriel Mountains to the east and the Sierra Pelona Mountains to the north. The quality of these views varies by residence depending on the prevailing trees and vegetation, some of which predominate over the foreground and obstruct views. However, these residences are separated from the project site by a minor ridgeline, the presence of which largely precludes clear views of the project site from these residences under existing conditions.
- **Residences along Clearlake Drive.** The residences along Clearlake Drive south of the project site are nestled within a topographic depression. As such, clear views of the surrounding mountains and the project site from the residences along Clearlake Drive are predominantly obstructed by prevailing topography.
- **Residences along Appaloosa Road.** The residences along Appaloosa Road south of the project site provide high-quality view locations. Views of the San Gabriel Mountains (south and southeast), the Santa Susanna Mountains (south and west), and the Sierra Pelona Mountains and the City-designated secondary ridgeline (north) are available from most of these residences. These homes sit at a slightly higher elevation than the surrounding land uses and face north with clear, unobstructed views of the existing Sand Canyon Golf Course, including the project site.

As described above, scenic vistas of the surrounding mountains would be limited from the surrounding residences due to prevailing oak woodlands, vegetation, and topography, which preclude clear, high-quality views of the scenic mountains and hillsides. Those residences along Appaloosa Road are the only residences with clear, unobstructed views of the City's scenic vistas and of the project site.

Recreational Hikers

Hikers using the public trail system that surrounds the project site are afforded views of the Santa Susana Mountains to the south and west, the San Gabriel Mountains to the southeast, and the Sierra Pelona Mountains to the north, as well as fleeting views of the project site and the residential and urban development to the south. As shown on Figure 4.1-3, there are three public trail segments in the vicinity of the proposed project that grant views that could potentially be impacted by the proposed project:

- **Sand Canyon Road Trail between Sand Canyon Road and Live Oak Springs Road.** The hikers utilizing the Sand Canyon Road Trail are afforded fleeting views of the surrounding hills and ridgelines (including the San Gabriel Mountains, Santa Susana Mountains, and Sierra Pelona Mountains) in the distance. However, views of these scenic resources in the vicinity of the project site from the Sand Canyon Trail are largely obstructed by residential development and prevailing vegetation, including mature oak trees and oak woodlands. Views to and from the project site are almost entirely obscured from the Sand Canyon Road Trail.
- **Spring Canyon Road Trail between Graceton Drive and Canyon Road.** The Spring Canyon Road Trail runs in an east–west direction approximately 0.5 miles north of the project site, immediately south of Oak Springs Canyon Road. The hikers utilizing the Spring Canyon Road Trail between Graceton Drive and Canyon Road are afforded high-quality, expansive views of the San Gabriel Mountains to the east. Although present, views of the Santa Susana Mountains to the south are characterized by the existing single- and double-story residential development, as well as stands of oak trees and undulating topography. Similarly, views of the Sierra Pelona Mountains to the north, although present, are characterized by the prevailing residential and urban development to the north. Due to the slightly higher elevation of this trail, moderate quality views of the project site and the Sand Canyon community prevail from this viewer location. However, these views of the project site and the surrounding residential development are characterized by the undulating topography that pervades the region.
- **Robinson Ranch Trail between Spring Canyon Road and the Santa Clarita City Limits.** The Robinson Ranch Trail is located in the foothills of the San Gabriel Mountains, approximately 0.6 miles east of the project site. The hikers utilizing the Robinson Ranch Trail between Spring Canyon Road and the Santa Clarita City limits are afforded expansive views of the San Gabriel Mountains to the east. Although present, views of the Santa Susana Mountains to the south and the Sierra Pelona Mountains to the north are characterized by the existing single- and double-story residential development, stands of oak trees and associated vegetation, and the prevailing undulating topography. Views to the west from this location include the residential development off Live Oaks Spring Canyon Road, which predominates over the view corridor and largely obscures the more distant project site from view.

Other Viewers

Other private view locations in proximity to the project site include views from Robinson Ranch Road, the Sycamore Bar and Grill, and the Sand Canyon Country Club's Clubhouse (see Figures 4.1-2a and 4.1-2b).

4.1.2 Regulatory Framework

State

State Scenic Highways

The California Department of Transportation's State Scenic Highway System includes a list of designated and eligible state scenic highways. There are two eligible state scenic highways in the City of Santa Clarita, (a) Interstate 5 from Interstate 210 near Tunnel Station to SR-126 near Castaic and (b) SR-126 from SR-150 near Santa Paula to Interstate 5 near Castaic (both approximately 11 miles west of the project site). However, neither of these highways are officially designated and neither of these highways are located within proximity to the project site (Caltrans 2019).

Local

City of Santa Clarita General Plan

Land Use Element

The City's General Plan Land Use Element (City of Santa Clarita 2011b) outlines specific policies pertaining to the protection of scenic resources. Those policies applicable to the proposed project are included below and analyzed in Section 4.10, Land Use and Planning, of this EIR.

Goal LU 1: An interconnected Valley of Villages providing diverse lifestyles, surrounded by a greenbelt of natural open space.

Policy LU 1.1.4: Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.

Policy LU 1.3.2: Substantially retain the integrity and natural grade elevations of significant natural ridgelines and prominent landforms that form the Valley's skyline backdrop.

Policy LU 1.3.3: Discourage development on ridgelines and lands containing 50% slopes so that these areas are maintained as natural open space.

Goal LU 6: A scenic and beautiful urban environment that builds on the community's history and natural setting.

Policy LU 6.1.3: Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to clustering of development; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.

Policy LU 6.2.1: Promote the inclusion of plazas, courtyards, seating areas, public art, and similar features within commercial centers, business parks, and civic facilities visited by the general public.

Policy LU 6.2.2: Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.

Policy LU 6.3.4: Require undergrounding of utility lines for new development where feasible, and plan for undergrounding of existing utility lines in conjunction with street improvement projects where economically feasible.

Policy LU 6.5.1: Require use of high quality, durable, and natural-appearing building materials pursuant to applicable ordinances.

Policy LU 6.5.2: Encourage the use of designs and architectural styles that incorporate classic and timeless architectural features.

Policy LU 6.5.3: Require architectural enhancement and articulation on all sides of buildings (360-degree architecture), with special consideration at building entrances and corners, and along facades adjacent to major arterial streets.

Policy LU 6.5.4: Evaluate new development in consideration of its context, to ensure that buildings create a coherent living environment, a cohesive urban fabric, and contribute to a sense of place consistent with the surrounding neighborhoods.

Conservation and Open Space Element

The City's General Plan Conservation and Open Space Element (City of Santa Clarita 2011a) outlines specific policies pertaining to the protection of scenic resources. Those policies applicable to the proposed project are included below and analyzed in Section 4.10 of this EIR.

Goal CO 6: Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values.

Policy CO 6.1.1: Protect scenic canyons, as described in Part I of this element, from overdevelopment and environmental degradation.

Policy CO 6.1.2: Preserve significant ridgelines, as shown on the Exhibit CO-7, as a scenic backdrop throughout the community by maintaining natural grades and vegetation.

Objective CO 6.2: Protect the scenic character of view corridors.

Policy CO 6.2.1: Where feasible, encourage development proposals to have varied building heights to maintain view corridor sight lines.

Objective CO 6.4: Protect the scenic character of oak woodlands, coastal sage, and other habitats unique to the Santa Clarita Valley.

Policy CO 6.4.1: Preserve scenic habitat areas within designated open space or parkland, wherever possible.

Policy CO 6.4.2: Through the development review process, ensure that new development preserves scenic habitat areas to the extent feasible.

Objective CO 6.6: Limit adverse impacts by humans on the scenic environment.

Policy CO 6.6.1: Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.

Policy CO 6.6.2: Improve views of the Santa Clarita Valley through various policies to minimize air pollution and smog, as contained throughout the General Plan.

Policy CO 6.6.4: Where appropriate, require new development to be sensitive to scenic viewpoints or viewsheds through building design, site layout and building heights.

Policy CO 6.6.5: Encourage undergrounding of all new utility lines, and promote undergrounding of existing lines where feasible and practicable.

Hillside Development and Ridgeline Protection

As stated above, the City is surrounded by the Santa Susana Mountains to the south and west, the San Gabriel Mountains to the southeast, and the Sierra Pelona Mountains to the north. Both the City and Los Angeles County have adopted policies and ordinances to regulate development in hillside areas, in order to protect the scenic quality and integrity of hillside areas from overdevelopment and erosion. Both City and Los Angeles County standards for hillside development are intended to ensure that development in hillside areas maintains the natural topography, resources, and amenities of these areas (City of Santa Clarita 2011a). The City regulates hillside development through Section 17.51.020 of the City of Santa Clarita Municipal Code.

Community Character and Design Guidelines

The City's Community Character and Design Guidelines (Design Guidelines) establish the planning principles for the City with the intent of retaining and encouraging architectural variety and promoting quality development (City of Santa Clarita 2009). The Design Guidelines are applicable to the aesthetic value of the proposed project, specifically in ensuring that the project meets the following ideals:

- Is compatible in size, scale, and appearance with the character of Santa Clarita
- Is attractive and an asset to the community
- Preserves and enhances natural features of a site
- Incorporates quality articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design
- Provides pedestrian-oriented design to enrich the pedestrian experience
- Includes pedestrian friendly amenities such as pedestrian connections, plazas, seating, bike racks, fountains, and other similar features for the enjoyment of the community and visitors

- Promotes the use of high-quality materials
- Promotes well-landscaped parking lots with efficient pedestrian and vehicular circulation
- Provides suggestions for ways to improve the environmental performance of projects through the strategic incorporation of green building components

City of Santa Clarita Municipal Code

The City's Municipal Code includes established development standards that regulate development activities within the City. Municipal Code sections that are applicable to the proposed project's aesthetic impact include, but are not necessarily limited to, the following:

- **Section 17.39.010, Sand Canyon Special Standards District.** Section 17.39.010 of the Municipal Code outlines the development standard regulations for all development planned within the Sand Canyon area. The code regulates numerous aspects of development, including community character and design, oak tree preservation, and street development standards (e.g., lighting, curbs, sidewalks).
- **Section 17.51.020, Hillside Development.** The purpose of Section 17.51.020 is to regulate the development and alteration of hillside areas, to minimize the adverse effects of hillside development and to provide for the safety and welfare of the citizens of the City. According to the City's General Plan, the project site is within an area that is predominantly at a 0%-15% slope (City of Santa Clarita 2011a). Hillside development is allowed in the City through the following methods:
  - Hillside development must be consistent with the hillside development standards to maximize the positive impacts of site design, grading, landscape architecture, and building architecture and must provide development consistent with the goals and policies of the General Plan.
  - Hillside development must maintain the essential natural characteristics of the area such as major landforms, vegetation and wildlife communities, hydrologic features, scenic qualities, and open space that contribute to a sense of place.
  - Hillside development must retain the integrity of predominant off-site and on-site views in hillside areas in order to maintain the identity, image, and environmental quality of the City.
- **Section 17.51.040, Oak Tree Preservation.** Oak trees define the visual character of the City, and thus, are considered a natural and aesthetic resource. The Oak Tree Preservation Ordinance outlines the requirements pertaining to the protection and preservation of oak trees in the City, including regulations for cutting, damage, and encroachment on oak trees and oak woodlands.
- **Section 17.51.050, Outdoor Lighting Standards.** The outdoor lighting standards are intended to permit the reasonable use of outdoor lighting for nighttime safety, utility, security, productivity, enjoyment, and commerce, while conserving energy to the greatest extent possible and minimizing off-site light trespass and glare. Per Section 17.51.50, the general requirements set forth for the City's lighting standards include the following:
  - Shielding. All lighting shall be directed downward and be of a cut-off design so the luminary and/or lens do not protrude below the luminary housing and are not visible from a public right-of-way.
  - Light Trespass. Lighting may not illuminate other properties and shall be directed downward to prevent off-site glare.
  - Appurtenances. Lighting shall be operated so that it does not disturb the peace, quiet, and comfort of adjacent, neighboring uses, and shall be screened and/or shielded from surrounding properties and streets.

  - Lighting Plan. Except for new and additions to single-family residences, applications for new buildings and building additions and proposed modifications shall include the location, fixture type, fixture height, and photometric information of all outdoor lighting and information about shut-off timers and hours of operation for outdoor lighting where required by this section for review and approval by the Director of the City's Planning Division.
- **Section 17.88, Grading Designation and Location.** The City's Grading Designation and Location Code requires that all grading operations that require a grading permit be subject to inspection by the City Engineer. Additionally, the code requires that a field engineer, geotechnical engineer, and an engineering geologist perform all grading operations.

4.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines and except as provided in California Public Resources Code, Section 21099, a significant impact related to aesthetics would occur if the project would:

1. Have a substantial adverse effect on a scenic vista.
2. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.
3. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urban area, conflict with applicable zoning and other regulations governing scenic quality.
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
5. Additionally, the City's Local Guidelines include the following additional City-specific threshold related to aesthetics, in which a significant impact would occur if the project would result in (City of Santa Clarita 2005):
6. Changes to the topography of a Primary or Secondary Ridgeline.

4.1.4 Impact Analysis

Threshold AES-1. Would the project have a substantial adverse effect on a scenic vista?

The City's General Plan Conservation Element (City of Santa Clarita 2011a) does not specifically list any local scenic vistas; however, because the City is aesthetically characterized by expansive views of the surrounding hillsides and more distant mountains, these landforms would be considered important components of the City's scenic vistas.

As such, scenic vistas within the City include panoramic views of the following:

- San Gabriel Mountains, specifically the Mendenhall and Magic Mountain ridgelines to the east and southeast
- Sierra Pelona Mountains to the north
- Santa Susana Mountains to the southwest
- Minor ridgelines throughout the City

Although clear views of these scenic vistas are available from various locations on and around the project site, the view locations are predominantly private and comprise private residential properties. It is important to note that the obstruction of "only a few private views" (i.e., views from private view locations such as residences) is generally not considered significant under CEQA (CNRA 2004). Instead, significant aesthetic impacts would be those that substantially degrade or otherwise impair the quality of public views (i.e., views from publicly accessible view locations such as roadways).

The only public view locations in proximity to the project site are (a) Sand Canyon Road, (b) Live Oak Springs Road, and (c) the public trails described in Section 4.1.1, Existing Conditions. As described in Section 4.1.1, views from Sand Canyon Road and the Sand Canyon Road Trail do not include any scenic vistas because existing trees and vegetation generally preclude expansive, clear views of the surrounding mountains and hillsides. Furthermore, only fleeting and limited views of the project site are available from public vantage points on Sand Canyon Road.

Similarly, limited views of the project site, the minor ridgeline to the north, and the San Gabriel Mountains to the east are available from Live Oak Springs Canyon Road. However, existing views from Live Oak Springs Canyon Road are obstructed by existing mature oak trees and associated vegetation and residential land uses, and, as such, would not be considered a scenic vista. Due to the distance between Live Oak Springs Road and the project site (i.e., the size of the view corridor), the proposed project would not have a significant impact on views from Live Oak Canyon Road.

As shown in Figure 4.1-3, three public trails are located in the vicinity of the project site, and the proposed project would be visible from two of these public trails: the Robinson Ranch Trail, which lies approximately 0.6 miles east of the project site, and the Spring Canyon Road Trail, which lies approximately 0.5 miles north of the project site. Existing views from locations on these trails are occasionally expansive and include the San Gabriel Mountains to the east and the Sierra Pelona Mountains to the north. Views of the distant Santa Susanna Mountains to the south are also available.

Views from Robinson Ranch Trail looking east towards the project site do not encompass scenic vistas. Rather, views looking east from the Robinson Ranch Trail include views of the existing single- and double-story residential development and the Sand Canyon Country Club, including the project site, all of which would not be considered as contributing to views of a scenic vista. Views available from Robinson Ranch Trail include the San Gabriel Mountains to the east; however, the proposed project would not be located within this viewshed, and, as such, would not impact views of the San Gabriel Mountains or associated scenic vistas to the east. Although distant views of the Santa Susana Mountains are available from the Robinson Ranch Trail to the south and southwest, these views also encompass the Sand Canyon Community to the south. Considering that existing residential development predominates over the viewshed, views to the Santa Susana Mountains to the south from this trail include developed uses and the project would not substantially alter mountain views. Further, views to the Santa Susana Mountains from the trail would not be substantially obstructed. Similarly, the proposed project would not be located within available views towards the Sierra Pelona Mountains from the Robinson Ranch Trail (which are located to the north of the trail). As such, implementation of the proposed project would have a less-than-significant impact on scenic vistas from the Robinson Ranch Trail.

Views from Spring Canyon Road Trail looking south towards the project site include the existing single- and double-story residential development to the north and south of the project site, as well as distant views of the Santa Susana Mountains to the south and southwest. Although views of the Santa Susana Mountains are available from the trail, the distant mountain terrain would not be obstructed by project development. Further, existing views encompass developed uses and development on the project site would not substantially alter the existing quality of available

views. Expansive views of the San Gabriel Mountains to the east from the Spring Canyon Road Trail would constitute a scenic vista; however, the proposed project would not be located within the viewshed looking east towards the San Gabriel Mountains. As such, the proposed project would have no impact on scenic vistas of the San Gabriel Mountains from the Spring Canyon Road Trail. Similarly, the proposed project would not be within the viewshed of the Sierra Pelona Mountains from the Spring Canyon Road Trail, looking north. Therefore, implementation of the proposed project would have a less-than-significant impact on scenic vistas from the Spring Canyon Road Trail.

As such, project implementation would have a **less-than-significant impact** on scenic vistas and no mitigation is required.

Threshold AES-2. ***Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?***

The project site is not located within the viewshed of a designated state scenic highway or an eligible state scenic highway. There are no designated state scenic highways within the City. There are two eligible state scenic highways in the City: Interstate 5 from Interstate 210 near Tunnel Station to SR-126 near Castaic and SR-126 from SR-150 near Santa Paula to Interstate 5 near Castaic (Caltrans 2019). Both Interstate 5 and SR-126 are located approximately 11 miles west of the project site and, as such, views to the project site are not available from these highways. As such, the proposed project would have **no impact** on scenic resources within a state scenic highway.

Threshold AES-3. ***In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage points)? If the project is in an urban area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Given that the project site is located in a rural, equestrian neighborhood, the proposed project is evaluated under both the "non-urbanized" and the "urbanized" scenario, as follows.

Construction

The project site is currently vacant and was subject to recent flood and fire damage in 2016. Previously graded, scarred ground and sparse shrub and grassland vegetation occur on the project site. As a result, the existing visual quality of the project site is low due to elements that appear unmaintained, random, and discordant.

Construction of the proposed project is anticipated to occur over 18 months. Construction activities would result in an increased presence of heavy construction equipment, as well as temporary ground disturbance that would be partially visible from surrounding private land uses. In addition, building foundations would be developed and the frames and forms of buildings (i.e., vertical construction) and installation of landscaping would also occur. Brief and partially screened views to construction activity on the project site would be available from public roadways in the area.

As stated in Section 4.1.1, the only public vantage points in proximity to the project site are Sand Canyon Road, Live Oak Springs Road, and views from the nearby trail system. Motorists traveling on Sand Canyon Road and Live Oak Springs Road would have partial, fleeting views of the project site during construction-related activities, including views of construction equipment and grading/excavation activities. While the creation of new lines and tan colors in the landscape, the influx of construction workers and equipment, the forming of building frames and exteriors, and installation of new landscaping would be experienced by motorists, available views would be fleeting. Further, motorists generally have low to moderate viewer sensitivity due to the short duration and transient nature

of views from moving vehicles. As such, impacts to the visual character and quality of the project site during construction would be less than significant from public roadways.

Similarly, hikers utilizing the nearby trail system would have partial views of the project site during construction-related activities. As stated above in Threshold AES-1, the proposed project is only within the public view corridor of the distant Santa Susana Mountains from the Robinson Ranch Trail and the Spring Canyon Road Trail, as is the surrounding residential development. Existing available views of the Santa Susanna Mountains are of moderate quality and include residential development. Nonetheless, the presence of construction equipment and effects of grading and other activities on the previously developed and disturbed project site would slightly degrade the quality of the existing views of the distant Santa Susanna Mountains. However, for the limited number of hikers using these trails, views to the construction activity would be intermittent and temporary in nature. Despite the short duration of available views, hikers typically have moderate to high viewer sensitivity; however, given the presence of existing nearby development, expectations for natural and unaltered views would be low. In addition, neither construction equipment nor the exposure of new lines and colors on the project site due to site disturbance would result in substantial view blockage or interruption. As such, impacts to the visual character and quality of the project site during construction would be less than significant from hiking trails.

To conclude, impacts to the visual character and quality of the project site during construction would be **less than significant**.

Operation

The project involves the construction of a new resort, spa, and associated amenities and expansion of an existing detention basin (from 1 acre to 1.9 acres) on an approximately 77-acre project site (see Chapter 3, Project Description). In total, the proposed project would result in the development of approximately 32 acres of the 77-acre project site. Figures 4.1-4 through 4.1-9 contain colored architectural elevations of proposed uses including the Main Hotel, function/event and spa buildings, wedding garden resort, and villas. As depicted on Figures 4.1-4 and 4.1-5 (Main Hotel building elevations), the proposed Main Hotel would be three stories in height and would feature earth tone painted, stucco clad exteriors, and rectangular windows. The low pitched roof would be covered primarily with clay tiles. Similar design and architectural elements are also proposed for the one- to two-story Function Building (see Figure 4.1-6, Function Building, Parking Elevations), two-story Spa Building (se Figure 4.1-7, Spa Building, West Elevation), three-story Spa Garden Inn (see Figure 4.1-8, Spa Garden Inn, West Elevations), and the View Villas and Oak Villas (see Figure 4.1-9, Villas, Elevations).

The development of the site from an inactive golf course to a resort and spa property with hotels, villas, and other buildings would noticeably alter the existing visual character and quality of the project site. The expansion of the existing detention basin would be visible to several residents on Live Oak Springs Canyon Road but would be partially screened from view by existing intervening vegetation (primarily mature trees). In addition, the expansion of an existing detention basin from 1 acre to 1.9 acres would encompass previously disturbed lands and constitute a relatively weak change in the visual landscape. The proposed resort and spa (and associated uses and features) would primarily be visible from private vantage points, such as the Sand Canyon Country Club (including Robinson Ranch Road and the Sycamore Bar and Grill), the private residences off Appaloosa Road, and, to a lesser extent, the private residences north of the project site off Live Oak Springs Canyon Road (which may be afforded limited views of top portions of the three-story Main Hotel and wedding resort buildings).

Although the proposed project would introduce significant development to the project site that would alter existing visual character, the project would adhere to the design guidelines established in the Sand Canyon Special Standards District and the City's General Plan and Design Guidelines. The project's consistency with the City's

General Plan and with the Sand Canyon Special Standards District is shown in Tables 4.10-1 and 4.10-3 respectively (see Section 4.10 of this Draft EIR). The project's consistency with the overarching goals of the Design Guidelines is described in Table 4.1-1.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
1	Is compatible in size, scale, and appearance with the character of Santa Clarita.	**Consistent.** The proposed project is of a scale and size that is uncommon in the Sand Canyon community but compatible with the City of Santa Clarita in general. However, the appearance of the proposed project would be generally consistent with the visual character of the community and the surrounding area, as follows: • The proposed project would be located in a portion of the project site that is generally screened from public view. • The proposed project would complement the prevailing topography to the extent practicable. Grading would be implemented at a maximum gradient of 2:1 and would adhere to City regulations. • Building materials would complement the rustic, rural visual character of the surrounding area and would include red clay roof tiles, neutral-colored stucco, metal railings, complimentary stone wall bases, and large glass windows. • Outdoor lighting would be low voltage and unobtrusive, positioned away from residential land uses, concealed in landscaped areas, and down-lighted. These measures would serve to spread and diffuse light and glare, while preserving the "dark night" principles that dominate the Sand Canyon area and aesthetically enhancing the architecture and design of the resort. • The proposed project would retain approximately 45 acres (60%) of the approximately 77-acre project site as open space. However, the project would result in the permanent loss of 32.4 acres of open space.
2	Is attractive and an asset to the community.	**Consistent.** The proposed project would be designed to complement the visual character of the community and the surrounding area (as described above in Goal No. 1). The proposed project would provide hospitality and recreational opportunities for the community and for the City in general. Additionally, the proposed project would provide approximately 500 employment opportunities to the City's employment pool, thereby enhancing the economic opportunity in the area.
3	Preserves and enhances natural features of a site.	**Partially Consistent.** While the proposed project would retain approximately 45 acres of open space, approximately 32.4 acres of existing open space would be permanently converted to private commercial use.
4	Incorporates quality articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design.	**Consistent.** The proposed project would, to the extent practicable, incorporate quality articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design, as follows: • The proposed project would complement the prevailing topography to the extent practicable. Grading would be implemented at a maximum gradient of 2:1 and would adhere to City regulations. • The proposed project would include a variety of building forms, ranging from three-story hotel buildings to single- and two-story villas. However, all buildings under the proposed project would incorporate simple architectural design features to compliment the surrounding aesthetic environment and the associated project elements. • Building materials would complement the rustic, rural visual character of the surrounding area, and would include red clay roof tiles, neutral-colored stucco, metal railings, complimentary stone wall bases, and large glass windows.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
		• Outdoor lighting would be low voltage and unobtrusive, positioned away from residential land uses, concealed in landscaped areas, and down-lighted. These measures would serve to spread and diffuse light and glare, while preserving the "dark night" principles that dominate the Sand Canyon area and aesthetically enhancing the architecture and design of the resort. • The proposed project would retain approximately 45 acres (60%) of the approximately 77-acre project site as open space. However, the project would result in the permanent loss of 32.4 acres of open space.
5	Provides pedestrian-oriented design to enrich the pedestrian experience.	**Consistent.** The proposed project would provide pedestrian-oriented design to enrich the pedestrian experience, as follows: • The proposed project would include over 2 miles of on-site pedestrian pathways. • The proposed project would include paved, well-lit pathways, which would provide access to all areas of the resort and the associated Sand Canyon Country Club and amenities. • Pedestrian pathways would be nestled among extensive landscaping so as to enhance the pedestrian experience. • Recreational amenities, including one tennis court, two pickleball courts, and a "chip and putt" golf course, would be implemented under the proposed project and would be accessible via paved pedestrian pathways. • As outlined in the Section 4.10, Land Use and Planning, of this Draft EIR, the proposed project would provide bicycle storage facilities and showers for those employees who choose to bike to work.
6	Includes pedestrian friendly amenities such as pedestrian connections, plazas, seating, bike racks, fountains, and other similar features, for the enjoyment of the community and visitors.	**Consistent.** See the analysis for Goal No. 5.
7	Promotes the use of high quality materials.	**Consistent.** See the analysis for Goal No. 1 and Goal No. 4.
8	Promotes well-landscaped parking lots with efficient pedestrian and vehicular circulation.	**Consistent.** The proposed project would include 400 new parking spaces as well as have access to the 319 existing parking spaces associated with the adjacent Sand Canyon Clubhouse. Parking would be landscaped and would be designed in accordance with City guidelines so as to ensure the efficient circulation of pedestrians and vehicles.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
9	Provides suggestions for ways to improve the environmental performance of projects through the strategic incorporation of green building components.	**Consistent.** The proposed project would adhere to Title 24 of the California Building Code, which legislates mandatory green building design. See Section 4.5, Energy, of this Draft EIR for more information.

As shown in Table 4.1-1, Table 4.10-1, and Table 4.10-3, the proposed project would be either partially or completely consistent with the aesthetic components of the City's General Plan, the City's Design Guidelines, and the Sand Canyon Special Standards District. Moreover, the existing visual quality of the project site is low due to elements that appear unmaintained and undeveloped since the 2016 fire and subsequent flooding. While the project would substantially alter the existing vacant character of the former golf course property, adherence to the aesthetic components of the City's General Plan, the City's Design Guidelines, and the Sand Canyon Special Standards District would ensure development compatibility with the City in general. Further, the project includes a variety of building forms, ranging from three-story hotel buildings to single-story villas (one- and two-story residences are commonplace in the surrounding area) and would incorporate simple architectural design features to complement existing development in the area. While the massing associated with resort and function buildings is greater than that of nearby single-family residences, the project would be generally screened from wide public view due to hilly/mountainous terrain to the north and mature trees scattered throughout the portion of the prior golf course property to the south of Robinson Ranch Road. Therefore, impacts would be **less than significant** and no mitigation is required.

Threshold AES-4. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The proposed project would introduce approximately 460,000 square feet of building area to the currently vacant project site. Given the proposed use of the property as a resort, the project would entail the introduction of significant new sources of light and glare when compared to existing conditions. For example, the proposed three-story Main Hotel building, the three-story Spa Garden Inn buildings, villas, and other structures and uses including the paved surface parking lot would include lighting sources and may include potentially reflective materials including steel, glass, and asphalt. Potential impacts concerning new sources of light and glare are described in greater detail below.

Light

Given that there are limited sources of light on the project site and the surrounding land uses under existing conditions, the development of the proposed resort and associated amenities would entail the introduction of significant new sources of light.

The nearest light-sensitive receptors to the project site would be residences located in the surrounding neighborhoods immediately west of the project site, as well as residences located south of Robinson Ranch Road off Appaloosa Road. Opportunities for light trespass on residences as a result of new sources of lighting on the project site, including interior lighting, exterior mounted fixtures, and lighting for pedestrian paths, outdoor spaces, project roads, and landscaping would be reduced due to the distance between residences and the proposed project components. Furthermore, the project is subject to the City's Outdoor Lighting Standards (Section 17.51.050 of the Municipal Code) and, as such, would be required to demonstrate compliance with all applicable standards. For example, all installed lighting would be shielded and directed downward so as to not be visible from the public right-of-way, and lighting would not be permitted to illuminate off-site properties. Furthermore, and consistent with City Outdoor Lighting Standards, a lighting plan that includes the location, fixture type, fixture height, and photometric information of all outdoor lighting and information about shut-off timers and hours of operation for outdoor lighting would be provided for the project. The lighting plan would be submitted for review and approval by the Director of the City's Planning Division to ensure compliance with the Outdoor Lighting Standards. Therefore, through adherence to the City's Outdoor Lighting Standards, potential lighting impacts would be less than significant to residences located south of Robinson Ranch Road off Appaloosa Road.

Residences immediately west of the project site would be located approximately 400 feet west of the proposed Oak Villas. However, the proposed lighting fixtures at the Oak Villas would include low voltage dimmable lanterns (indirect light source comparable to candles) on the exterior of the buildings, as well as wall bracket and chain-hung lanterns over entryways, which would cast diffused and dimmable light. In addition, and as described above, project lighting would comply with all applicable outdoor lighting standards including standards for light trespass. As such, significant lighting impacts are not anticipated to occur at the residences west of the project site.

Residences off Appaloosa Road are located approximately 650 feet south of the planned Main Hotel building, Function Building, Spa Garden Inn, Spa Building, and associated amenities. Given the proposed development density of the resort and associated buildings and the proximity of these uses, residences located off Appaloosa Road would experience noticeable increased nighttime illumination. However, and as stated previously, new outdoor lighting on the project site would comply with Section 17.51.050, Outdoor Lighting Standards, of the City's Municipal Code. The outdoor lighting standards are intended to permit the reasonable use of outdoor lighting for nighttime safety, utility, security, productivity, enjoyment, and commerce, while conserving energy to the greatest extent possible and minimizing off-site light trespass and glare. Through adherence to the City's Municipal Code Outdoor Lighting Standards, including the installation of shielded and downward directed lighting, prohibition of light trespass on off-site properties, and preparation and approval of a lighting plan to include the location of all fixtures and photometric information for all outdoor lighting, potential lighting impacts would be **less than significant**.

Glare

Glare is typically a daytime problem associated with buildings that are constructed with a significant proportion of reflective materials such as glass and metal. As shown in the proposed building elevations in Figure 4.1-4 through Figure 4.1-9, the proposed hotel and spa buildings would incorporate glass windows and some metal finishes, which are potentially reflective materials. As such, the proposed project could result in increased glare at the project site. However, daytime glare produced as a result of project implementation is not anticipated to adversely affect nearby sensitive receptors due to the architectural elements incorporated in the project's design. For example, metal elements would likely be painted and this process would typically result in reduced reflectivity. In addition, although some reflective materials (glass and metal) would be used, the proposed project would primarily be constructed of non-reflective, neutral-colored materials such as beige stucco, red clay tiles, and stone accent details and paving (see Figure 4.1-4 through Figure 4.1-9). Additionally, due to the distance and local topography and

vegetation (which serves as a buffer) between proposed project structures and the nearest sensitive viewers, slight increases in glare introduced by the proposed project would not result in substantial nuisance at the nearest surrounding residences. As such, impacts would be **less than significant**. No mitigation is required.

Threshold AES-5. Would the project result in changes to the topography of a Primary or Secondary Ridgeline?

The project site is not located within an identified primary or secondary ridgeline. As such, with project implementation, no changes to the topography of a primary or secondary ridgeline would occur, and impacts would be **less than significant**.

4.1.5 Mitigation Measures

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

4.1.6 Level of Significance After Mitigation

Project implementation would have a less-than-significant impact on aesthetics. No mitigation is required.

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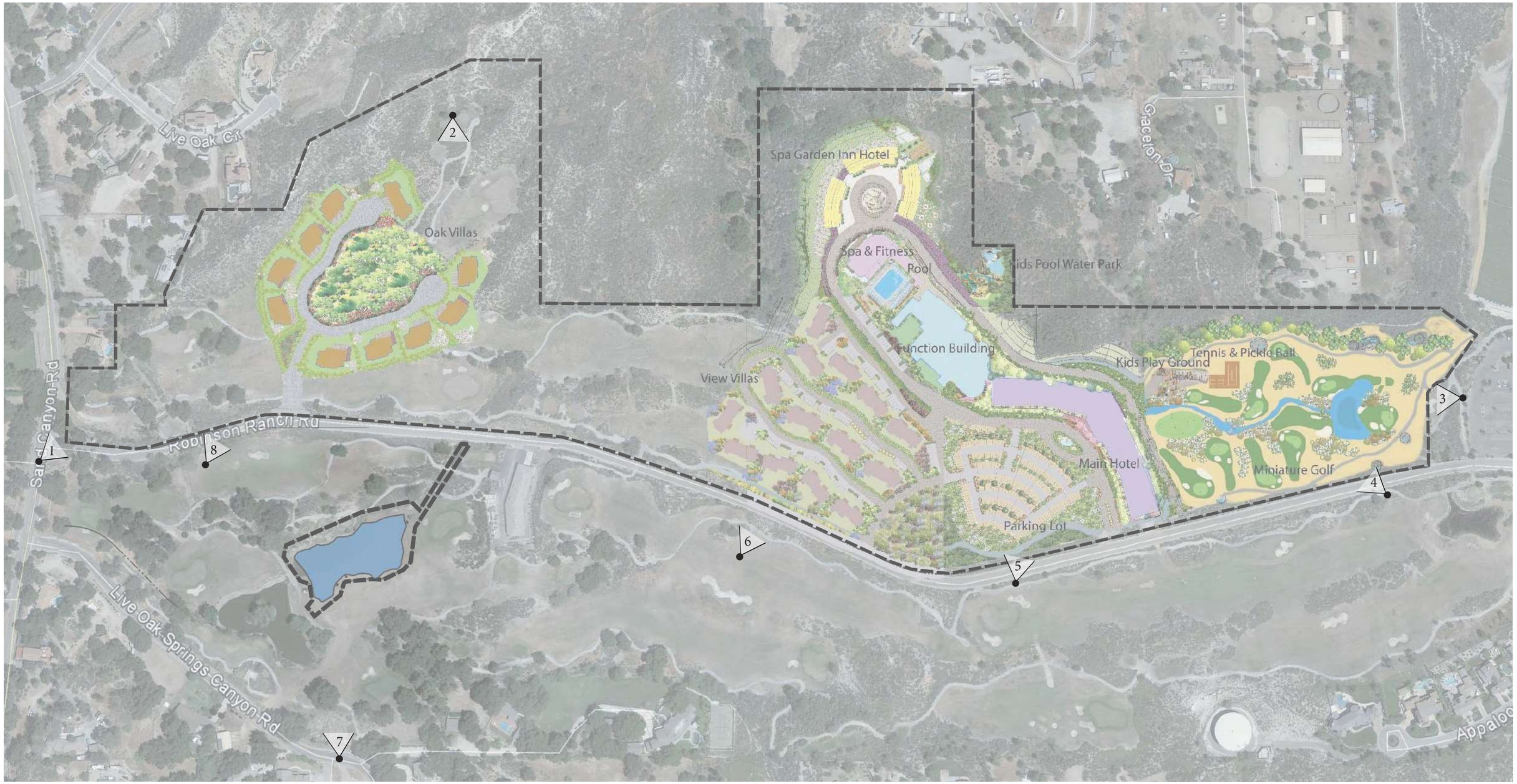

SOURCE: DUDEK, Sand Canyon Country Club, MGS Architecture, MVE Partners

FIGURE 4.1-1

Photograph Locations

Sand Canyon Resort Project

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Photograph 1, View from the Intersection of Sand Canyon Road and Robinson Ranch Road, Looking Northeast Towards the Project Site

Photograph 2, View from the Northwestern Portion of the Property Boundary, Looking South Towards the Project Site

Photograph 3, View from the Eastern Portion of the Project Site Adjacent to the Sycamore Bar and Grill, Looking West Towards the Project Site

Photograph 4, View from East Robinson Ranch Road, Looking Northwest Towards the Project Site

SOURCE: Sand Canyon Country Club, MGS Architecture, MVE Partners

DUDEK

FIGURE 4.1-2a
Existing Conditions
Sand Canyon Resort Project

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Photograph 5, View from Central Robinson Ranch Road, Looking North Towards the Project Site

Photograph 6, View from the Intersection of Live Oak Springs Canyon Road and Trail Ridge Road, Looking North Towards the Project Site

Photograph 7, View from West Robinson Ranch Road, Looking Northeast Towards the Project Site

SOURCE: Sand Canyon Country Club, MGS Architecture, MVE Partners

FIGURE 4.1-2b
Existing Conditions
Sand Canyon Resort Project

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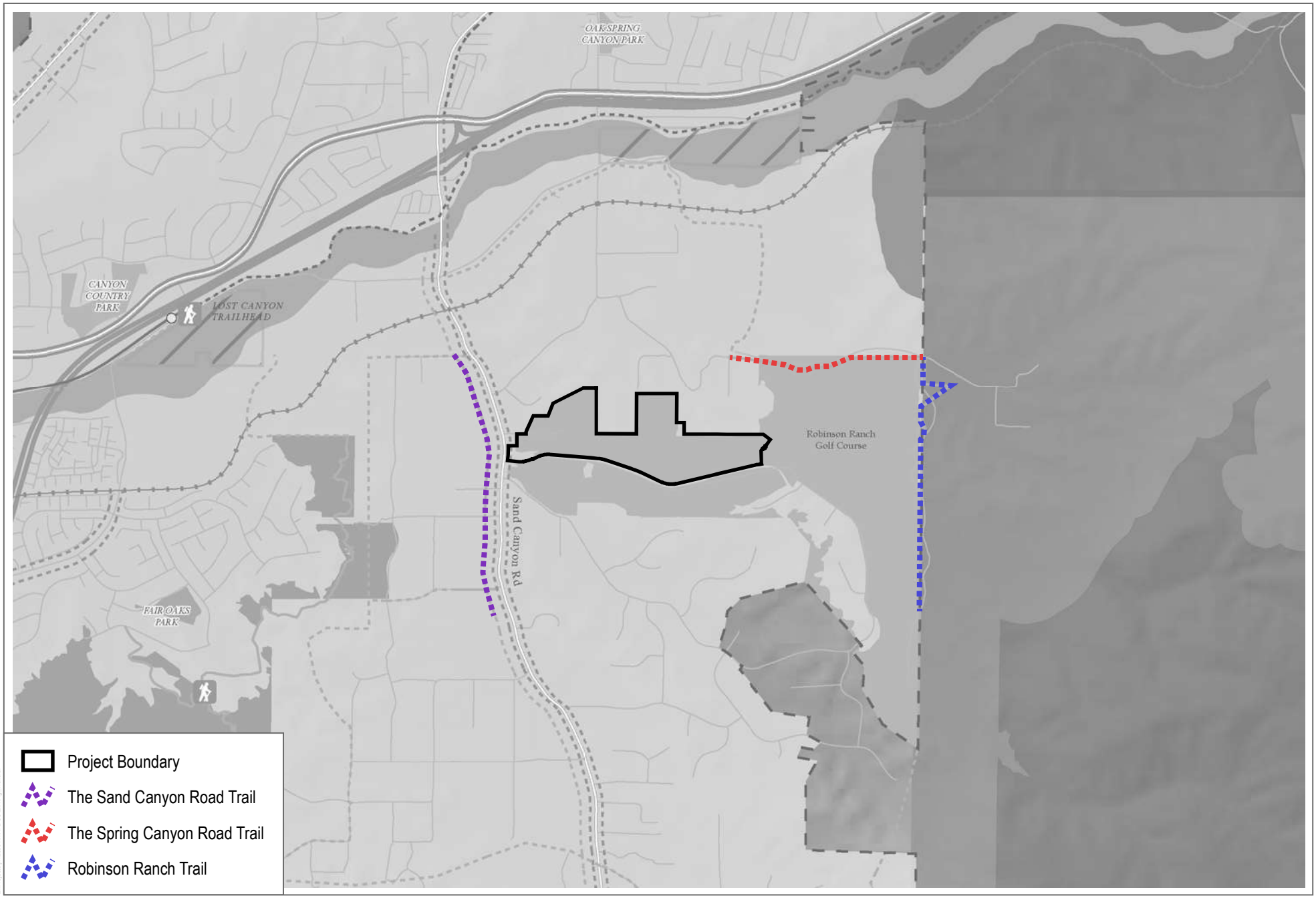

SOURCE: City of Santa Clarita 2016

DUDEK

FIGURE 4.1-3

Public Trails in the Vicinity of the Project Site

Sand Canyon Resort Project

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SOURCE: Tucker Sadler 2018

FIGURE 4.1-4

Main Hotel, Parking Elevations

Sand Canyon Resort Project

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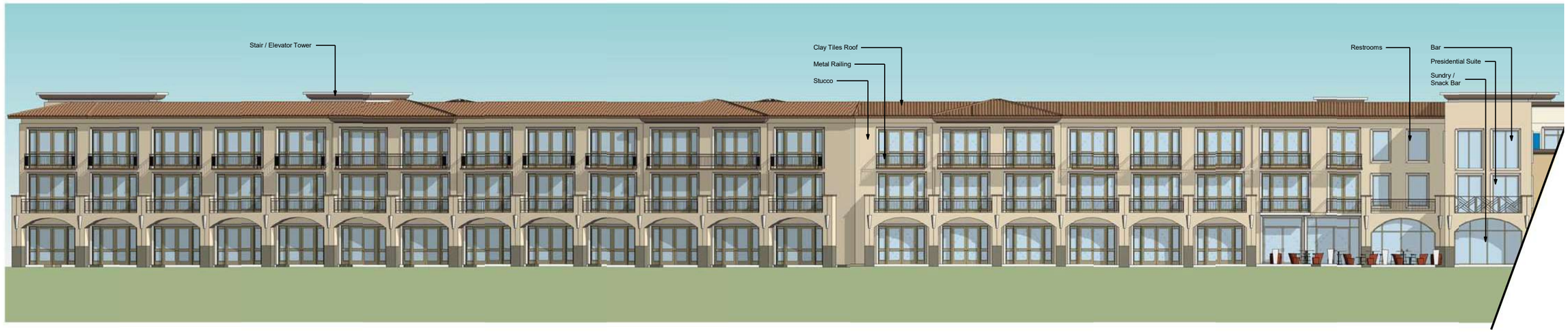

Main Hotel Wing "A" | **Main Hotel Wing "B"** | **Lobby, Presidential Suite & Sunrise Deck**

Lobby, Presidential Suite & Sunrise Deck | **Main Hotel Wing "C"** | **Main Hotel Wing "D"**

SOURCE: Tucker Sadler 2018

FIGURE 4.1-5

Main Hotel, Garden Elevations

Sand Canyon Resort Project

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Spa | Courtyard | Entry | Pool Bar | Pool Court (Gym Beyond) | Banquet / Meeting | Jr. Ballroom Celebration Graden

Grand Ballroom, Meeting Rooms, Prefunction Foyer | Banquet Rooms | Italian Restaurant

SOURCE: Tucker Sadler 2018

FIGURE 4.1-6

Function Building, Parking Elevations

Sand Canyon Resort Project

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Spa | **Zen Garden (Beyond)** | **Grand Ballroom, Meeting Rooms, Prefunction Foyer**

SOURCE: Tucker Sadler 2018

FIGURE 4.1-7

Spa Building, West Elevation

Sand Canyon Resort Project

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WEST ELEVATION

EAST ELEVATION

SOURCE: Tucker Sadler 2018

FIGURE 4.1-8

Spa Garden Inn, West Elevations

Sand Canyon Resort Project

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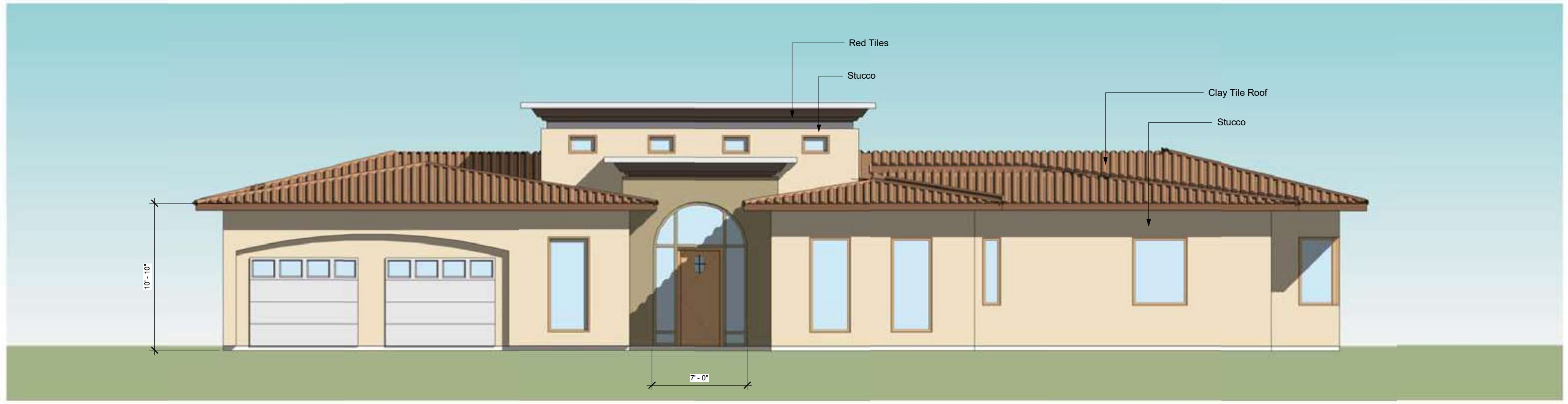
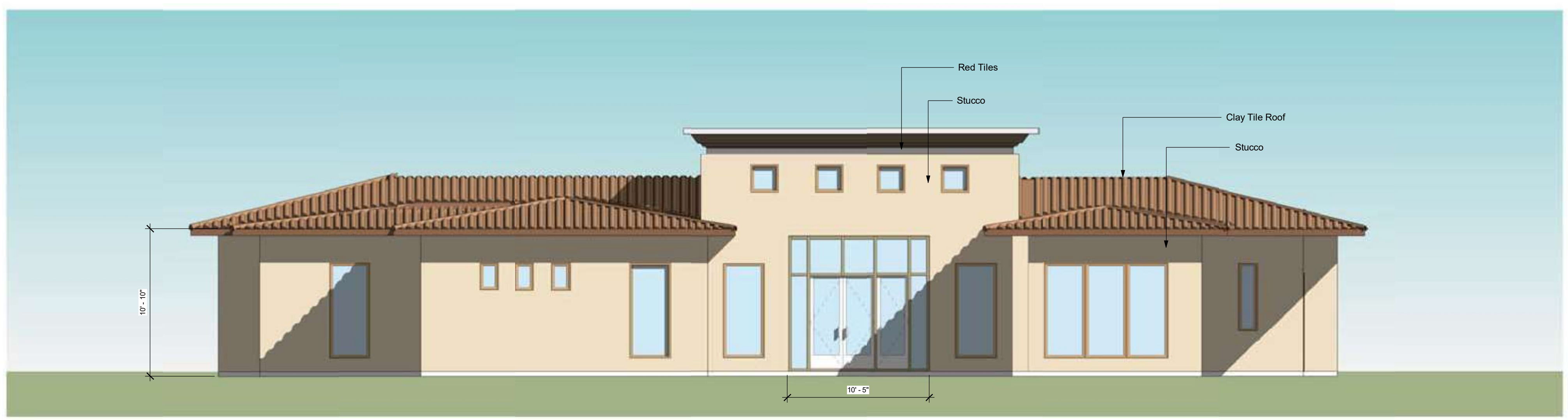


FRONT ELEVATION



REAR ELEVATION

SOURCE: Tucker Sadler 2018

DUDEK

FIGURE 4.1-9

Villas, Elevations

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4.2 Air Quality

This section describes potential impacts of the proposed San Canyon Resort Project (project) on air quality and its contribution to regional air quality conditions, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

4.2.1 Environmental Setting

The project site is located within the South Coast Air Basin (SCAB). The SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

Climate and Meteorology

The SCAB generally lies in the semi-permanent, high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) as well as of human-made influences (e.g., development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the SCAB.

Climate

Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the basin, averaging 75°F. However, with a less pronounced oceanic influence, the eastern inland portions of the basin show greater variability in annual minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100° F in recent years. Although the SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of the basin. Precipitation in the SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail, due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the basin. The City of Santa Clarita (City) is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 94° F in August to a low of 36° F in January (WRCC 2019).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain "primary" pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NO_x]) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level (amsl), the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours. Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of ozone (O_3) observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The basin has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

The project site is located in an area that is susceptible to air inversions. This traps a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

4.2.1.1 Air Quality Characteristics

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion for the pollutants. Reduced visibility, eye irritation, and adverse health impacts on people who are deemed sensitive receptors are the most serious hazards that can result from changes in existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the South Coast Air Quality Management District (SCAQMD), sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The project area's local ambient air quality is monitored by the SCAQMD. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The Santa Clarita Station, located at 22224 Placerita Canyon Road, Santa Clarita, California, is approximately 6.4 miles west of the project site and is characterized by topography that resembles the project area. The data collected at this station are considered representative of the air quality experienced in the project vicinity. Air quality data from 2015 through 2017 for the Santa Clarita Monitoring Station are provided in Table 4.2-1. Because carbon monoxide (CO) levels were not monitored at the Santa Clarita Monitoring Station, reported values were taken from the Los Angeles Monitoring Station, located approximately 26.4 miles south of the project site, which is the next closest monitoring station to the project site that monitors CO.

Table 4.2-1. Ambient Air Quality Data (ppm unless otherwise indicated)

Pollutant	Averaging Time	2015	2016	2017	Most Stringent Ambient Air Quality Standard	Monitoring Station
O_3	1 hour	0.126	0.130	0.151	0.09 ppm (State)	Santa Clarita[a]
	State exceedances	1	2	5	—	
	8 hours	0.109	0.116	0.129	0.070 ppm (State/National)	
	Federal exceedances	52	57	73	—	
	State exceedances	55	59	76	—	
PM_{10}	24 hours	39.0	96.1	66.5	50 µg/m³ (State)	Santa Clarita[a]
	Federal exceedances (Estimated)	0	0	0	—	
	State exceedances (Estimated)	0	1	2	—	
	Annual	18.4	23.4	21.2	20 µg/m³ (State)	
$PM_{2.5}$	24 hours	34.4	33.9	32.6	35 µg/m³ (National)	Santa Clarita[a]
	Federal exceedances (Estimated)	—	—	—	—	
	Annual	—	9.4	10.2	12 µg/m³ (National)	
SO_2	1 hour	0.013	0.013	0.006	0.075 ppm (State)	Los Angeles[b]
	24 hours	0.001	0.001	0.002	0.04 ppm (State)	
NO_2	1 hour	0.064	0.046	0.057	0.100 ppm (National)	Santa Clarita[a]
	Annual	0.011	0.010	0.010	0.030 ppm (State)	
CO	1 hour	1.2	1.3	1.3	20 ppm (State)	Santa Clarita[a]
	8 hours	0.9	1.1	0.8	9.0 ppm (State)	

Sources: CARB 2019; EPA 2019.

Notes: ppm = parts per million; O_3 = ozone; PM_{10} = coarse particulate matter; µg/m3 = micrograms per cubic meter; $PM_{2.5}$ = fine particulate matter; SO_2 = sulfur dioxide; NO_2 = nitrogen dioxide; CO = carbon monoxide.

Data were taken from California Air Resources Board (CARB) iADAM (http://www.arb.ca.gov/adam) or Environmental Protection Agency (EPA) AirData (http://www.epa.gov/airdata/) and represent the highest concentrations experienced over a given year. Exceedances of federal and state standards are only shown for ozone and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed either federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

[a] Santa Clarita Monitoring Station is located at 22224 Placerita Canyon Road, Santa Clarita, California.

[b] Los Angeles Monitoring Station is located at 1630 N Main St, Los Angeles, California.

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the project is located. The entire SCAB is designated as a nonattainment area for federal and state O_3 standards. The U.S. Environmental Protection Agency (EPA) has classified the SCAB as an extreme nonattainment area and has mandated that it achieve attainment no later than June 15, 2024. The SCAB is designated as an attainment area for state and federal CO standards. The SCAB is designated as an attainment area under the state and federal standards for nitrogen dioxide (NO_2).

The entire SCAB is in attainment with both federal and state sulfur dioxide (SO_2) standards. Only the Los Angeles County portion of the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, and the SCAB is designated attainment for the state lead standard. The SCAB is designated as a nonattainment area for state standards for particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM_{10}); however, it is designated as an attainment area for federal standards. In regard to particulate matter with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$) attainment status, the SCAB is designated as a nonattainment area by the California Air Resources Board (CARB) and EPA. The attainment classifications for these criteria pollutants are outlined in Table 4.2-2.

Table 4.2-2. South Coast Air Basin Attainment Classification

Pollutant	Averaging Time	Designation/Classification
Federal Standards		
O_3	8 hours	Nonattainment (extreme)
NO_2	1 hour	Unclassifiable/attainment
	Annual arithmetic mean	Attainment (maintenance)
CO	1 hour; 8 hours	Attainment (maintenance)
SO_2	24 hours; annual arithmetic mean	Unclassifiable/attainment
PM_{10}	24 hours	Attainment (maintenance)
$PM_{2.5}$	24 hours; annual arithmetic mean	Nonattainment (serious)
Lead	Quarter	Unclassifiable/attainment
	3-month average	Nonattainment (partial)[a]
State Standards		
O_3	1 hour; 8 hours	Nonattainment
NO_2	1 hour; annual arithmetic mean	Attainment
CO	1 hour; 8 hours	Attainment
SO_2	1 hour; 24 hours	Attainment
PM_{10}	24 hours; annual arithmetic mean	Nonattainment
$PM_{2.5}$	Annual arithmetic mean	Nonattainment
Lead[b]	30-day average	Attainment
Sulfates (SO_4)	24 hours	Attainment
Hydrogen sulfide (H_2S)	1 hour	Unclassified
Vinyl chloride[b]	24 hours	No designation
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Source: EPA 2016 (federal); CARB 2016a (state).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.

[a] Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expected to remain in attainment based on current monitoring data.

[b] California Air Resources Board (CARB) has identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined.

4.2.1.2 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive people from illness or discomfort. Pollutants of concern include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants are discussed in the following paragraphs.[1]

Ozone. O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases, and NO_x react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_x, the precursors of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide. Most NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide and atmospheric oxygen. Nitric oxide and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere, causing reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis, and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million (ppm) by volume.

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions, where a layer of warm air sits atop cool air, are more frequent and can trap pollutants close to the ground. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly

[1] The descriptions of health effects for each of the criteria air pollutants associated with Project construction and operation are based on the U.S. Environmental Protection Agency (EPA) Six Common Air Pollutants (EPA 2015), the CARB Glossary of Air Pollutant Terms (CARB 2015), and the CARB Fact Sheet: Air Pollution Sources, Effects, and Control (CARB 2009).

stringent controls placed on stationary source emissions of SO_2 and limits placed on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. Inhalable or coarse particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the view shed of natural scenery, reduced airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above.

Non-Criteria Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a hazardous air pollutant (HAP) by EPA, or a toxic air contaminant (TAC) by CARB.[2] Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. The CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000).

Valley Fever. Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

The County is not considered a highly endemic region for Valley Fever, as the latest report from the County Department of Public Health listed an incident rate of 8.43 cases per 100,000 people in 2016 (County Department of Public Health 2017). Similarly, the incident rate of Valley Fever in the San Fernando planning area (which includes the City) in 2016 was 10.4 cases per 100,000 people (County Department of Public Health 2017).

[2] The EPA defines HAPs as air pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The CARB defines TACs as air pollutants which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. Since the CARB's TAC list includes all federal HAPs (as discussed in Section 4.2.2, Regulatory Framework), the term TAC is used in this analysis to represent air toxics in general.

4.2.2 Regulatory Framework

Regulatory oversight for air quality in the SCAB is maintained by EPA at the federal level, CARB at the state level, and by SCAQMD at the local level. Applicable laws, regulations, and standards of these three agencies are described in the following subsections.

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including the setting of National Ambient Air Quality Standards (NAAQS) for major air pollutants, HAP standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions. Federal standards are established for criteria pollutants under the Clean Air Act, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. Federal standards for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the federal standards at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare state implementation plans that demonstrate how those areas will attain the standards within mandated time frames.

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the federal standards to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

The 1977 federal Clean Air Act Amendments required the EPA to identify National Emission Standards for HAPs to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State

CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the federal standards. The state standards describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. The state standards for O_3, CO, SO_2 (1 hour and 24 hours), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The federal and state standards are presented in Table 4.2-3.

Table 4.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary[c,d]*	*Secondary[c,e]*
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day Average	1.5 µg/m³	—	—
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24- hours	25 µg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2016b.

Notes: O_3 = ozone; µg/m³ = micrograms per cubic meter; ppm = parts per million by volume; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; PST = Pacific Standard Time.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended 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. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 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/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] 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.

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

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

[f] On October 1, 2015, the primary and secondary NAAQS for O_3 were lowered from 0.075 ppm to 0.070 ppm

[g] 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 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard 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.

[h] 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 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as toxic air contaminant (TACs) 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.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ 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.

The state Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807. The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, they are required to communicate the results to the public in the form of notices and public meetings.

As part of its diesel risk reduction program, CARB adopted an Airborne Toxic Control Measure that applies to new and in-use stationary compression-ignition (i.e., diesel) engines. The Airborne Toxic Control Measure was adopted in 2004 and revised in November 2010 with an effective date of May 19, 2011. After December 31, 2008, the Airborne Toxic Control Measure requires that new emergency standby engines must comply with EPA emission standards applicable to a 2007-model-year off-road engine of the same horsepower rating. The Airborne Toxic

Control Measure further limits the particulate matter emissions from an emergency standby engine operated less than 50 hours per year for maintenance and testing to 0.15 grams per brake-horsepower-hour.

Local

South Coast Air Quality Management District

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the project is located. The SCAQMD operates monitoring stations in the SCAB, develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SCAQMD's Air Quality Management Plans (AQMPs) include control measures and strategies to be implemented to attain state and federal ambient air quality standards in the SCAB. The SCAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment.

The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017a), which was adopted by the SCAQMD governing board on March 3, 2017. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. The 2016 AQMP represents a new approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017a). Because mobile sources are the principal contributor to the SCAB's air quality challenges, the SCAQMD has been and will continue to be closely engaged with CARB and the EPA, who have primary responsibility for these sources. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality but also local businesses and the regional economy. These "win-win" scenarios are key to implementation of this 2016 AQMP with broad support from a wide range of stakeholders. The SCAQMD 2016 AQMP (SCAQMD 2017a) applies the updated Southern California Association of Governments (SCAG) growth forecasts assumed in the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) (SCAG 2016).

Potentially Applicable Rules

Emissions that would result from stationary and area sources during operation under the project may be subject to SCAQMD rules and regulations. The SCAQMD rules applicable to the project may include the following:

Rule 201: **Permit to Construct.** This rule establishes an orderly procedure for the review of new and modified sources of air pollution through the issuance of permits. Rule 201 specifies that any facility installing nonexempt equipment that causes or controls the emissions of air pollutants must first obtain a permit to construct from SCAQMD.

Rule 401: **Visible Emissions.** This rule establishes the limit for visible emissions from stationary sources.

Rule 402: **Nuisance.** This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.

Rule 403: **Fugitive Dust.** This rule requires fugitive dust sources to implement best available control measures for all sources to ensure all forms of visible particulate matter are prohibited from crossing any

property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust.

Rule 431.2: **Sulfur Content of Liquid Fuel.** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of both reducing the formation of SO_x and particulates during combustion and enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers, such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the district. The rule also affects diesel fuel supplied for mobile-source applications.

Rule 1113: **Architectural Coatings.** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Regulation XIV: **Toxics and Other Non-Criteria Pollutants.** This regulation includes rules that regulate toxics and other non-criteria pollutants. It provides specifications for maximum individual cancer risk, cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units that emit TACs. The rules establish allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

City of Santa Clarita General Plan

Local governments, such as the City, share the responsibility to implement or facilitate some of the control measures of the AQMP. These governments have the authority to reduce air pollution through local policies and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in the AQMP. The AQMP assigns local governments certain responsibilities to assist the SCAB in meeting air quality goals and policies. In general, the first step towards assigning a local government's responsibility is accomplished by identifying the air quality goals, policies, and implementation measures in its general plan. The City of Santa Clarita has done this through the Conservation and Open Space Element in its 2011 General Plan. These air quality goals, objectives and policies have been identified below (City of Santa Clarita 2011).

Goal CO 7: Clean air to protect human health and support healthy ecosystems.

Objective CO 7.1: Reduce air pollution from mobile sources.

Policy CO 7.1.1: Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources.

Policy CO 7.1.2: Support the use of alternative fuel vehicles.

Policy CO 7.1.3: Support alternative travel modes and new technologies, including infrastructure to support alternative fuel vehicles, as they become commercially available.

Objective CO 7.2: Apply guidelines to protect sensitive receptors from sources of air pollution as developed by the CARB, where appropriate.

Policy CO 7.2.1: Ensure adequate spacing of sensitive land uses from the following sources of air pollution: high traffic freeways and roads; distribution centers; truck stops; chrome plating facilities; dry cleaners using perchloroethylene; and large gas stations, as recommended by CARB.

Objective CO 7.3: Coordinate with other agencies to plan for and implement programs for improving air quality in the South Coast Air Basin.

Policy CO 7.3.1: Coordinate with local, regional, state, and federal agencies to develop and implement regional air quality policies and programs.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the project would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other remissions (such as those leading to odors) adversely affecting a substantial number of people.

Additionally, the City of Santa Clarita's Local Guidelines include the following additional City-specific threshold related to air quality, in which a significant impact would occur if the project would exceed (City of Santa Clarita 2005):

5. The most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook."

Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The SCAQMD CEQA Air Quality Handbook (SCAQMD 1993, 2019), as revised in March 2019, sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2019). Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4.2-4 were exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3 (see Table 4.2-2), which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 4.2-4. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an O_3 significance threshold (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see the previous discussion of O_3 and its sources), and the effects of

an individual project's emissions of O_3 precursors (VOC and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

Table 4.2-4. South Coast Air Quality Management District Air Quality Significance Thresholds

Pollutant	Construction	Operation
Criteria Pollutants Mass Daily Thresholds		
VOCs	75 lb/day	55 lb/day
NO_x	100 lb/day	55 lb/day
CO	550 lb/day	550 lb/day
SO_x	150 lb/day	150 lb/day
PM_{10}	150 lb/day	150 lb/day
$PM_{2.5}$	55 lb/day	55 lb/day
Lead[a]	3 lb/day	3 lb/day
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥ 10 in 1 million Cancer burden for cancer risk > 1 in 1 million Chronic and acute hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants[c]		
NO_2 1-hour average NO_2 annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
PM_{10} 24-hour average PM_{10} annual average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation) 1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation)	

Source: SCAQMD 2015.
Notes: VOC = volatile organic compounds; lb/day = pounds per day; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; TAC = toxic air contaminant; SCAQMD = South Coast Air Quality Management District; NO_2 = nitrogen dioxide; ppm = parts per million; μg/m³ = micrograms per cubic meter.

[a] The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and non-carcinogens.
[c] Ambient air quality standards for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
[d] Ambient air quality threshold based on SCAQMD Rule 403.

In addition to the emission-based thresholds in Table 4.2-4, the SCAQMD also recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of construction and operation activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST

significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

a) Source receptor area (SRA) in which the project is located
b) Size of the project site
c) Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

Based on the project location, LSTs for SRA 13 (Santa Clarita Valley) would be applicable. As stated previously, localized construction emissions generated during the development of the project's detention basin have been quantified and included in the following analysis. The detention basin would be developed over approximately 1.53 acres. Therefore, with respect to the development phase of the detention basin, this analysis uses the LSTs for a 1.0-acre site in SRA 13 with sensitive receptors located within 25 meters. Based on the project's construction assumptions outlined previously, approximately 4.0 acres per day would be disturbed during the demolition, site preparation, and grading phases. The LSTs for a 4.0-acre site in SRA 13 with sensitive receptors located within 25 meters were calculated per SCAQMD Linear Regression Methodology and utilized for the demolition, site preparation, and grading phases. The LSTs applicable to construction and operation of the project are shown in Table 4.2-5. Notably, if localized emissions exceed the applicable LSTs and refined dispersion modeling is required, the most stringent NAAQS or CAAQS (included in Table 4.2-2) would be used as the threshold of significance.

Table 4.2-5. Localized Significance Thresholds for the Project

Pollutant	Threshold[a,b] (pounds/day)
NO_x	218
CO	1,388
PM_{10}	10.0
$PM_{2.5}$	5.3

Source: SCAQMD 2008. See also Appendix B of this EIR for a description of localized significance threshold (LST) determination.
Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; NO_2 = nitrogen dioxide.
[a] SCAQMD localized significance thresholds are shown for a 4-acre project site at 25 meters using a linear regression.
[b] Allowable emissions are the maximum emissions that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (based on site size and distance to receptor).

4.2.4 Impact Analysis

Threshold AQ-1. Would the project conflict with or obstruct implementation of the applicable air quality plan?

As discussed previously, the project site is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. Construction and operation of the development proposed as part of the project may result in the emission of additional short- and long-term criteria air pollutants in conflict with the SCAQMD AQMPs.

The SCAQMD has established criteria for determining consistency with the AQMP in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows:

- **Consistency Criterion No. 1**: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2**: The proposed project will not exceed the assumptions in the AQMP or increments based on the year of project build-out phase.

Consistency Criterion No. 1

As discussed under Threshold AQ-2 below, the project would result in less-than-significant impacts associated with the violation of an air quality standard. Because the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, the project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

Consistency Criterion No. 2

While striving to achieve the NAAQS for O_3 and $PM_{2.5}$ through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The future emissions forecasts are primarily based on demographic and economic growth projections provided by SCAG. Thus, demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by SCAG for their 2016 RTP/SCS were used to estimate future emissions in the 2016 AQMP (SCAQMD 2017a).

The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2016 RTP/SCS was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration and the Federal Transit Administration indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 Federal Transportation Improvement Program Consistency Amendment through Amendment 15-12 have been met (SCAG 2016). Consistency with the RTP/SCS would demonstrate consistency with SCAQMD's 2016 AQMP.

The project is expected to generate up to 500 jobs (250 full time and 250 part time). The 2016 AQMP is based on growth assumptions within the 2016 RTP/SCS, which show employment in the City of 73,500 in 2012 and 95,900 in 2040. This allows the creation of 800 jobs per year between 2012 and 2040. Since the jobs created by the project are within the job growth projections in the 2016 RTP/SCS, the project would not conflict with the 2016 AQMP and, as such, would not jeopardize attainment of CAAQS and NAAQS in the area under the jurisdiction of the SCAQMD. Therefore, the project is consistent with Consistency Criterion No. 2. Overall, since the project would not conflict with Consistency Criterion No. 1 or No. 2, impacts are considered **less than significant** for Threshold AQ-1.

Threshold AQ-2. ***Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

In considering cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SCAB is designated as nonattainment for the CAAQS and NAAQS. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. A project would be considered to have a significant cumulative impact, however, if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Construction and operation of the project may result in emission of criteria air pollutants from mobile, area, and energy sources, which may cause exceedances of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. The following discussion identifies potential short- and long-term construction impacts that would result from implementation of the project. Feasible mitigation measures to reduce potential significant impacts, as appropriate, are proposed.

Construction Emissions

For purposes of this analysis, it is estimated that the project would be constructed in approximately 18 to 24 months, with construction beginning in January of 2021 and project operations commencing by 2023. While construction may begin at a later date and/or take place over a longer period, the assumption of an 18-month construction period would assume the fastest build-out potential, resulting in a worst-case daily impact scenario for purposes of this analysis. This analysis assumes construction would be undertaken with the following primary construction phases: (1) detention basin; (2) site preparation, grading, and foundations; and (3) structural building, finishing, and paving. Each primary construction phase has been further detailed below.

Detention Basin

The project would include a water quality/detention basin proposed to be located near the existing water feature south of Robinson Ranch Road. The required volume for both the existing water feature and the proposed detention basin is approximately 6,800 cubic yards. This totals to an area of approximately 66,800 square feet or 1.53 acres. The construction of these areas would occur first, prior to project grading and construction. Development of the detention basin would occur for approximately 1 month.

Site Preparation, Grading, and Foundations

Site preparation, grading, and foundation preparation activities would occur for approximately 6 months, and would involve the cut and fill of land to ensure the proper base and slope for the entire site, including building pads and foundations. At this time, no soil import or export activities are anticipated, as approximately 511,000 cubic yards of cut-and-fill earthwork would be balanced on site.

Structural Building, Finishing, and Paving

The project would include the construction and operation of a resort including one three-story Main Hotel building, a Spa Garden Inn within three three-story buildings, 14 two-story View Villas, nine Oak Villas, and a function wing

level that would include space for a grand ballroom, junior ballroom, meeting room space, three restaurants, kitchen/bakery space, and a kids club and arcade. In addition, the project includes spa and sauna uses, a beauty salon, gym, two swimming pools, one tennis and two pickleball courts, nine-hole miniature golf, a kid's playground, and 2 miles of multipurpose pedestrian pathways. In total, structural building, finishing, and paving activities are expected to occur for approximately 12 months. Upon completion of the building shells, finishing (coatings) and paving of parking areas and streets would follow. It is estimated that architectural coatings and paving/striping of roadways and parking lots would occur over the final 2 months of this phase.

The construction equipment mix and estimated hours of equipment operation per day used for the air emissions modeling of the project are shown in Table 4.2-6. For this analysis, it was assumed that heavy construction equipment would operate 5 days a week (22 days per month) and up to 8 hours per day during project construction. Because no specific information regarding on-road trips during construction is known at this time, worker, vendor, and haul truck trips were estimated using California Emissions Estimator Model (CalEEMod) defaults.

Table 4.2-6. Construction Scenario Assumptions

Construction Phase	One- Way Worker Trips	One-Way Vendor Truck Trips	One-Way Haul Truck Trips	Equipment[a]	Quantity	Hours/ Day
Demolition	15	0	168	Concrete/Industrial Saws	1	8
				Excavators	3	8
				Rubber Tired Dozers	2	8
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Crawler Tractor	4	8
Grading	20	0	1,250	Excavators	2	8
				Rubber Tired Dozers	1	8
				Graders	1	8
				Crawler Tractor	2	8
				Scrapers	2	8
Building Construction	830	324	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Welders	1	8
Paving	15	0	0	Pavers	2	8
				Rollers	2	8
				Paving Equipment	2	8
Architectural Coating	166	0	0	Air Compressors	1	6

Notes: See Appendix B for complete assumptions.

[a] Construction equipment list and usage are project-specific estimates. California Emissions Estimator Model (CalEEMod) defaults were used for off-road construction equipment horsepower and load factors.

Implementation of the project would generate construction-related air pollutant emissions from entrained dust, equipment and vehicle exhaust emissions, architectural coatings, and pavement off-gassing. Entrained dust results

from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. To account for dust control measures to comply with SCAQMD Rule 403 in the calculations, it was assumed that the active sites would be watered at least twice daily, resulting in a 55% reduction in fugitive dust as implemented by CalEEMod. Exhaust from internal combustion engines used by construction equipment, hauling trucks, vendor trucks, and worker vehicles would result in emissions of NO_x, VOCs, CO, SOx, PM_{10}, and $PM_{2.5}$. Asphalt paving associated with the parking lot land use construction would generate VOC off-gassing emissions. The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions; however, the contractor would be required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings). Unmitigated emissions for coating categories were calculated based on default VOC content data from CalEEMod, which was provided by the air districts, including SCAQMD, where the project would be located. The CalEEMod default VOC content for SCAQMD is based on the 2013 version of Rule 1113.

Construction of the project would result in the addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials.

Table 4.2-7 presents the estimated maximum unmitigated daily construction emissions generated during construction of the project in each year. The values shown are the maximum summer or winter daily emissions (i.e., worst-case) results from CalEEMod. Details of the emission calculations are provided in Appendix B.

Table 4.2-7. Estimated Maximum Daily Construction Emissions (pounds/day)

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Unmitigated Emissions[a]						
Year 2021	6.89	63.40	58.23	0.21	12.45	5.07
Year 2022	43.13	47.89	54.99	0.20	12.29	3.94
Maximum daily emissions	**43.13**	**63.40**	**58.23**	**0.21**	**12.45**	**5.07**
Pollutant threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix B for complete results.

[a] Emissions are based on project-specific construction schedule, equipment list, and amount of hauling material. California Emissions Estimator Model (CalEEMod) defaults were used for off-road construction equipment horsepower and load factors and on-road construction emissions. The off-road emissions calculations assume that fugitive dust is controlled by watering two times daily, as required by South Coast Air Quality Management District (SCAQMD) Rule 403. The emissions analysis conservatively assumed a start year of 2021; therefore, emissions presented here reflect years 2021 and 2022.

As shown in Table 4.2-7, in the unmitigated scenario, daily construction emissions would not exceed the SCAQMD significance thresholds for all criteria air pollutants during construction. Furthermore, construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. In addition, the project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions would include watering the active sites approximately two times daily, depending on weather conditions. Impacts would be **less than significant**.

Operational Emissions

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of buildings and on the default factor of pounds of VOC per building square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and SCAQMD's Rule 1113 (Architectural Coatings) governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories. The project would use architectural coatings that would not exceed 50 grams per liter for interior and exterior applications. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017). CalEEMod defaults were assumed for the application of architectural coatings during operation, as that would not be controlled by the project applicant.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. For Los Angeles County, the average annual number of summer days is estimated at 250 days (CAPCOA 2017).

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site.

Mobile Sources

Following the completion of construction activities, the project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the employees and guests of the project. The maximum weekday trip rates were taken from the Traffic Impact Analysis for the project (Appendix J). The estimated trip lengths and trip modes were based on CalEEMod defaults. The CalEEMod model was used to estimate emissions from proposed vehicular sources (refer to Appendix B). CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use, as modeled within the CalEEMod. Emission factors representing the vehicle mix and emissions for 2023 were conservatively used to estimate emissions associated with vehicular sources.

Table 4.2-8 presents the maximum daily area source emissions, energy source emissions, and vehicle source emissions for the project operations. The values shown are the maximum summer or winter daily emissions (i.e., worst-case) results from CalEEMod. Details of the emission calculations are provided in Appendix B.

Table 4.2-8. Estimated Maximum Daily Operational Emissions (pounds/day)

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Unmitigated Emissions[a]						
Area source emissions	7.67	0.00	0.08	0.00	0.00	0.00
Energy source emissions	0.25	2.27	1.91	0.01	0.17	0.17
Mobile source emissions[b]	1.88	7.68	21.29	0.08	6.74	1.84
Combined total emissions	**9.80**	**9.95**	**23.28**	**0.09**	**6.91**	**2.01**
Pollutant threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Note: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix B for detailed results.

[a] Emissions were estimated using methodology consistent with California Emissions Estimator Model (CalEEMod) 2016.3.2.

[b] on-road vehicle emissions were estimated using EMFAC2014 for calendar year 2023. Vehicle trip rates for each land use type were obtained from the project-specific Traffic Impact Analysis. Additionally, a project-specific fleet mix was calculated for the unrefrigerated warehouse land use types based on the Traffic Impact Analysis.

As shown in Table 4.2-8, in the unmitigated scenario, the combined daily area, energy, and vehicular source emissions would not exceed the SCAQMD operational thresholds for all criteria air pollutants. Therefore, the project would have a **less-than-significant** air quality impact during operation.

Threshold AQ-3. Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Criteria Air Pollutant Emissions

As indicated in the discussion of the thresholds of significance, the SCAQMD also recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ impacts as a result of construction and operational activities to sensitive receptors in the immediate vicinity of the project site. On-site construction emissions were calculated using CalEEMod and compared to the SCAQMD LST thresholds (see Appendix B). Because the LST methodology is applicable to projects where emission sources occupy a fixed location, LST methodology would typically not apply to the operational phase

of the project because emissions are primarily generated by mobile sources traveling on local roadways over potentially large distances or areas. LSTs would apply to the operational phase of a project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site. For example, the LST methodology applies to operational projects such as warehouse/transfer facilities. As the project would include a resort with hotel and recreational uses, an operational analysis against the LST methodology is not applicable and thus has not been included in this analysis. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2008).

Sensitive receptors are those more susceptible to the effects of air pollution than are the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest off-site sensitive receptors to the project site are residents located adjacent to the project site to the north, west, and south.

Table 4.2-9 presents the estimated maximum on-site unmitigated daily construction emissions generated during construction of the project in each year and compares the emissions to the applicable LSTs. The construction emissions are based on conservative assumptions to represent the maximum level of construction activity that may occur on the project site on a given day. Details of the emission calculations are provided in Appendix B.

Table 4.2-9. Comparison of Project On-Site Construction Emissions to Localized Significance Thresholds (pounds/day)

	NO_x	CO	PM_{10}	$PM_{2.5}$
Year 2021[a]	60.8	31.2	7.3	5.0
Year 2022[a]	15.6	16.4	0.8	0.8
Comparison to SCAQMD LSTs[b]				
Allowable Emissions	*218*	*1,388*	*10.0*	*5.3*
Threshold exceeded?	**No**	**No**	**No**	**No**

Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix B for complete results.

[a] Emissions estimated using methodology consistent with California Emissions Estimator Model (CalEEMod) 2016.3.2. Only on-site emissions are compared with the LST mass rate table. The off-road emissions calculations assume that fugitive dust is controlled by watering two times daily, as required by SCAQMD Rule 403. The emissions analysis conservatively assumed a start year of 2021; therefore emissions presented here reflect years 2021 and 2022.

[b] Using the SCAQMD LSTs, 'Allowable Emissions' are the maximum emissions that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. Metropolitan Riverside County LSTs shown are for a 4-acre site at a 25 meter distance, and are assumed to be conservative thresholds for larger project sites.

As shown in Table 4.2-9, construction of the project is not anticipated to result in an exceedance of the interpolated SCAQMD LSTs. Localized ambient air quality impacts would be **less than significant**. Since the analysis shows that on-site construction emissions are below the mass-rate LSTs, further air dispersion modeling was not required.

Carbon Monoxide Hotspots

Mobile source impacts occur on two scales of motion. Regionally, project-related travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SCAB. Locally, project traffic

would be added to the County of Los Angeles and City of Santa Clarita roadway system near the project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. With the turnover of older vehicles and introduction of cleaner fuels, CO concentrations in the SCAB have steadily declined.

As noted previously in Table 4.2-1, in SRA 13 (Santa Clarita Valley) the maximum 8-hour CO concentration over the past three years was 1.2 ppm in 2014, and the 1-hour CO concentration was 3.0 ppm in 2014. Based on these measured concentrations, CO concentrations in SRA 13 are substantially below the California 1-hour and 8-hour CO standards of 20 ppm and 9.0 ppm, respectively. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. In addition, the SCAQMD suggests conducting a CO hotspots analysis for any intersection where a project would worsen the level of service from A–C to any level below C, and for any intersection rated D or worse where the project would increase the volume to capacity ratio by 2% or more. As concluded in the project's traffic study (Appendix J), the project's study intersections operate at an acceptable level of service under existing and opening year conditions. Under Interim Year and Long Range General Plan buildout cumulative conditions, the additional traffic added by the project does not result in any new level-of-service deficiencies and the increase in average vehicle delay due to the project is less than significant. In conclusion, there is no significant impact to the study intersections with the addition of the project. Therefore, the project would not have the potential to cause or contribute to an exceedance of the California 1-hour or 8-hour CO standards of 20 ppm or 9.0 ppm, respectively. Impacts with respect to localized CO concentrations would be **less than significant**.

Health Risk Assessment

An HRA was prepared to evaluate the potential health risk impacts to sensitive receptors as a result of exposure to DPM as a result of heavy-duty diesel trucks and construction equipment on site. The HRA is based on the methodologies prescribed in the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015). To implement the 2015 OEHHA Guidelines based on project information, the estimated annual average ambient DPM concentrations at the nearest sensitive receptor were determined using American Meteorological Society/EPA Regulatory Model Improvement Committee Model, 5 years of local meteorological data obtained from the SCAQMD, and the estimated DPM emissions associated with on-site heavy duty truck movement and construction equipment. For a detailed description of emissions calculations and methodologies, the HRA report is included in Appendix C.

Cancer risk is defined as the increase in probability (chance) of an individual developing cancer due to exposure to a carcinogenic compound, typically expressed as the increased chances in one million. The cancer risk from exposure to a TAC is estimated by calculating the inhalation (and if applicable, ingestion or dermal) dose in units of milligrams/kilogram body weight per day based on a ambient concentration in units of micrograms per cubic meter, age sensitivity factors, breathing rates, exposure period, fraction of time spent at home, and multiplying the dose by the inhalation cancer potency factor, expressed as (milligrams/kilogram body weight per day)-1. The SCAQMD CEQA Air Quality Handbook (SCAQMD 1993) states that emissions of TACs are considered significant if an HRA shows an increased risk of greater than 10 in 1 million. The SCAQMD Modeling Guidance for AERMOD provides guidance with which to perform HRAs within the SCAB (SCAQMD 2017b).

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and

its toxicity or reference exposure level. A reference exposure level is a concentration at or below which health effects are not likely to occur. A hazard index less than 1.0 means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

The HRA is consistent with OEHHA guidance (OEHHA 2015), where risks were estimated at the location of the maximally exposed individual resident (MEIR) and included evaluation of the maximally exposed individual sensitive receptor (MEISR). The MEIR and MEISR are defined as the off-site receptor locations where residents and other sensitive individuals may reside or be present, respectively, with the potential highest cancer risk or chronic hazard index. Additionally, the 2015 OEHHA guidance includes an exposure duration of 30 years for the residences, as well as applicable age sensitivity factors and daily breathing rates. A detailed description of the 2015 OEHHA guideline assumptions is included in Appendix C. The results of the construction HRA are shown in Table 4.2-10.

Table 4.2-10. Construction Activity Health Risk Assessment Results - Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk	Per Million	33.1	10.0	**Potentially Significant**
HIC	Not Applicable	0.07	1.0	Less than Significant

Notes: CEQA = California Environmental Quality Act; HIC = Chronic Hazard Index.
Source: Appendix C.

As shown in Table 4.2-10, the project would exceed the SCAQMD significance threshold for cancer risk during construction. For this analysis, the MEIR was identified as a sensitive receptor and thus determined to be the MEISR.[3] Health risk impacts associated with construction of the project would be **potentially significant**. Therefore, mitigation is required.

Following construction, there would no substantial source of TAC emissions during operation. Vehicles would travel to and from the site and would be a source of TAC emissions. However, the amount of TAC emissions on site due to mobile sources would be minimal and would not result in substantial exposure to sensitive receptors. Therefore, impacts would be less than significant during operation.

Threshold AQ-4. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public, and generate citizen complaints. Odor impacts associated with project construction and operations are discussed below.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered **less than significant**.

[3] The MEIR may also be considered the MEISR if the health risk values at the MEIR are the maximum of off-site receptors.

According to the SCAQMD, land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any uses identified by the SCAQMD as commonly associated with odors. Therefore, project operations would result in an odor impact that would be **less than significant**.

Threshold AQ-5. ***Would the project exceed the most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook"?***

This section of the EIR has evaluated the proposed project in compliance with the most recent air quality thresholds, as determined by the SCAQMD. All air quality impacts would be less than significant with the exception of Threshold AQ-3, which is **potentially significant**.

4.2.5 Mitigation Measures

The following mitigation measure (MM) is provided to reduce the impacts to nearby sensitive receptors.

MM-AQ-1 During project construction, project's construction contractor shall adhere to the following measures to reduce diesel particulate emissions, including, but not limited to:

a. All construction equipment greater than 75 horsepower shall be equipped with Tier 4 Interim diesel engines or better.
b. The engine size of construction equipment shall be the minimum size suitable for the required job.
c. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest number is operating at any one time.
d. Construction equipment shall be maintained in tune per the manufacturer's specifications.
e. The prime contractor will provide the City of Santa Clarita with verification of equipment type used during construction.

4.2.6 Level of Significance After Mitigation

Threshold AQ-3. ***Would the project expose sensitive receptors to substantial pollutant concentrations?***

Health Risk Assessment

Construction of project components would require use of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions, and would involve use of diesel trucks, which are also subject to an Airborne Toxics Control Measure. The implementation of MM-AQ-1 would reduce the emissions of DPM during construction. The results of the HRA during construction with mitigation are provided in Table 4.2-11.

Table 4.2-11. Construction Activity Health Risk Assessment Results - Mitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk	Per Million	2.7	10.0	Less than Significant
HIC	Not Applicable	0.007	1.0	Less than Significant

Notes: CEQA = California Environmental Quality Act; HIC = Chronic Hazard Index.
Source: Appendix C.

The results of the construction analysis demonstrate that the mitigated construction emissions exhibit cancer risk below the 10 in a million threshold and below the chronic hazard index threshold. The project construction TACs impact from DPM emissions would be reduced to **less than significant with mitigation**.

Threshold AQ-5. ***Would the project exceed the most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook"?***

All air quality impacts would be **less than significant with implementation of MM-AQ-1**.

4.2.7 References Cited

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4.3 Biological Resources

This section describes the existing biological resources of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. A survey area was established to evaluate biological resources that occur or have the potential to occur on and immediately adjacent to the project site. The survey area consists of approximately 68 acres (the proposed development area plus an additional buffer) of an existing, but inactive, golf course. The existing conditions as they pertain to biological resources are discussed in relation to the survey area; potential impacts to biological resources from the proposed project are discussed later in this chapter in relation to the project site.

The biological resources described in this section are based on the findings provided in the Sand Canyon Resort Jurisdictional Delineation and Biological Resources Assessment (Appendix D). This reference document and a review of relevant state and federal databases documenting special-status biological resources in the region were used to determine the existing conditions on the project site, and are included in Appendix D. This section also includes the results of an initial biological survey conducted in December 2018 and focused surveys conducted for the survey area between May and June 2019 (Appendix D).

4.3.1 Environmental Setting

4.3.1.1 Regional Setting

Regionally, the project site occurs in the City of Santa Clarita (City), which is in the Santa Clarita Valley, which is part of the upper watershed of the Santa Clara River in Los Angeles County. The site is located in the Santa Clara River Valley Groundwater Basin, Santa Clara River Valley East Sub-basin (Appendix D). The Santa Clara River Valley East Sub-basin is bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium, on the south by the Santa Susana Mountains, and on the southeast by the San Gabriel Mountains. The surface is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek.

4.3.1.2 Project Setting

The project site is located in the Sand Canyon area of the City within the former Robinson Ranch Golf Course (now the Sand Canyon Country Club). The project site is currently vacant and comprises an abandoned nine-hole golf course (the Mountain Course) and a single small restroom structure that is no longer in service. Since 2016 the project site has been unmaintained and has been subject to wildfire and flooding. The existing Sand Canyon Country Club property comprises a 27-hole golf course, a driving range, a maintenance building, and clubhouse; however, all of the aforementioned features are outside of the project site boundaries.

The project area is bounded to the north by hills covered largely in native chamise chaparral, to the south and east by the remaining active golf courses of the Sand Canyon Country Club, and to the west by residences and ranch property. The proposed debris basin to the south of Robinson Ranch Road is surrounded by existing golf course fairway and associated developments. The survey area is generally dry and exposed (south-facing). The average high/low summer temperatures in the survey area are 92°F/53°F, average high/low winter temperatures are 66°F/37°F, and average precipitation is 14 inches per year.

The soils at the site are Saugus loam, 30% to 50% slopes; Hanford sandy loam, 2% to 9% slopes; and Metz loam, 2% to 5% slopes. The Saugus loam tends to have rapid runoff and is therefore subject to high erosion, whereas the Hanford sandy loam tends to have slow runoff and be more resistant to erosion. Metz loam is typified by very slow runoff, with low potential for erosion, and is therefore subject to periodic flooding in low-lying areas. These soils are typical of former grazing lands, and none are considered hydric (NRCS 2018).

Vegetation throughout the survey area is predominantly native and non-native grassland, which encompasses the majority of the area that used to be golf course. Surrounding it and in vegetation islands within it are stands of mixed chamise and California buckwheat chaparral, California brittlebush scrub, and Great Basin sagebrush scrub. Land uses adjacent to the site include active irrigated golf courses to the south and east, vegetated hills and residences to the north, and residential and ranch land to the west.

Vegetation

The majority of the planned development area is occupied by mixed native and non-native grassland (the former golf course), but the area also encompasses several coast live oak woodlands and both hillsides and vegetation islands within the grassland that are covered with mixed chaparral and scrub communities. Areas surrounding the proposed project area are vegetated hillsides, existing active golf course, and residential and ranch properties.

To the extent possible, plant communities were correlated with plant communities included in the California Department of Fish and Wildlife (CDFW) California Natural Communities List (CDFW 2019), which provides a list of officially recognized plant communities occurring within the State of California. The list assigns a conservation status rank (also known as a rarity rank) to each plant community, which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of G1 through G3 or S1 through S3, respectively, are considered to be sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

Of the communities mapped, four are considered sensitive by CDFW. Table 4.3-1 provides a summary of vegetation types/land uses under existing conditions and the corresponding acreage. Figure 4.3-1, Biological Resources Map, depicts the existing vegetation conditions with an overlay of the planned development footprint. Below is a discussion of each vegetation/land use type.

Table 4.3-1. Summary of Potential Jurisdictional Features in the Survey Area

Habitat Class	Plant Community or Land Cover[1]	Conservation Status Rank[2]	Acres
Woodland	Fremont Cottonwood (*Populus fremontii*) Alliance [61.130.06]*	G2QS3	0.57
	Coast Live Oak (*Quercus agrifolia*) Woodland Alliance [71.060.02]	G5S4	1.78
	Individual Coast Live Oak (*Quercus agrifolia*) Trees	Not ranked	0.26
Scrub/Shrubland	Tamarisk (Tamarix *ramosissima*) Semi-Natural Stands [63.810.01]	Not ranked	0.07
	California Sagebrush (*Artemisia californica*) Scrub Alliance [32.010.01]	G5S5	0.34
	California Brittlebush (*Encelia californica*) Scrub Alliance [33.050.02]*	G3S3	3.82

Table 4.3-1. Summary of Potential Jurisdictional Features in the Survey Area

Habitat Class	Plant Community or Land Cover[1]	Conservation Status Rank[2]	Acres
	Chamise (*Adenostoma fasciculatum*) Chaparral Alliance [37.101.16]	G5S5	0.89
	Chamise - California Buckwheat (*Adenostoma fasciculatum - Eriogonum fasciculatum*) Chaparral Alliance [37.101.14]	G5S5	14.54
	Great Basin Sagebrush – California Buckwheat (*Artemisia tridentata – Eriogonum fasciculatum*) Scrub Alliance [35.110.09]	G5S5	7.68
	California Brittlebush – California Sagebrush (*Encelia californica – Artemisia californica*) Scrub Association [32.050.01]*	G3S3	0.47
	Purple Sage – California Sagebrush (Salvia *leucophylla – Artemisia californica*) Scrub Alliance [32.090.01]	G4S4	0.18
Herbaceous	Desert Saltgrass (*Distichlis spicata*) Alliance [41.200.09]	G5S4	0.08
	Native and Non-Native Grassland (Formerly Golf Course Fairways)	Not ranked	26.08
	Narrowleaf Cattail Marshes (*Typha domingensis*) Alliance [52.050.03]	G5S5	0.03
	Creeping Ryegrass (*Elymus triticoides*) Herbaceous Alliance [41.080.01]*	G3S3	0.05
Other/Developed	Barren/Sparsely Vegetated	Not ranked	1.73
	Paved	Not ranked	2.99
	Pond	Not ranked	0.57
	Developed	Not ranked	1.13
	Barren/Sparsely Vegetated	Not ranked	4.82
		Total Acreage	**68.1**

Source: Appendix D.

* CDFW Sensitive Community

1 Numbers in brackets are unique codes for each plant community, as provided in the Natural Communities List (CDFW 2019).

2 A conservation status rank (also known as "rarity rank") or a "high inventory priority" designation is used to determine the significance of project impacts to plant communities. The conservation status ranking system consists of a geographic scale (G = Global; S = State) and a degree of threat (1 = critically imperiled; 2 = imperiled; 3 = vulnerable to extirpation or extinction; 4 = apparently secure; and 5 = demonstrably widespread, abundant, or secure). Plant community alliances with global or state conservation status ranks of G1 through G3, or S1 through S3, respectively, are considered to be "natural communities of special concern." A Q within the ranking indicates "Questionable taxonomy"—Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority.

Woodland

Fremont Cottonwood Woodland Alliance

This woodland association, which is considered sensitive by CDFW (2019a), occurs in several small patches at several locations in the eastern portion of the survey area. Several more patches exist in the southwestern portion of the survey area around the location of the proposed debris basin, though no impacts to the trees in that area are projected.

Coast Live Oak Woodland Alliance

This woodland association occurs in patches scattered within the western portion of the survey area with one smaller patch in the eastern portion. In this association, the tree layer is dominated by coast live oak (*Quercus agrifolia*). Understory within these woodland associations within the survey area is generally dominated by the herbaceous layer, primarily comprised of grasses and forbs. A shrub layer is sometimes present, including California buckwheat (*Eriogonum fasciculatum*) and California sagebrush (*Artemisia californica*). This community is not considered sensitive by CDFW (2019a).

Coast Live Oak Individual Trees

Aside from the coast live oak woodlands, a number of individual coast live oak trees are scattered about the survey area, primarily in the southwestern and western area. These are simply coast live oak trees that are too far apart to constitute woodlands but occupy a large enough area to be mapped. Individual coast live oaks do not possess any state, federal, or local special status, but are protected when meeting designated size criteria by the County of Los Angeles (County) oak tree ordinance. They do not constitute a plant community and therefore cannot be assessed as a potential sensitive plant community.

Scrub/Shrubland

Tamarisk Semi-Natural Stands

Saltcedar trees (*Tamarix ramosissima*) were found in various areas around the survey area. In one place within the survey area, a thicket of saltcedar exists. This community is dominated by tamarisk, with Great Basin sagebrush (*Artemisia tridentata*) growing around and partially underneath it. An herbaceous layer of grasses and forbs also grows around and underneath the tamarisk. Tamarisk is not a native plant and is not considered sensitive by the CDFW (2019a).

California Sagebrush Scrub Alliance

This community is typified by the dominance of California sagebrush in the shrub layer with no other co-dominant plants. One patch was mapped at the far eastern edge of the survey area. While not within the proposed grading limits, the community would potentially be impacted by fuel modification activities. This community is not considered sensitive by the CDFW (2019a).

California Brittlebush Scrub Alliance

This plant community, considered sensitive by CDFW (2019a), occurs on both sides of the survey area, though primarily on the east side in areas often in between the chamise/california buckwheat alliance and the former golf course areas. In this community, California brittlebush (*Encelia californica*) is dominant and often continuous. In places where it is not continuous, it is punctuated by California sagebrush and Great Basin sagebrush.

Chamise Chaparral Alliance

Chamise (*Adenostoma fasciculatum*) is common throughout the survey area, though in most places it is co-dominant with California buckwheat. One patch of this community, where chamise alone is dominant, exists in the far eastern portion of the survey area immediately north of the lone patch of California sagebrush. This plant community is not considered sensitive by the CDFW (2019a).

Chamise–California Buckwheat Shrubland Alliance

This shrub association occupies large swaths of the survey area on the hillsides and slopes north of the existing golf course. Chamise in the survey area is typically dominant or co-dominant with Great Basin sagebrush, with individual chaparral yucca (*Hesperoyucca whipplei*) occurring frequently throughout the association. In transitional areas between communities, Great Basin sagebrush, California brittlebush, California buckwheat, and California sagebrush begin to appear as one approaches the neighboring communities. This community is not considered sensitive by CDFW (2019a).

Great Basin Sagebrush–California Buckwheat Shrubland Association

This shrub association occurs primarily at the southern extreme of the survey area and within vegetation islands surrounded by the existing golf course within both the eastern and western portions of the survey area. These areas are typified by dominant Great Basin sagebrush, or co-dominant California buckwheat and Great Basin sagebrush. California sagebrush and California brittlebush are also found in parts of these areas in lesser quantities. This community is not considered sensitive by CDFW (2019a).

California Brittlebush–California Sagebrush Shrubland Association

This plant community, considered sensitive by CDFW (2019a), occurs in two vegetation "islands" within the non-native grassland in the eastern portion of the survey area. In this community, California brittlebush is co-dominant in the shrub canopy with California sagebrush and occupies greater than 30% of the canopy layer.

Purple Sage–California Sagebrush Scrub Association

This plant community was mapped in only one patch, which grows immediately north of the proposed location for the debris basin in the southwestern portion of the survey area. This community is typified by co-dominance of purple sage (*Salvia dorrii*) and California sagebrush in the shrub layer. This patch in particular is on the edge of the area to be graded for the debris basin. This community is not considered sensitive by CDFW (2019a).

Herbaceous

Desert Saltgrass Alliance

This community occurs only in the western portion of the survey area where a seep was found. No historical imagery indicates the existence of this seep, and therefore the water source for this may be faulty irrigation equipment. A carpet of desert saltgrass (*Distichlis spicata*) grows over an area just downslope of saturated turf, and is punctuated by a small growth of cattail (*Typha* spp.). This community is not considered sensitive by CDFW (2019a).

Native and Non-Native Grassland

This community is the largest within the survey area. This community is comprised of the golf course fairways, which have been left fallow, where they have not been converted. Dominant species within this community now include various grasses and forbs, with non-natives including ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), Bermuda grass (*Cynodon dactylon*), and smilo grass (*Stipa miliacea*) and natives including foothill needlegrass (*Stipa lepida*) and giant wildrye (*Elymus condensatus*).

Narrowleaf Cattail Herbaceous Alliance

This community occurs in two patches, one in the western portion and one in the eastern portion of the survey area. In the eastern portion of the survey area, the narrowleaf cattail (*Typha angustifolia*) exists within the footprint of what used to be a pond. This plastic-lined feature has been drained and most of the cattail observed was dead, though some was still green. In the western portion of the survey area, a concrete-lined pond supports cattail, though at the time of the survey most of it was dead despite the presence of water. This community is not considered sensitive by CDFW (2019a).

Creeping Ryegrass Herbaceous Alliance

This community, considered sensitive by CDFW, occurs along and adjacent to the northern end a modified stream. This area is located near the center of the project site, just north of Robinson Ranch Road, at the eastern edge of the western portion of the survey area. It occurs partially within the riparian zone, portions of which are underneath canopy cover of coast live oak trees.

Other/Developed

Barren or Sparsely Vegetated

Barren or sparsely vegetated areas include areas with sparse cover of non-native ruderal species and areas that have been graded or cleared of vegetation, and may be mowed or otherwise disturbed on a regular basis. These areas are located in the eastern portion of the survey area, where equipment and piled vegetation indicate that the area has been cleared, perhaps to act as a staging area. Selected species observed include hoary mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), and tree tobacco (*Nicotiana glauca*). Due to their highly disturbed condition, these areas generally lack native species and are dominated by non-natives, and are not considered sensitive.

Paved

Paved areas include Robinson Ranch Road, which runs through the property at the southern end of the survey area, and the concrete paths that run throughout the area that used to serve as roads for golf carts to follow throughout the course. Paved areas are not sensitive.

Pond

One artificial decorative pond is maintained within the survey area in the far southwestern corner near the proposed location of the debris basin. The pond is outside of the grading limits for the debris basin, and should not be impacted by project activities.

Developed

Developed areas within the survey area include portions of the buildings that house maintenance operations for the golf course. Developed areas were within the survey area but are not sensitive or projected to be impacted by project activities.

Turf Grass

Portions of the existing golf course occur within the survey area around the proposed debris basin location. These areas are covered in turf grass, which is not sensitive.

Floral Diversity

A total of 179 vascular plant taxa were identified during the surveys of the site, including 2 gymnosperms, 144 dicots, and 33 monocots. Of the plants observed, 110 were native (61%) and 69 were non-native (39%). A complete list of the vascular plant species observed within the survey area is provided in Appendix D.

Wildlife

A list of vertebrate wildlife species observed during surveys is located in Appendix D. Nearly all wildlife species observed during surveys of the site were species common or relatively common to the region. Many other non-special-status wildlife species can also be expected to utilize habitats at the site for cover, foraging, and reproduction. Furthermore, in general, the list in Appendix D includes species that are more easily detected during daytime surveys. Several species (e.g., reptiles, birds, small mammals) may reproduce in the survey area, and a wide range of larger or mobile species can be expected to utilize the site's resources routinely, such as foraging raptors and medium- to large-sized mammals (e.g., striped skunk [*Mephitis mephitis*], coyote [*Canis latrans*], and mule deer [*Odocoileus hemionus*]).

The woodland, scrub/shrubland, and herbaceous habitats provide suitable habitat for a variety of reptile species. No reptiles were observed during the December 5, 2018, survey, likely because of the cold, wet, and overcast conditions, although several common reptile species are very likely to be present. During the spring 2019 surveys, coastal whiptail (*Aspidoscelis tigris stejnegeri*), a California Species of Special Concern (SSC), and western fence lizards (*Sceloporus occidentalis*) were observed within the survey area.

The native and non-native habitats at the project site provide cover and forage resources as well as nesting/breeding habitat for several species of birds. Birds were the most diverse vertebrate wildlife observed and consisted of year-round, summer, and winter residents, as well as potential migrants.

Species observed include acorn woodpecker (*Melanerpes formicivorus*), American coot (*Fulica americana*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), ash-throated flycatcher (*Myiarchus cinerascens*), Bewick's wren (*Thryomanes bewickii*), blue-grey gnatcatcher (*Polioptila caerulea*), bushtit (*Psaltriparus minimus*), Cassin's kingbird (*Tyrannus vociferans*), California quail (*Callipepla californica*), California scrub-jay (*Aphelocoma californica*), California thrasher (*Toxostoma redivivum*), California towhee (*Melozone crissalis*), Canada goose (*Branta canadensis*), cliff swallow (*Petrochelidon pyrrhonota*), common raven (*Corvus corax*), great horned owl (*Bubo virginianus*), great-tailed grackle (*Quiscalus mexicanus*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), killdeer (*Charadrius vociferus*), lesser goldfinch (*Spinus psaltria*), mallard (*Anas platyrhynchos*), mourning dove (*Zenaida macroura*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), phainopepla (*Phainopepla nitens*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculatus*), turkey vulture (*Cathartes aura*), western bluebird (*Sialia mexicana*), western kingbird (*Tyrannus verticalis*), white crowned sparrow (*Zonotrichia leucophrys*), wrentit (*Chamaea fasciata*), and yellow-rumped warbler (*Setophaga coronata*). The woodland and scrub communities, with their abundance of small mammals, open habitat, and presence of large trees, provide excellent foraging habitat for raptors. Several bird species would nest within the survey area in any given year. Nearly all species of birds, while nesting, are protected by California Fish and Game Code Section 3503 and 3503.5, and by the federal Migratory Bird Treaty Act.

Mammals observed during the survey included domestic rooster (*Gallus domesticus*), desert cottontail (*Sylvilagus audubonii*), fox squirrel (*Sciurus niger*), and domestic dog (*Canis lupus familiaris*), and mammals inferred by sign included Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus beecheyi*), coyote, big-eared woodrat (*Neotoma macrotis*), raccoon (*Procyon lotor*), and mule deer.

Special-Status Species

For the purposes of this assessment, special-status species are those species that are listed, proposed for listing, or that meet the criteria for listing as endangered, threatened, or rare under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); plants on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants with a California Rare Plant Rank (CRPR) of 1A through 3, which are evaluated on a case-by-case basis; and wildlife that are listed on the CDFW Special Animals list with a designation of SSC or California Fully Protected (CFP). However, plant species with a CRPR of 4 are not considered locally significant. The status codes for special-status plants and special-status wildlife are described in Table 3 and 5, respectively, of Appendix D.

Special-Status Plants

Special-status plant species either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors.

An evaluation of the potential for occurrence at the site of special-status plant species known to occur in the region was undertaken through a search of the CNPS Online Inventory of Rare and Endangered Plants, 8th ed. (CNPS 2020), and the CDFW's California Natural Diversity Database (CNDDB) Rarefind 5 application (CDFW 2020) for sensitive "elements" reported within the Mint Canyon quadrangle and eight others that surround it (Warm Springs Mountain, Green Valley, Sleepy Valley, Newhall, Agua Dulce, Oat Mountain, San Fernando, and Sunland). The CNDDB/CNPS derived lists are provided in Appendix D. Based upon a review of the resources and databases listed above, 42 special-status vascular plant species have been documented within the nine U.S. Geological Survey quadrangles.

The analysis of the potential for occurrence of special-status plants is presented in Appendix D, including protection status, primary habitat associations, and an evaluation of their potential for occurrence at the site. The evaluation considers the potential for occurrence within the biological survey area (i.e., within the development footprint and vicinity). The potential for occurrence analysis does not include CRPR 4 plants. As discussed in Appendix D, most special-status plant species known to occur in the region are precluded from occurring at the site due to lack of suitable habitat or because the site is outside of the known range of the species. Other species, particularly shrubs and many perennial herbs, could be confirmed as absent as they were not found during the survey. The following 11 special-status plant species had low potential to occur at the site prior to floristic surveys conducted on the survey area:

- chaparral ragwort (*Senecio aphanactis*) – CRPR 2B.2
- Davidson's bush mallow (*Malacothamnus davidsonii*) – CRPR 1B.1
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*) – CRPR 1B.2
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*) – CRPR 1B.1
- Ross' pitcher sage (*Lepechinia rossii*) – CRPR 1B.2
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*) – Federal Endangered/ California Endangered

- San Gabriel bedstraw (*Galium grande*) – CRPR 1B.2
- short-tailed beavertail (*Opuntia basilaris* var. *brachyclada*) – CRPR 1B.2
- slender mariposa lily (*Calochortus clavatus* var. *gracilis*) – CRPR 1B.2
- slender-horned spineflower (*Dodecahema leptoceras*) – Federal Endangered/California Endangered
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*) – CRPR 2B.2

All of these species were confirmed absent by the floristic surveys conducted in spring 2019.

Special-Status Wildlife

For the purposes of this assessment, special-status wildlife species are those species that are listed, proposed for listing, or that meet the criteria for listing as endangered, threatened, or rare under the FESA or CESA; and those that are listed on the CDFW Special Animals list with a designation of SSC or CFP.

Special-Status Wildlife Species Observed

Surveys conducted on the survey area between 2017 and 2019 observed Cooper's hawk (*Accipiter cooperii*), a CDFW watch list species; the presence of San Diego desert woodrat (*Neotoma lepida*), a CDFW SSC, was also found, although Envicom biologists did not see any nests that conformed to that species in their survey. Also documented were the presence of least bittern (*Ixobrychus exilis*), a California SSC, and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), a CDFW watch-list species. Additionally, the 2019 spring surveys included observations of coastal whiptail, a California SSC. Locations of observations of the special-status coastal whiptail are shown on Figure 4 of Appendix D.

Coastal California gnatcatcher (*Polioptila californica californica*) has been documented in the vicinity of the project area, but not at the project site. Surveys of the project site were conducted for California gnatcatchers in accordance with standard protocols in spring 2017. No coastal California gnatcatchers were observed during the protocol surveys (Appendix D). Also, the site is not within final U.S. Fish and Wildlife Service–designated critical habitat for the species, which occurs north and east of the site.

Potential for Occurrence Analysis

An analysis of the potential for occurrence of special-status wildlife at the site is presented in Appendix D, which includes the species' protected status, primary habitat associations, and an assessment of their potential for occurrence (Presumed Absent, No Potential, Low Potential, Moderate Potential, or High Potential). The potential for occurrence was undertaken through research of the CNDDB (CDFW 2020) using the Rarefind application for special-status "elements" on the Mint Canyon quadrangle and eight adjacent quadrangles. The CNDDB-derived list is provided in Appendix D. The potential for occurrence analysis provides an assessment of the potential for the occurrence at the site of special-status animals on the basis of their known distribution and habitat requirements.

Water features within the project area are all either artificial lined features containing stagnant water, or are overland swales with no standing water, and are not suitable habitat for fishes, precluding the possibility that special-status fish species may occur within the project area.

Several special-status species of reptiles, birds, and mammals have potential to use the site. Species that have been observed at the site are confirmed present and are not included on this list of potentially present species. Four special-

status reptiles, one special-status amphibian, eight special-status birds, and four special-status mammals have potential to occur at the site, with varying probabilities ranging from moderate to very low, including the following.

Reptiles

- California glossy snake (*Arizona elegans occidentalis*) – SSC
- Western pond turtle (*Emys marmorata*) – SSC
- Coast horned lizard (*Phrynosoma blainvillii*) – SSC
- Two-striped gartersnake (*Thamnophis hammondii*) – SSC

Amphibians

- Western spadefoot (*Spea hammondii*) – SSC

Birds

- Tricolored blackbird (*Agelaius tricolor*) – California Threatened
- Grasshopper sparrow (*Ammodramus savannarum*) – SSC
- Burrowing owl (*Athene cunicularia*) – SSC
- Swainson's hawk (*Buteo swainsoni*) – Federal Threatened/California Threatened
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) – Federal Threatened/ California Threatened
- White-tailed kite (*Elanus leucurus*) – California Fully Protected
- Loggerhead shrike (*Lanius ludovicianus*) – SSC
- Coastal California gnatcatcher – Federal Threatened/SSC

Mammals

- Pallid bat (*Antrozous pallidus*) – SSC
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) – SSC
- Southern grasshopper mouse (*Onychomys torridus ramona*) – SSC
- American badger (*Taxidea taxus neglecta*) – SSC

Protected Trees

The City of Santa Clarita oak tree ordinance (City of Santa Clarita Municipal Code Chapter 17.51, Section 17.51.040, Oak Tree Preservation) protects and preserves oak trees in the City. The project site contains 136 protected oak trees, including 121 coast live oak trees and 15 scrub oaks (*Quercus berberidifolia*). Of the 121 coast live oaks, 13 are heritage trees.

Jurisdictional Waters

Potential federal and/or state jurisdictional features within the survey area include a human-made ditch, a pond, an ephemeral drainage, a modified stream, and a swale that was located within upland habitat. All features observed were evaluated per both U.S. Army Corps of Engineers (ACOE) and CDFW guidance and results are

provided in Table 4.3-2. The survey area is located in the Santa Clara River watershed (Hydrologic Unit Code 180701020107) within the larger Ventura-San Gabriel Coastal watershed (Hydrologic Unit Code 1810701). It includes multiple concrete or plastic lined pond features, a wetland feature, and a County Public Works storm drain and detention basin.

Table 4.3-2. Summary of Potential Jurisdictional Features in the Survey Area

Feature	Latitude[1]	Longitude	ACOE Wetland Waters of the United States[2]	ACOE Non-Wetland Waters of the United States	RWQCB Waters of the State	CDFW Streambed and Riparian Habitat
Ditch 1 (DIT1)	34.412305	-118.415586	—	—	0.02/69	0.02/69
Drainage 1 (DR1)	34.413645	-118.412710	—	—	0.03/167	0.10/177
Swale 1 (SW1)	34.412916	-118.414817	—	—	0.09/171	0.09/171
Pond (P1)	34.412042	-118.406985	—	—	0.14/301	0.36/357
Stream 1 (ST1)	34.411111	-118.416861	0.03/117	0.26/713	0.26/712	0.55/716
		Total	**0.03/117**	**0.26/713**	**0.54/1,420**	**1.12/1,490**

Source: Appendix D.
Notes: ACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.
1 North American Datum 1983, California State Plane Zone V. GPS coordinates are given for the upstream origin of the drainage or ditch and center point of debris basins as accessed during field surveys and/or as digitized from aerial imagery.
2 All measurements are acres/linear feet.

Ditches and Drainages

Ditch 1 (DIT1) is a concrete and rock-lined channel that was dug within uplands and presumably supplemented by irrigation or nuisance water. The ditch contained impounded water that appeared be stagnant (i.e., not flowing). There was approximately 3 inches of accumulated soil materials on top of the concrete liner. DIT1 is hydrologically connected to another human-made impoundment south of the survey area via a concrete box culvert that runs under Robinson Ranch Road, which eventually leads to a secondary built pond system within the existing golf course. There is no nexus from the ponds to a traditional navigable water (TNW). The ACOE generally does not assert jurisdiction over ditches or swales excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water. CDFW and Regional Water Quality Control Board (RWQCB) would likely determine that DIT1 constitutes jurisdictional habitat.

Drainage 1 (DR1) is located in the northern portion of the survey area and did not exhibit any criteria indicators to suggest the presence of a wetland. The ACOE will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters," meaning tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). In this case, DR1 does not appear to support continuous flow but is instead the result of erosion from convergent hillsides. For example, the golf cart path appears to have bisected the convergent hillsides and was constructed without adequate drainage control, which has resulted in severe undercutting of the hillside nearest the downhill side (west) of the pathway. The ephemeral drainage area appears to be isolated, ending in an overland flow with no connection to a TNW. Therefore, the drainage is not likely subject to ACOE jurisdiction, but CDFW and RWQCB would likely determine that DR1 constitutes jurisdictional habitat, which would be affected by the proposed project.

In addition, a Los Angeles Department of Public Works debris basin is located west of the survey area. The extent of ACOE and RWQCB jurisdiction is limited to the confined channel within the basin. Conversely, the extent of CDFW jurisdiction is limited to the top of bank (i.e., top of the concrete-lined basin) and would not extend to include the canopy of the oak tree immediately adjacent to the basin because the tree is not dependent on the drainage and basin and it does not contribute to the ecological function of the basin, which is lined with concrete. The drainage continues north of the basin, west of the survey area, and ties into the City's storm drain system that drains into the Santa Clara River.

Swale

There is one swale area within the subject property that appears to be a result of faulty irrigation. This feature does not have a significant nexus to TNW as it ceases at the existing concrete golf cart path and no subsurface flows were detected that suggest a connection to the water course to the southwest. This area is a shallow feature in the landscape that has grass or other low-lying vegetation throughout and conveys nuisance water across upland areas. As such, this feature has been classified as a swale. The ACOE typically does not assert their jurisdiction over swales, especially those that are not tributary to or abutting TNWs or tributaries of TNWs. Furthermore, the condition is likely a result of faulty irrigation, as there is no indication of similar conditions in the vicinity of the swale. Nevertheless, because the swale currently supports cattail marsh and a robust herbaceous layer of salt grass, CDFW and the RWQCB will consider it jurisdictional.

Ornamental Pond and Water Feature

One ornamental pond and its associated water feature were found within the survey area. The boundary of the feature was mapped based on site-specific topography. The area would meet all three criteria to be considered a wetland under ACOE guidance; however, the pond was dug in uplands and was subsequently lined and filled as an ornamental feature for aesthetic purposes. At the time of the spring 2019 survey conducted for this report, the pond was full of water and supported cattail thickets. The pond and associated water feature do not constitute jurisdictional waters of the United States. CDFW and RWQCB would likely consider the pond and water feature to be jurisdictional.

Modified Stream

One modified stream was delineated within the expanded survey area assessed during the spring 2019 surveys. The boundary of the stream was mapped based upon site-specific topography. At three locations, the stream met all three criteria to be considered a wetland under ACOE guidance. The remainder of the stream channel meets criteria of non-wetland waters of the United States. Additional details on the wetlands are provided on the Wetland Determination Data Forms in Appendix 4 to Appendix D of this Environmental Impact Report. The stream connects to a Los Angeles Department of Public Works debris basin to the northwest (the same mentioned above), which does have a nexus to the Santa Clara River. The stream is subject to ACOE, CDFW, and RWQCB jurisdiction.

Habitat Linkages and Wildlife Movement Corridors

Wildlife must to be able to access habitat for water, foraging, breeding, and cover. Examples of barriers or impediments to movement (i.e., access) include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. The term wildlife movement corridor is used to describe physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed and fragmented landscapes, such as landscapes fragmented by urban development. Wildlife movement corridors are necessary for

dispersal and migration, to ensure the mixing of genes between populations, and so wildlife can respond and adapt to environmental stress, and thus are necessary to maintain healthy ecological and evolutionary processes. Wildlife crossings are generally small, narrow areas allowing wildlife to pass through an obstacle or barrier, such as a roadway to reach another patch of habitat. These can be critical at both the local and regional level. Wildlife crossings include culverts, drainage pipes, underpasses, tunnels, and, more recently, crossings created specifically for wildlife movement over highways.

Based on a review of the following documents, the project site and the survey area are near but not within an area that has been identified as important to wildlife movement, such as a regional-scale habitat linkage or a wildlife movement corridor:

- California Essential Connectivity Project: A Strategy for Conserving a Connected California (Spencer et al. 2010)
- South Coast Missing Linkages Project: A Linkage Design for the San Gabriel – Castaic Connection (Penrod et al. 2004)
- South Coast Missing Linkages Project: A Linkage Design for the Santa Monica Mountains – Sierra Madre Connection (Penrod et al. 2006)
- City of Santa Clarita General Plan: Conservation and Open Space Element (City of Santa Clarita 2011a).

The potential importance of the project site to wildlife movement was also evaluated both in the field and by reviewing recent aerial photographs of the site and the surrounding area. The scrub and woodland communities within the project area provide coverage/foraging areas for local wildlife. A diversity of wildlife species could potentially move through the survey area, as it contains vegetative cover and suitable habitat for many species.

4.3.2 Regulatory Framework

Federal

Federal Endangered Species Act

The FESA of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service for most plant and animal species and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. The FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to "take" any listed species, and take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of Habitat Conservation Plans on private property without any other federal agency involvement.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. The MBTA protects over 800 species of birds (including their parts, eggs, and nests) from killing, hunting, pursuing, capturing, selling, and shipping unless expressly authorized or permitted.

Clean Water Act

The Clean Water Act provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the Clean Water Act. The RWQCB administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by ACOE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. ACOE implementing regulations are found at Title 33 of the Code of Federal Regulations Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with ACOE (Title 40 Code of Federal Regulations Section 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. ACOE exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the previously described features. The extent of waters of the United States is generally defined as that portion that falls within the limits of the ordinary high water mark. Typically, the ordinary high water mark corresponds to the 2-year flood event.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by ACOE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Title 33 Code of Federal Regulations Section 328.3[b]; Title 40 Code of Federal Regulations Section 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by ACOE (ACOE 1987).

State

California Endangered Species Act

The CESA (California Fish and Game Code Section 2050 et seq.) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by the project applicant from the CDFW under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of implementation, and monitoring of mitigation measures.

California Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, the CDFW has designated certain vertebrate species as SSC, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 directed the CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. The CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the CESA created the categories of "threatened" and "endangered" species. It converted all rare animals into the act as threatened species, but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in the CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. The act also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such

small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under the FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including for example the Audubon Watch List Species. Guidance documents prepared by other agencies, including the U.S. Fish and Wildlife Service Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species included on the CNPS's CRPR List 1 and 2, and potentially some List 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service."

California Fish and Game Code Section 1602

Under these sections of the California Fish and Game Code, the project operator is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

California Wetland Definition

Unlike the federal government, California has adopted the Cowardin et al. (1979) definition of wetlands. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (at least 50% of the aerial vegetative cover); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and saturated with water or covered by shallow water at some time during the growing season of each year.

Under normal circumstances, the federal definition of wetlands requires all three wetland identification parameters to be met, whereas the Cowardin definition requires the presence of at least one of these parameters. For this reason, identification of wetlands by state agencies consists of the union of all areas that are periodically inundated or saturated or in which at least seasonal dominance by hydrophytes may be documented or in which hydric soils are present.

Section 401 Clean Water Act

Under Section 401 of the Clean Water Act, the local RWQCB, Santa Ana RWQCB, must certify that actions receiving authorization under Section 404 of the Clean Water Act also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

Porter-Cologne Water Quality Control Act

The RWQCB also has jurisdiction over waters deemed isolated or not subject to Section 404 jurisdiction under the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Local

Los Angeles County Significant Ecological Areas

As part of the Conservation and Open Space and Land Use elements of the City of Santa Clarita General Plan (General Plan), the County has identified and adopted policies since 1970 for the establishment of Significant Ecological Areas (SEAs) (City of Santa Clarita 2011a, 2011b). These SEAs were developed to maintain biological diversity by establishing natural biological parameters (key species, habitat types, and linkages) and recommended management practices. The final boundaries and categories for the 21 SEAs (and 9 Coastal Resource Areas) were established in 2015 with the County Board of Supervisors approval of the General Plan. The survey area does not include any mapped SEAs; the nearest mapped SEA (Santa Clara River SEA) is located within 0.15 miles of the project site.

City of Santa Clarita General Plan

The General Plan is the primary planning document for the incorporated areas of the City, including the Sand Canyon Community. The General Plan outlines goals and policies that are intended to guide new planning and development efforts within the City in compliance with state requirements. The City's General Plan is part of a larger collaborative planning effort between the City and the County called the "One Valley One Vision" project. This project involves coordination between the City and County for a unified vision for a larger planning area made up of the incorporated and unincorporated areas of the Santa Clarita Valley. While the incorporated areas of the valley are regulated by the City's General Plan, the plan has been prepared to reflect the common goals and policies agreed to as part of the One Valley One Vision project. For unincorporated areas, the County prepared the Santa Clarita Valley Area Plan, which is consistent with the City's General Plan. As such, both plans reflect the common goals and policies agreed to as part of the One Valley One Vision project (City of Santa Clarita 2011a). The theme of the City's General Plan and Santa Clarita Valley Area Plan is "Valley of Villages," in recognition of the various communities and neighborhoods within the Santa Clarita Valley that wish to maintain a distinctive character, while at the same time recognizing their place in the big picture plan for development within the entire planning area.

The Conservation and Open Space Element of the City's General Plan contains goals and policies that are applicable to the potential biological resources impacts of the project (City of Santa Clarita 2011a). The Conservation and

Open Space Element manages developments' impact on natural resources and recreational amenities within the City by ensuring that goals and policies are in place to regulate the preservation of existing natural and recreational resources while continuing to foster economic growth and development. The goals and policies within the Conservation and Open Space Element outline the City's long-term vision of maintaining and providing open space for the residents of Santa Clarita Valley while also ensuring that new open space and recreational resources contribute to the community character of the region (City of Santa Clarita 2011a).

Goal CO 3: Conservation of biological resources and ecosystems, including sensitive habitats and species.

Objective CO 3.1: In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.

Policy CO 3.1.1: On the Land Use Map and through the development review process, concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss, to the extent feasible.

Policy CO 3.1.2: Avoid designating or approving new development that will adversely impact wetlands, floodplains, threatened or endangered species and habitat, and water bodies supporting fish or recreational uses, and establish an adequate buffer area as deemed appropriate through site specific review.

Policy CO 3.1.3: On previously undeveloped sites ("greenfields"), identify biological resources and incorporate habitat preservation measures into the site plan, where appropriate. (This policy will generally not apply to urban infill sites, except as otherwise determined by the reviewing agency).

Policy CO 3.1.4: For new development on sites with degraded habitat, include habitat restoration measures as part of the project development plan, where appropriate.

Policy CO 3.1.5: Promote the use of site-appropriate native or adapted plant materials, and prohibit use of invasive or noxious plant species in landscape designs.

Policy CO 3.1.6: On development sites, preserve and enhance natural site elements including existing water bodies, soil conditions, ecosystems, trees, vegetation and habitat, to the extent feasible.

Policy CO 3.1.7: Limit the use of turf-grass on development sites and promote the use of native or adapted plantings to promote biodiversity and natural habitat.

Policy CO 3.1.8: On development sites, require tree planting to provide habitat and shade to reduce the heat island effect caused by pavement and buildings.

Policy CO 3.1.9: During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.

Policy CO 3.1.10: To the extent feasible, encourage the use of open space to promote biodiversity.

Policy CO 3.1.11: Promote use of pervious materials or porous concrete on sidewalks to allow for planted area infiltration, allow oxygen to reach tree roots (preventing sidewalk lift-up from roots seeking oxygen), and mitigate tree-sidewalk conflicts, in order to maintain a healthy mature urban forest.

Objective CO 3.2: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.

Policy CO 3.2.1: Protect wetlands from development impacts, with the goal of achieving no net loss (or functional reduction) of jurisdictional wetlands within the planning area.

Policy CO 3.2.2: Ensure that development is located and designed to protect oak, and other significant indigenous woodlands.

Policy CO 3.2.3: Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.

Policy CO 3.2.4: Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources.

Objective CO 3.3: Protect significant wildlife corridors from encroachment by development that would hinder or obstruct wildlife movement.

Policy CO 3.3.1: Protect the banks and adjacent riparian habitat along the Santa Clara River and its tributaries, to provide wildlife corridors.

Policy CO 3.3.2: Cooperate with other responsible agencies to protect, enhance, and extend the Rim of the Valley trail system through Elsmere and Whitney Canyons, and other areas as appropriate, to provide both recreational trails and wildlife corridors linking the Santa Susana and San Gabriel Mountains.

Policy CO 3.3.3: Identify and protect one or more designated wildlife corridors linking the Los Padres and Angeles National Forests through the Santa Clarita Valley (the San Gabriel-Castaic connection).

Policy CO 3.3.4: Support the maintenance of Santa Clarita Woodlands Park, a critical component of a cross-mountain range wildlife habitat corridor linking the Santa Monica Mountains to the Angeles and Los Padres National Forests.

Policy CO 3.3.5: Encourage connection of natural open space areas in site design, to allow for wildlife movement.

Objective CO 3.5: Maintain, enhance, and manage the urban forest throughout developed portions of the Santa Clarita Valley to provide habitat, reduce energy consumption, and create a more livable environment.

Policy CO 3.5.1: Continue to plant and maintain trees on public lands and within the public right-of-way to provide shade and walkable streets, incorporating measures to ensure that roots have access to oxygen at tree maturity, such as use of porous concrete.

Policy CO 3.5.2: Where appropriate, promote planting of trees that are native or climactically appropriate to the surrounding environment, emphasizing oaks, sycamores, maple, walnut, and other native species in order to enhance habitat, and discouraging the use of introduced species such as eucalyptus, pepper trees, and palms except as ornamental landscape features.

Policy CO 3.5.3: Pursuant to the requirements of the zoning ordinance, protect heritage oak trees that, due to their size and condition, are deemed to have exceptional value to the community.

Municipal Code

The City established the City of Santa Clarita Municipal Code to provide organization for the classification and grouping of ordinances adopted by the City Council. The proposed project must comply with all applicable ordinances in the City's Municipal Code. The City's oak tree ordinance (Municipal Code Chapter 17.51, Section 17.51.040, Oak Tree Preservation) protects and preserves oak trees in the City. The ordinance protects oak trees in the genus *Quercus* that measure at least 6 inches or more in circumference when measured at a point 4.5 feet above the tree's natural grade, or, for those trees on properties occupied by a single-family residence, that exceed 12.5 inches in circumference when measured 4.5 feet above the tree's natural grade. A heritage tree is defined as any oak measuring 108 inches or more in circumference or, in the case of a multiple-trunk oak tree, two or more trunks measuring 72 inches each or greater in circumference, measured 4.5 feet above natural grade. Unless allowed by an Oak Tree Permit, no person shall cut, remove, or encroach into the protected zone or relocate a protected oak tree.

Per the oak tree ordinance, for mitigation of oaks due to removal and/or major encroachment of non-heritage oak trees on a property occupied by a single-family residence, any required tree replacements shall be based on a 6-inch increment as follows:

1. 8 inches to 12 inches = Two 24-inch box native oaks
2. 12 inches to 18 inches = Three 24-inch box native oaks
3. 18 inches to 24 inches = Four 24-inch box native oaks

4. 24 inches to 30 inches = Five 24-inch box native oaks
5. 30 inches to 36 inches = Six 24 inch box native oaks
6. One additional 24-inch box native oak per incremental increase of 6 inches

Replacement trees shall be planted on the same property from which they were removed unless there is no appropriate place for planting. If an appropriate on-site location for replanting does not exist, mitigation trees may be donated to the City following the replacement schedule above or their monetary value may be paid to the City to the satisfaction of the Director of Community Development.

4.3.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to biological resources would occur if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
3. 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.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Additionally, the City's Local Guidelines include the following additional City-specific thresholds related to biological resources, in which a significant impact would occur due to (City of Santa Clarita 2005):

7. Removal of any heritage oak tree, as defined in Uniform Development Code §17.16.090, removal of more than five (5) oak trees for a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees, proposed as part of any other project.
8. Disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita.
9. Disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists.

4.3.4 Impacts Analysis

Threshold BIO-1. ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Special-Status Plants

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the FESA, the CESA, and/or CEQA. CRPR 4 species are also considered if protected by local policy or if they meet criteria to be locally significant. The 11 federal- or state-listed plant species with low potential to occur at the project site were confirmed absent by the floristic surveys conducted in spring 2019. Furthermore, no CRPR 4 species at the site are protected by City policy or otherwise meet criteria to be considered locally significant. Therefore, impacts to special-status plants would be **less than significant**, and no mitigation is required.

Special-Status Wildlife

This assessment of impacts to special-status wildlife considers those species that are listed, proposed for listing, or that meet the criteria for listing as Endangered or Threatened under the FESA or CESA; and those with a designation of SSC or CFP, as mandatory special consideration and/or protection of these species is required pursuant to the federal Endangered Species Act, the state Endangered Species Act, and/or CEQA.

The coastal whiptail, which is a California SSC, was observed within the project grading footprint in June 2019. Observations of coastal whiptail made during the spring 2019 surveys are indicated on Figure 4 in Appendix D. An August 2017 survey also indicated the presence of San Diego desert woodrat, a California SSC, though biologists did not find any nests that conformed to that species in their survey in December 2018 or Spring 2019 (Appendix D). Vocalizations of least bittern, a California SSC, were also heard at a human-made pond at the project site in 2017.

Several other special-status wildlife species have potential to occur at the site. Most of the special-status wildlife species that may potentially occur at the site are capable of escaping harm during project development, including grading and construction, landscaping, or fuel modification, while others are potentially vulnerable to direct impacts, including injury and mortality. In this case, the special-status species that could be directly impacted include the California glossy snake (SSC), coastal whiptail (SSC), coast horned lizard (SSC), western spadefoot (SSC), two-striped gartersnake (SSC), San Diego black-tailed jackrabbit (SSC), San Diego desert woodrat (SSC), and a few species of special-status bats, which could potentially roost in tree cavities or in tree foliage at the site. Additionally, some potentially occurring special-status bird species could be impacted if nesting at the site.

Habitat loss associated with the project is not expected to significantly impact a population of a potentially occurring special-status wildlife species, given the relatively limited amount of habitat that would be lost and the relatively abundant amount of remaining suitable habitat in the surrounding area. However, the direct loss of or injury to a special-status wildlife species would be a **potentially significant impact**.

Nesting Birds

Ground- and vegetation-disturbing activities, if conducted during the nesting bird season (typically February 1 to August 31), would have the potential to result in removal of or disturbance to trees and shrubs that could contain active bird nests. In addition, these activities would also affect herbaceous vegetation that could support and conceal ground-nesting species. Project activities that result in the loss of bird nests, eggs, and young would be in violation of one or more of California Fish and Game Code Sections 3503 (any bird nest), 3503.5 (birds of prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal MBTA, whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511. The loss of protected bird nests, eggs, or young due to project activities would be a **potentially significant impact**.

Threshold BIO-2. ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

The project includes approximately 39 acres of development with an additional 21 acres of potential impacts related to fuel modification. The primary vegetation communities impacted by the proposed project include mixed native and non-native grassland, chamise–California buckwheat scrub, California buckwheat–Great Basin sage scrub, California brittlebush scrub, and coast live oak woodland, as well as existing paved and barren areas. Permanent disturbances are assumed to be located within the proposed development footprint and fuel modification areas. The proposed project is shown overlaid on the site's biological resources on Figure 4 in Appendix D.

Four CDFW sensitive plant communities exist within the project site and would be impacted by the project: Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance. Proposed impacts to the sensitive plant communities located within the project site are listed in Table 4.3-3.

Table 4.3-3. Impacts to Sensitive Plant Communities and Land Covers

Habitat Class	Plant Community or Land Covers	Existing Acres	Project Impact Acres	
			Development Footprint	*Fuel Modification**
Woodland	*Fremont Cottonwood (*Populus fremontii*) Alliance	0.57	0.09	0.04
Scrub/ Shrubland	*California Brittlebush (*Encelia californica*) Scrub Alliance	3.82	2.68	1.14
	*California Brittlebush – California Sagebrush (*Encelia californica – Artemisia californica)* Scrub Association	0.47	0.47	0
Herbaceous	*Creeping Ryegrass (*Elymus triticoides*) Herbaceous Alliance	0.11	0.0	0.05
	Total Acreage	**4.97**	**3.24**	**1.23**

* Fuel modification impacts are based on the standard Los Angeles County Fire Department (LACFD) distances of 200 feet from structures and 10 feet from roadways.

Source: Appendix D.

As shown in Table 4.3-3, the project would have a **potentially significant impact** on riparian habitat or other sensitive natural communities.

Threshold BIO-3. ***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The project site contains waters of the United States, waters of the state, and riparian habitat that would be subject to ACOE, RWQCB, and CDFW jurisdiction under Section 404 and 401 of the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1600. The project limits of disturbance are overlaid on potential jurisdictional areas on Figure 5 in Appendix D**.** The jurisdictional acreage within the features that would be impacted by the project is provided in Table 4.3-4.

Table 4.3-4. Permanent Impacts to Jurisdictional Areas

Feature	ACOE Wetland Waters of the United States (acres/ linear feet)	ACOE Non-Wetland Waters of the United States (acres/ linear feet)	RWQCB Waters of the State (acres/ linear feet)	CDFW Streambed and Riparian Habitat	
				Grading Impacts (acres/ linear feet)	*Fuel Modification Impacts (acres/ linear feet)*
Drainage 1 (DR1)	—	—	0.03/167	0.10/173	0.0007/8
Ditch 1 (DIT1)	—	—	—	—	0.02/69
Swale 1 (SW1)	—	—	0.002/37	0.002/37	0.09/144
Stream 1 (ST1)	0.03/181	0.20/462	0.28/462	0.28/462	—
Total	**0.03/181**	**0.20/462**	**0.23/666**	**0.38/672**	**0.11/221**

Source: Appendix D.
Note: ACOE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.

Prior to issuance of the grading permit, the applicant shall consult with and prepare and submit a Preliminary Delineation Report for Waters of the United States to ACOE, a Preliminary Delineation Report for Waters of the State to RWQCB, and a Streambed Alteration Notification package to CDFW. If required by ACOE, a Clean Water Act Section 404 permit shall be obtained, and the applicant shall comply with the permit conditions. If required by CDFW, a Streambed Alteration Agreement shall be entered into with the CDFW under Section 1602 of the California Fish and Game Code, and the applicant shall comply with the associated conditions. If required by RWQCB, a Clean Water Act Section 401 Water Quality Certification shall be obtained from the RWQCB, and the applicant shall comply with the certification conditions. The applicant shall provide evidence to the City of Santa Clarita Planning Division that the required permits have been obtained prior to issuance of a grading permit. However, the project would have a **potentially significant impact** on affect protected wetlands.

Threshold BIO-4. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The scrub and woodland communities within the project area provide coverage/foraging areas for local wildlife. A diversity of wildlife species could potentially move through the survey area, as it contains vegetative cover and suitable habitat for many species. Although wildlife may potentially move through the survey area, the habitats within the survey area are not of special or particular importance for wildlife movement at a local or regional scale. For example, the project site is not within an important bottleneck of habitat between larger areas of natural habitat and there are extensive natural habitats in the surrounding area that can be used by wildlife for movement through the surrounding area. For example, to the northeast of the project area is a protected SEA that connects the Santa Clara River SEA to the San Gabriel Mountains, a corridor that will not be impacted by this project. Also, the project site does not contain an important nursery site or other resources of special or particular importance to wildlife, and development of the project would not impede access to a nursery site or other important resources. Therefore, impacts to wildlife movement are considered to be **less than significant**.

Threshold BIO-5. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Based on the current site design, 21 oak trees would be removed to implement the project as currently designed, which would be significant under the City's oak tree ordinance (Municipal Code Section 17.51.040). The project would be subject to conditions imposed as part of the Oak Tree Permit per the oak tree ordinance (Municipal Code Section 17.51.040.B), including required mitigation for the 21 proposed removals. Conditions of the permit can include, but not are limited to, requiring the applicant to plant compensation trees on site or pay into the City's Oak Tree Fund the equivalent value of the trees to be removed as calculated by the International Society of Arboriculture standards. The remaining oak trees could be impacted by project construction, resulting in the loss of protected trees, which would result in a **potentially significant impact**.

Threshold BIO-6. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The survey area is located within the City of Santa Clarita and within the County of Los Angeles. The survey area does not occur within any local or regional Natural Community Conservation Plans or Habitat Conservation Plans. Additionally, the survey area does not occur within any local coastal plans or SEAs as defined and mapped by the County. Therefore, the project would result in **no impact** to any Natural Community Conservation Plans or Habitat Conservation Plans.

Threshold BIO-7. *Would the project result in the removal of any heritage oak trees, as defined in Unified Development Code §17.17.090, removal of more than five (5) oak trees from a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees?*

As discussed under Threshold BIO-5, based on the current site design, 21 oak trees would be removed to implement the project, which would be significant under the City's oak tree ordinance (Municipal Code Section 17.51.040). None of the oak trees to be removed are identified as heritage oak trees. The project would be subject to conditions imposed as part of the Oak Tree Permit per the oak tree ordinance (Municipal Code Section 17.51.040.B), including

required mitigation for the 21 proposed removals. Conditions of the permit can include, but not are limited to, requiring the applicant to plant compensation trees on site or pay into the City's Oak Tree Fund the equivalent value of the trees to be removed as calculated by the International Society of Arboriculture standards. The remaining oak trees could be impacted by project construction, resulting in the loss of protected trees, which would result in a **potentially significant impact**.

Threshold BIO-8. ***Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?***

As discussed under Threshold BIO-3, the project site contains waters of the United States, waters of the state, and riparian habitat that would be subject to ACOE, RWQCB, and CDFW jurisdiction under Section 404 and 401 of the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1600. The project limits of disturbance are overlaid on potential jurisdictional areas on Figure 5 in Appendix D. The jurisdictional acreage within the features that would be impacted by the project is provided in Table 4.3-4.

Prior to issuance of the grading permit, the applicant shall consult with and prepare and submit a Preliminary Delineation Report for Waters of the United States to ACOE, a Preliminary Delineation Report for Waters of the State to RWQCB, and a Streambed Alteration Notification package to CDFW. If required by ACOE, a Clean Water Act Section 404 permit shall be obtained, and the applicant shall comply with the permit conditions. If required by CDFW, a Streambed Alteration Agreement shall be entered into with the CDFW under Section 1602 of the California Fish and Game Code, and the applicant shall comply with the associated conditions. If required by RWQCB, a Clean Water Act Section 401 Water Quality Certification shall be obtained from the RWQCB, and the applicant shall comply with the certification conditions. The applicant shall provide evidence to the City of Santa Clarita Planning Division that the required permits have been obtained prior to issuance of a grading permit. However, the project would have a **potentially significant impact** on protected wetlands.

Threshold BIO-9. ***Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?***

As discussed under Threshold BIO-1, the following potential impacts could occur to either plant or animal species listed as endangered on a federal and/or state list.

Special-Status Plants

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the FESA, the CESA, and/or CEQA. CRPR 4 species are also considered if protected by local policy or if they meet criteria to be locally significant. The 11 federal- or state-listed plant species with low potential to occur at the project site were confirmed absent by the floristic surveys conducted in spring 2019. Furthermore, no CRPR 4 species at the site are protected by City policy or otherwise meet criteria to be considered locally significant. Therefore, impacts to special-status plants would be **less than significant**, and no mitigation is required.

Special-Status Wildlife

This assessment of impacts to special-status wildlife considers those species that are listed, proposed for listing, or that meet the criteria for listing as endangered or threatened under the FESA or CESA and those with a designation of SSC or CFP, as mandatory special consideration and/or protection of these species is required pursuant to the FESA, the CESA, and/or CEQA.

The coastal whiptail, which is a California SSC, was observed within the project grading footprint in June 2019. Observations of coastal whiptail made during the spring 2019 surveys are indicated on Figure 4 in Appendix D. An August 2017 survey also indicated the presence of San Diego desert woodrat, a California SSC, though biologists did not find any nests that conformed to that species in their survey in December 2018 or spring 2019 (Appendix D). Vocalizations of least bittern, a California SSC, were also heard at a human-made pond at the project site in 2017.

Several other special-status wildlife species are potentially occurring at the site. Most of the special-status wildlife species that may potentially occur at the site are capable of escaping harm during project development, including grading and construction, landscaping, or fuel modification, while others are potentially vulnerable to direct impacts, including injury and mortality. In this case, the special-status species that could be directly impacted include the California glossy snake (SSC), coastal whiptail (SSC), coast horned lizard (SSC), western spadefoot (SSC), two-striped gartersnake (SSC), San Diego black-tailed jackrabbit (SSC), San Diego desert woodrat (SSC), and a few species of special-status bats, which could potentially roost in tree cavities or in tree foliage at the site. Additionally, some potentially occurring special-status bird species could be impacted if nesting at the site.

Habitat loss associated with the project is not expected to significantly impact a population of a potentially occurring special-status wildlife species, given the relatively limited amount of habitat that would be lost and the relatively abundant amount of remaining suitable habitat in the surrounding area. However, the direct loss of or injury to a special-status wildlife species would be a **potentially significant impact**.

Nesting Birds

Ground- and vegetation-disturbing activities, if conducted during the nesting bird season (typically February 1 to August 31), would have the potential to result in removal of or disturbance to trees and shrubs that could contain active bird nests. In addition, these activities would also affect herbaceous vegetation that could support and conceal ground-nesting species. Project activities that result in the loss of bird nests, eggs, and young would be in violation of one or more of California Fish and Game Code Sections 3503 (any bird nest), 3503.5 (birds of prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal MBTA, whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511. The loss of protected bird nests, eggs, or young due to project activities would be a **potentially significant impact**.

4.3.5 Mitigation Measures

The following mitigation measures (MMs) shall be implemented during and prior to project construction in order to reduce potential project-related impacts to biological resources to a less-than-significant level.

MM-BIO-1 **Special-Status Wildlife**. Beginning no more than 2 weeks prior and ending no more than 3 days prior to ground-disturbing construction at the project site, pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego

black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species, shall be conducted by a qualified biologist and submitted to the City of Santa Clarita Planning Division prior to commencement of any ground or vegetation disturbance. The pre-construction surveys shall incorporate appropriate methods and timing to detect the special-status wildlife species that could potentially occur at the site, as well as appropriate methods to identify and relocate potentially occurring San Diego desert woodrats and their nest materials, if this species is determined to be present.

If a special-status species is found, project activities shall avoid disturbing the special-status species. If avoidance is not feasible, these species shall be captured, when possible, and transferred to adjacent appropriate habitat and location where they would not be harmed by project activities, preferably within the open space areas either on site or directly adjacent to the project area. Only a California Department of Fish and Wildlife (CDFW) approved biologist shall perform this. The CDFW and the City of Santa Clarita Planning Division shall be formally notified and consulted regarding the presence of these species on site. If a federally listed species is found prior to grading of the site, the U.S. Fish and Wildlife Service shall also be notified. A letter report summarizing the methods and results of the surveys and relocation efforts, if applicable, shall be submitted to the City of Santa Clarita and CDFW prior to commencement of project activities.

MM-BIO-2 **Nesting Birds**. Project activities, including but not limited to site preparation, construction, or fuel modification activities, with potential to disturb suitable bird-nesting habitat shall be prohibited within the breeding/nesting season for native bird species (typically February 1 through August 31). If the breeding/nesting season cannot be avoided, then no earlier than 7 days prior to ground- or vegetation-disturbing activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site, a qualified biologist shall perform two field surveys to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the disturbance zone, within 300 feet of the disturbance zone for songbirds, or within 500 feet of the disturbance zone for raptors and special-status bird species.

The second nesting bird survey shall be conducted within 3 days of the start of ground- or vegetation-disturbing activities. A letter report summarizing the methods and results of the surveys shall be submitted to the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife prior to commencement of project activities. In the event an active nest is found within the survey area, site preparation, construction, and fuel modification activities shall stop until the biologist can establish an appropriate setback buffer around the nest. Buffer size will be determined on a case-by-case basis by the biologist based on site conditions, the species' life history and disturbance tolerance, the nest's distance to construction activities, and the type of construction ongoing in the vicinity of the nest. Buffers will be clearly delineated (e.g., using rope, flagging, signage), or they may also be defined by natural or constructed features that are deemed sufficient to prohibit access (e.g., tree rows, fences). Project activities within the buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.

MM-BIO-3 **Sensitive Plant Communities**. Grading and fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities

shall be mitigated at a 2:1 ratio in an area to be preserved as permanent open space. Compensatory mitigation shall be accomplished by one or a combination of the following methods and shall be based on the following preference hierarchy:

1. Mitigation bank credits
2. Contribution to an in-lieu fee program
3. On-site restoration of in-kind habitat
4. Off-site restoration of in-kind habitat

The mitigation method(s) shall be approved by the City of Santa Clarita Planning Division and the California Department of Fish and Wildlife (CDFW) (if applicable).

Prior to issuance of a grading permit for the project, the limits of fuel modification shall be mapped and a qualified biologist shall determine the final acreage of fuel modification impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities.

If impacts to the Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance plant communities are to be mitigated by mitigation bank credits or by contribution of an in-lieu fee, the applicant shall provide evidence of purchase of mitigation bank credits or payment of the in-lieu fee prior to issuance of the first grading permit for the project. The in-lieu fee shall be based on the cost per acre to restore or create in-kind habitat and the acreage of the plant community impacted. In-lieu fees shall be used for the restoration of in-kind habitat.

If compensatory mitigation is to be accomplished by on-site or off-site restoration, a Mitigation and Monitoring Plan shall be developed by a qualified biologist, restoration ecologist, or resource specialist, and approved by the City of Santa Clarita Planning Division and CDFW (if applicable) prior to issuance of the grading permit for the project. The plan shall at a minimum include the following:

- Description of the project/impact and mitigation sites
- Specific objectives
- Success criteria
- Plant palettes
- Implementation plan
- Maintenance activities
- Monitoring plan
- Contingency measures

Off-site restoration shall be in the vicinity of the project site, or if off-site restoration in the vicinity of the project site is infeasible, off-site restoration shall be conducted within the same watershed. Restoration should be implemented only where suitable conditions exist to support viable in-kind habitats. Disturbed habitats within the Santa Clara River Significant Ecological Area immediately

adjacent to the northeastern portion of the subject property may provide a suitable opportunity for off-site restoration that is proximal to the impacted areas and within the same watershed.

The plant palettes shall include dominant species for each community (Fremont cottonwood, California brittlebush, California sagebrush, and creeping wildrye) as well as a diversity of appropriate native species that occur within these plant communities at the site.

Success criteria shall at a minimum be evaluated based on percent cover of planted native species, as well as control of invasive plant species within the restoration area.

The performance standards for the Mitigation and Monitoring Plan shall be at a minimum the following:

- Within 5 years of the introduction of the native plants to the mitigation site, the acreage of restored plant communities shall be no less than two times the acreage lost to project construction.
- Within 5 years of the introduction of the native plants to the mitigation site, the absolute cover of native species shall be no less than 80% within the restoration area.
- Non-native species in the treated area shall be less than 15% relative cover by the end of the third year of treatment and less than 5% relative cover by the end of the fifth year of treatment.
- Restoration will be considered successful after the success criteria have been met for a period of at least 2 years without any maintenance or remediation activities other than invasive species control.

Prior to issuance of a grading permit, the applicant shall secure a bond for an amount equal to the cost of the restoration effort. The bond shall be released by the City of Santa Clarita Planning Division upon satisfaction of the approved performance criteria.

The restoration project shall be initiated prior to issuance of the first grading permit for the project, and shall be implemented over a 5-year period. The restoration project shall incorporate an iterative process of annual monitoring and evaluation of progress, and allow for adjustments to the restoration plan, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the restoration project shall be submitted to City of Santa Clarita Planning Division and CDFW (if applicable). Five years after project start, a final report shall be submitted to the City of Santa Clarita Planning Division and CDFW (if applicable), which shall at a minimum discuss the implementation, monitoring, and management of the restoration project over the 5-year period, and indicate whether the restoration project has been successful based on established success criteria. The annual reports and the final report shall include as-built plans submitted as an appendix to the report. The project shall be extended if success criteria have not been met at the end of the 5-year period to the satisfaction of the City of Santa Clarita Planning Division and CDFW (if applicable).

If restoration cannot be achieved, compensation for the loss or modification of Fremont cottonwood woodland alliance, California brittlebush–California sagebrush shrubland association, California brittlebush shrubland association, and creeping wildrye herbaceous alliance shall be accomplished by on-site preservation of an in-kind habitat at a 3:1 ratio in an area to be preserved as permanent open space, subject to approval by City of Santa Clarita Planning Division and CDFW (if applicable).

To the extent possible, preservation shall be accomplished on site, or if on-site preservation is not feasible, at a location within the same watershed.

MM-BIO-4 **Habitat Mitigation and Monitoring Plan**. The applicant shall compensate for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of California Department of Fish and Wildlife jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of Regional Water Quality Control Board waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. The same or similar habitat shall be restored as close to the impact area as possible. If a location in the general area of the project is not feasible, as determined by the Director of Community Development of the City of Santa Clarita (City), then the applicant shall restore another appropriate area within the City limits as close to the impacted area as possible. If a location in the City is determined infeasible, mitigation shall occur elsewhere in the watershed but as close to the project site as possible, or an in-lieu fee to compensate for the loss of habitat may be provided to a qualified agency or other entity acceptable to the City and the regulatory agencies, as applicable. The appropriate in-lieu fee would be determined by the applicant and receiving entity/agency, as approved by the City of Santa Clarita Planning Division.

The mitigation program or in-lieu fee contribution shall be initiated prior to development of the project, and shall be implemented over a 5-year period. A mitigation plan and monitoring program shall be prepared and submitted to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, for acceptance prior to issuance of a Grading Permit or Building Permit or the start of construction of the project, whichever is sooner. The mitigation plan and monitoring program shall outline methods of mitigation; planting sizes, quantities, and receiver sites; and performance standards, including maintenance and monitoring (with periodic status reports and documentation). Success criteria shall at a minimum be evaluated based on appropriate survival rates and percent cover of planted native species, which shall be determined by examining reference sites, as well as eradication and control of invasive species within the mitigation area.

In the case of in-lieu fees, evidence of payment of such fees shall be provided to the City of Santa Clarita Planning Division and other regulatory agencies, as applicable, prior to issuance of a Grading Permit, a Building Permit, or prior to start of construction of the project, whichever occurs first.

MM-BIO-5 **Protection Zone Fence Installation**. To protect trees within the vicinity of major construction, trees should be temporarily fenced at the edge of the protected zone prior to the beginning of construction operations on the project site. The protected zone is an area surrounding a tree, defined within the City of Santa Clarita (City) oak tree ordinance. It includes all area within the dripline of the tree, plus 5 feet beyond the dripline. This distance must be no less than 15 feet from the trunk. The fence should be constructed of chain-link material and be a minimum of 5 feet in height. The project arborist will develop a fencing plan that will be approved by the City prior to fence installation. The fence will be removed at the completion of the construction upon approval by the City.

4.3.6 Level of Significance After Mitigation

Threshold BIO-1. ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Special-Status Wildlife

MM-BIO-1 requires that pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species, be conducted prior to commencement of any ground or vegetation disturbance. As such, potentially significant impacts to special-status wildlife species would be reduced to a **less-than-significant level with implementation of mitigation**.

Nesting Birds

MM-BIO-2 requires limiting site preparation, construction, or fuel modification activities within the breeding/nesting season for native bird species (typically February 1 through August 31). Further, it requires that if activities must occur within the breeding/nesting season, 7 days prior to ground- or vegetation-disturbing activities, two field surveys shall be conducted to confirm the presence/absence of breeding/nesting birds. As such, potentially significant impacts to nesting birds would be reduced to **less than significant with implementation of mitigation**.

Threshold BIO-2. ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

MM-BIO-3 requires compensatory mitigation for impacts to riparian habitat. As such, potentially significant impacts to riparian habitat would be reduced to **less than significant with implementation of mitigation**.

Threshold BIO-3. ***Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

MM BIO-4 requires compensation for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of CDFW jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of RWQCB waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the ACOE, RWQCB and CDFW. As such, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-5. ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

MM-BIO-5 requires installation of a protection zone fence around oak woodlands not being removed as part of the project. Therefore, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-7. *Would the project result in the removal of any heritage oak trees, as defined in Unified Development Code §17.17.090, removal of more than five (5) oak trees from a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees?*

MM-BIO-5 requires installation of a protection zone fence around oak woodlands not being removed as part of the project. Therefore, potentially significant impacts to oak trees would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-8. *Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?*

MM-BIO-4 requires compensation for the loss of 0.20 acres (462 linear feet) of non-wetland waters of the United States, 0.03 acres (181 linear feet) of wetland waters of the United States, 0.49 acres (893 linear feet) of CDFW jurisdictional riparian habitat, and 0.23 acres (666 linear feet) of RWQCB waters of the state at a 2:1 ratio (compensation area: impact area), or as required by the ACOE, RWQCB and CDFW. As such, potentially significant impacts would be reduced to **less than significant with mitigation incorporated**.

Threshold BIO-9. *Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?*

Special-Status Wildlife

MM-BIO-1 requires that pre-construction surveys for the California glossy snake, coastal whiptail, coast horned lizard, western spadefoot, two-striped gartersnake, San Diego black-tailed jackrabbit, roosting special-status bats, and San Diego desert woodrat, as well as any other potentially occurring special-status species be conducted prior to commencement of any ground or vegetation disturbance. As such, potentially significant impacts to special-status wildlife species would be reduced to a **less-than-significant level with implementation of mitigation**.

Nesting Birds

MM-BIO-2 requires limiting site preparation, construction, or fuel modification activities within the breeding/nesting season for native bird species (typically February 1 through August 31). Further, it requires that if activities must occur within the breeding/nesting season, 7 days prior to ground- or vegetation-disturbing activities, two field surveys shall be conducted to confirm the presence/absence of breeding/nesting birds. As such, potentially significant impacts to nesting birds would be reduced to **less-than-significant levels with mitigation incorporated**.

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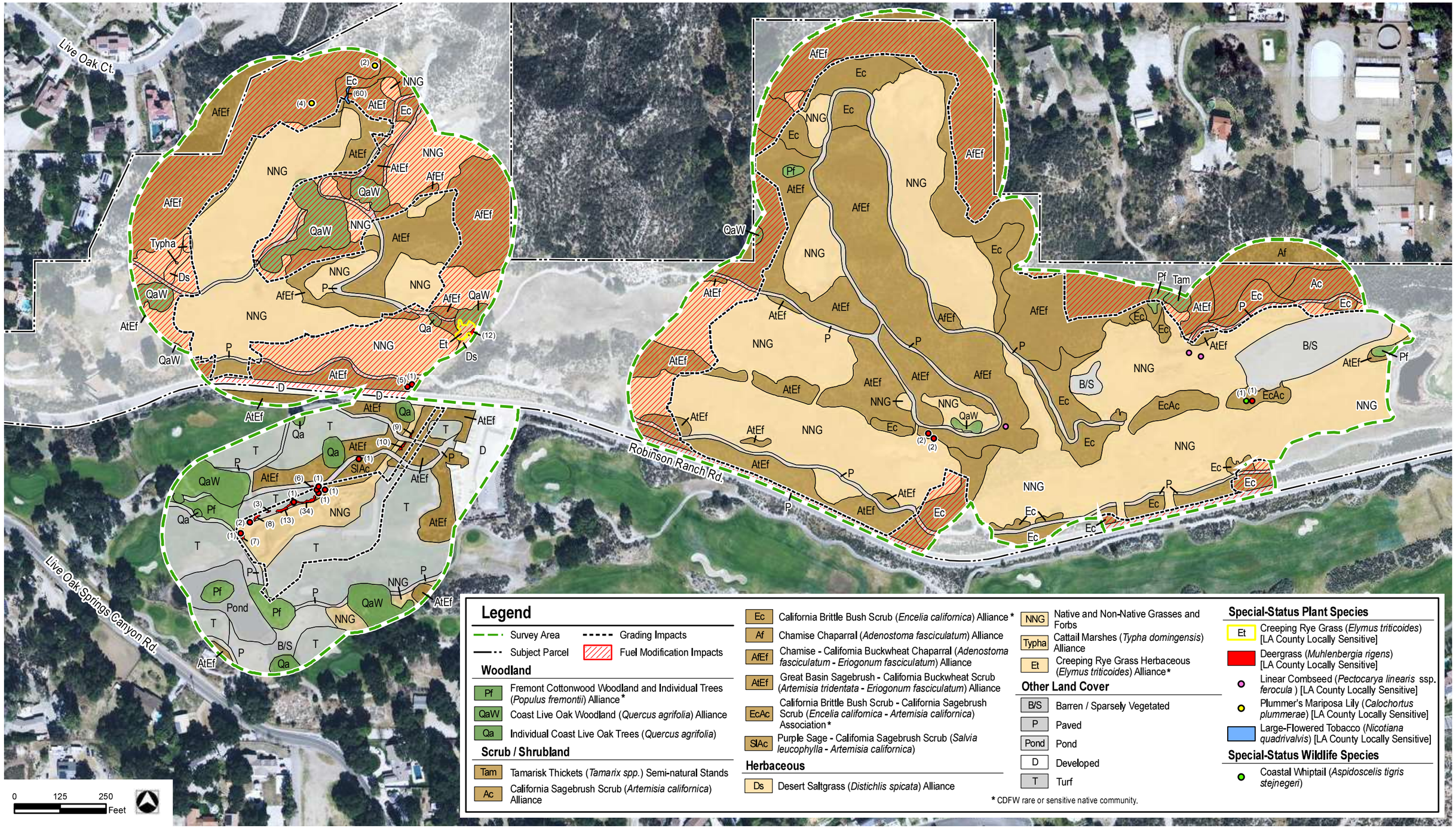

SOURCE: Envicom 2020

FIGURE 4.3-1

Biological Resources Map

Sand Canyon Resort Project

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4.4 Cultural and Tribal Cultural Resources

This section discusses potential impacts to historical resources, archaeological resources, human remains, and tribal cultural resources (TCRs) resulting from implementation of the proposed Sand Canyon Resort Project (project).

Comments received in response to the Notice of Preparation (Appendix A) included a letter from the Native American Heritage Commission (NAHC) describing tribal consultation requirements and listing recommendations for cultural resources assessments. Recommendations included conducting a search of the California Historical Research Information System (CHRIS), conducting a field survey (if determined necessary based on the CHRIS records search results), preparing a professional report detailing the findings of the field survey and records search, conducting a Sacred Lands File (SLF) search and Native American tribal outreach, and including provisions for the inadvertent discovery of cultural resources during construction and the protection of such resources. As demonstrated in this section, a cultural resources assessment has been conducted for the proposed project, and this assessment adheres to these recommendations.

The analysis is based on a review of existing cultural resources; technical data; and applicable laws, regulations, and guidelines and is derived from the Cultural Resources Technical Study prepared by Dudek in May 2019 (Appendix E of this Environmental Impact Report [EIR]).

As discussed in Chapter 3, Project Description, of this EIR, the proposed 77-acre project site collectively consists of the proposed resort site, which is approximately 75 acres in size and is located at 27734 Sand Canyon Road at the northeast corner of Sand Canyon Road and Robinson Ranch Roach; additionally, a 1.9-acre detention basin site located south of the proposed resort site. The project applicant is proposing to replace existing open space that was formerly the Mountain Course of the Robinson Ranch Golf Course, with a new resort and spa consisting of a hotel with a three-story building; a Spa Garden Inn within three three-story buildings; villas associated with the hotel (23 buildings); restaurants; a spa/gym/salon; conference/ball room space; a grand ballroom; junior ballroom; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, and a nine-hole “chip and putt” golf course; and parking for a total of 400 new parking stalls. Additionally, an existing detention basin would be expanded from 1 acre to approximately 1.9 acres in size. In total, the proposed resort would result in the development of approximately 30 acres of the 77-acre proposed project site. The resort would include a total of 392 hotel rooms and would provide 49,500 square feet of ballrooms, meeting rooms, and restaurants to host various events. The resort would be divided over four lots along approximately 4,250 linear feet of Robinson Ranch Road. The resort would be located entirely on the north side of Robinson Ranch Road.

4.4.1 Environmental Setting

The approximately 77-acre proposed project site is located at 27734 Sand Canyon Road, City of Santa Clarita (City), Los Angeles County, California, Assessor’s Parcel Number 2840-022-025, in Township 4 North, Range 15 West, Sections 23 and 24, as shown on the U.S. Geological Survey 7.5-minute Mint Canyon Quadrangle topographic map (Figure 3-1, Project Location). Specifically, the project is located at the northeast corner of Sand Canyon Road and Robinson Road and south of State Route 14 in the Sand Canyon area of the City.

The approximately 77-acre proposed project site is currently vacant and consists of an abandoned nine-hole golf course. The only building that currently exists on the proposed project site is a small restroom structure, which is no longer in service. The proposed project site is situated in and associated with the larger 200-acre Sand Canyon

Country Club property (formerly Robinson Ranch Golf Club), which consists of a 27-hole golf course, a driving range, a maintenance building, and clubhouse; however, all of aforementioned features of the larger Sand Canyon Country Club property are outside of the proposed project site boundaries.

Prior to 2016, the proposed project site was utilized as a nine-hole golf course, known as the Mountain Course, for the overall Robinson Ranch Golf Club. However, in July 2016, the Sand Fire burned the proposed project site. Following the wildfire, in 2016, flooding from record rainfall covered the proposed project site. Since 2016, the proposed project site has remained undeveloped and abandoned.

This section documents the results of a CHRIS search conducted at the South Central Coastal Information Center (SCCIC), a search of the NAHC SLF and tribal coordination, and tribal consultation completed by the lead agency, the City, pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18.

4.4.1.1 Background Research

California Historical Research Information System Records Search

On August 2, 2018, Dudek completed a CHRIS records search at the SCCIC for the proposed project site and surrounding 0.5 miles. Dudek completed an additional records search on April 3, 2019, to include the addition of the detention basin located in the southwestern portion of the proposed project site. This search included mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources included historical maps of the proposed project site, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Property Data File, the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. The confidential records search results are also provided in Appendix A of the Cultural Resources Technical Report, included in Appendix E of this EIR.

Previously Conducted Cultural Resource Studies

The SCCIC records indicate that 11 previous cultural resources technical investigations have been conducted within 0.5 miles of the proposed project site between 1979 and 2010. Of these, one previous technical investigation intersects the proposed project site (Table 4.4-1).

Table 4.4-1. Previously Conducted Cultural Resource Studies within 0.5 Miles of the Proposed Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-00467	McIntrye, Michael J. and Greenwood, Roberta S.	1979	Cultural Resource Survey of a Near Sand Canyon, Upper Santa Clara River Valley, Los Angeles County, California	Outside

Table 4.4-1. Previously Conducted Cultural Resource Studies within 0.5 Miles of the Proposed Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-00593	Romani, Gwendolyn R.	1979	Assessment of the Impact Upon Cultural Resources by the Proposed Development of 88.05 +/- Acres of Tentative Tract No. 37038, Combined With 12.27 Adjacent Acres to Be Known As Tentative Parcel Map No. 7389, Canyon Country, Los Angeles County, California	Outside
LA-01166	Wlodarski, Robert J.	1982	An Evaluation of the Potential Impacts to Cultural Resources Located on Portions of Tentative Tract 42254 Sand Canyon Road, Canyon Country, Los Angeles County, California	Outside
LA-01264	McIntyre, Michael J.	1983	Archaeological Reconnaissance Report of Oak Flats Campground Renovation ARR	Outside
LA-03659	Romani, Gwendolyn R.	1980	Parcel Map 12878	Outside
LA-03837	White, Robert S.	1997	An Archaeological Assessment of the Live Oak Springs Canyon Drain and Debris Basin Project, City of Santa Clarita, Los Angeles County	Intersecting
LA-04608	Tartaglia, Louis J.	1989	Cultural Resources Archaeological Survey Oak Spring Canyon, California Tentative Tract Map No. 47803	Outside
LA-05136	Wlodarski, Robert J.	2000	A Phase I Archaeological Study for the Robinson Ranch Trail, City of Santa Clarita/USDA Forest Service, Angeles National Forest County of Los Angeles, California	Outside
LA-06061	Lanz, Madeline	2001	Architectural Survey and Evaluation of the Historic Union Oil Terminal (berths 148-151) of the Port of Los Angeles	Outside
LA-10560	Hunt, Kevin and Richard D. Schultz	2005	Final Confidential: Cultural Resources Study for the Upper Santa Clara River Watershed Arundo and Tamarisk Removal Program Long-Term Implementation Plan, Program Environmental Impact Report/Environmental Assessment, Los Angeles County, California	Outside
LA-10642	Tang, Bai "Tom"	2010	Preliminary Historical/Archaeological Resources Study, Antelope Valley line Positive Train Control (PTC) Project Southern California Regional Rail Authority, Lancaster to Glendale, Los Angeles County, California	Outside

Previously Recorded Cultural Resources

No cultural resources have been previously recorded within the proposed project site. However, the SCCIC records indicate that two resources have been previously recorded within 0.5 miles of the proposed project site. One resource consists of the remains of a historic residence and the second resource is the Angeles National Forest (Table 4.4-2).

Table 4.4-2. Previously Recorded Cultural Resources within 0.5 Miles of the Proposed Project Site

Primary Number P-19-	Trinomial CA-LAN-	Period	Description	Recorder/Year	NRHP/CRHR Status
004605	004605H	Historic	Structural Remains	R.J. Lichtenstein, M. Armstrong, Applied Earthworks (2011)	Not evaluated
186535	—	Historic	Angeles National Forest	J. Arbuckle (1979)	Listed on CRHR

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

Historic Aerial Review

To understand development of the proposed project site and surrounding properties, historic maps and aerial photographs accessible online from Nationwide Environmental Title Research's historic aerial viewer, as well as the University of California, Santa Barbara, Map and Imagery Library were consulted. Topographic maps are available for the following years: 1900, 1905, 1910, 1914, 1924, 1930, 1932, 1945, 1946, 1955, 1961, 1964, 1975, 1988, 1994, 1999, 2012, and 2015 (NETR 2018a). Aerial images are available for the following years: 1928, 1940, 1947, 1952, 1954, 1959, 1974, 1978, 1980, 1992, 1994, 2002, 2003, 2005, 2009, 2010, 2012, and 2014 (Aeroflex Corporation 1959; FAS 1928; FAS 1940; NETR 2018b; Tubis 1947; Pacific Air Industries 1952; USGS 1994, 2003; WAC Corp 1980).

The first U.S. Geological Survey topographic map showing the proposed project site dates to 1900 and indicates that, during this time, the proposed project site was largely undeveloped except for two small structures of unknown use. There were several roads laid out in the general area, and the Pacific Railroad is depicted north of the proposed project site. In 1932, several new streets, including Oak Springs Canyon Road, are represented in the general area, and there were small developments taking place to the south and to the west of the proposed project site. At this time, there was still no development within the proposed project site. Topographic maps from the remainder of the twentieth century indicate a general increase in development, particularly along Sand Canyon Road to the west and directly south of the proposed project site. Robinson Ranch Road is illustrated for the first time on the topographic map in 2012.

The earliest available historic aerial of the proposed project site dates to 1927 and shows the proposed project site in its natural state characterized by a series of hills. Oak Springs Canyon Road and San Canyon Road are also visible on this aerial. Though there is no development within the proposed project site, it appears that certain areas at the base of the hills had been graded. In general, the nearby areas of the proposed project site are devoid of development at this time. The aerial from 1940 does not show any significant changes to the proposed project site or vicinity. The historic aerials from 1947 and 1952 appear to show more grading activity to the southwest of the proposed project site along Live Oak Springs Road; however, there does not appear to be any significant development. Moreover, there are sparse residential structures throughout the area. Aerials from 1954 and 1959 do not show significant changes within the proposed project site or general vicinity. The historic aerial from 1974 indicated that at some point during the 1960s, large-scale residential development began to the south and north of the proposed project site. Furthermore, the aerial shows several dirt roads throughout the proposed project site; however, no developments are visible. The historic aerial from 1978 and 1980 does not show any significant changes within the proposed project site. Historic aerials from 1992 and 1994 indicate that residential development in the area was expanding steadily, particularly north of State Route 14 and along Sand

Canyon Road, though there was still a large amount of undeveloped open space. The proposed project site itself appeared to be undeveloped during these times. Historic aerials indicate that the existing golf course, formally known as Robinson Ranch Golf Course, was built between 1994 and 2002. Throughout the remainder of the early 2000s up until present day, there has not been any significant changes to the proposed project site.

Native American Coordination

Sacred Lands File Search and Tribal Outreach

On August 2, 2018, Dudek requested a search of the SLF from the California NAHC. The NAHC responded via email on August 6, 2018, with an attached letter stating that the results of the SLF search failed to indicate the presence of Native American cultural resources on the proposed project site. The NAHC also provided a list of 16 Native American groups and individuals who may have knowledge of cultural resources in the proposed project site. Letters were sent to 15 of these representatives on August 29, 2018; one individual, Linda Candelaria, did not have a current address on file with the NAHC and was therefore not notified.

As a result of the tribal outreach letters mailed out on August 29, 2018, four responses were received. One response was from a representative of the San Manuel Band of Mission Indians, stating that the proposed project is located outside of Serrano ancestral territory and, as such, will not be requesting consulting party status. The second response was from a representative of the Gabrieleño Band of Mission Indians-Kizh Nation, requesting consulting party status if the proposed project resulted in any ground-disturbing activities. The third response was from a representative of the Barbareño/Ventureño Band of Mission Indians, requesting to be notified when the proposed project commenced and in the event anything is found. The fourth response with an attached Tataviam tribal historical territory map was received from a representative of the Fernandeño Tataviam Band of Mission Indians stating that the proposed project site is located within traditional Tataviam ancestral territory and that their records indicate the presence of Tataviam TCRs within 2 miles of the proposed project site. Moreover, the Fernandeño Tataviam Band of Mission Indians has location information for isolated cultural materials that were recovered by local residents and developers through the years. As such, the tribe considers the project vicinity to be sensitive for Native American cultural resources, requested participation in consultation before any ground-disturbing activities are approved, and recommends that Dudek reach out to the Santa Clarita Historical Society to inquire for more information for the proposed project.

An additional search of the SLF was requested to include the added detention basin on April 2, 2019. On April 24, 2019, the NAHC responded via email with an attached letter stating that the results of the SLF search failed to indicate the presence of Native American cultural resources for the proposed project site. The NAHC also provided a list of six Native American groups and individuals for the April 2019 request. The six individuals listed by the NAHC included five individuals who were originally contacted, including Rudy Ortega Jr, Andrew Salas, Anthony Morales, Sandonne Goad, Linda Candelaria, and Charles Alvarez, as well as one individual who was not originally contacted, Robert Dorame of the Gabrielino Tongva Indians of California Tribal Council. On May 13, 2019, letters were sent to all 15 individuals that were originally contacted as well as Robert Dorame, who was listed on the NAHC consultation list for the April 24, 2019, SLF results, and Linda Candelaria, who did have an address listed on the second consultation list sent by the NAHC.

As a result of the second round of tribal outreach, four responses were received. One response was from a representative of the San Manuel Band of Mission Indians, who stated that the proposed project site was located outside of Serrano Ancestral and that the San Manuel Band of Mission Indians would not be requested consulting party status with the lead agency. The second response was from a representative of the Santa Ynez Band of

Mission Indians who stated that they would defer to local tribes. The third response was from a presentative of the Barbareño/Ventureño Band of Mission Indians who requesting to be notified in the event anything is found during construction associated with the proposed project. The fourth response from a representative of the Gabrieleño Band of Mission Indians – Kizh Nation who requested to consult under AB 52 with the lead agency.

Table 4.4-3 summarizes the results of the tribal outreach efforts conducted for the proposed project. Documentation of coordination with Native American groups and individuals is also provided in confidential Appendix B of Appendix E of this Draft EIR. This outreach was conducted for informational purposes only and does not constitute formal government-to-government consultation as specified by AB 52 or SB 18.

Table 4.4-3. Tribal Outreach Results for Native American Heritage Commission-Listed Contacts

Native American Tribal Representatives	First Round: Method of Notification/Date	Response Received	Second Round: Method of Notification/ Date	Response Received
Charles Alvarez, Councilman Gabrieleno Tongva Tribe	Certified Mail; August 29, 2018	Letter unclaimed and unable to be forwarded; returned to Dudek on September 20, 2018	Certified Mail; May 13, 2019	None to date
Eleanor Arrellanes Barbareño/Ventureño Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Raudel Jo Banuelos Jr., Barbareño/Ventureño Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Linda Candelaria, Chairperson Gabrielino-Tongva Tribe	No current address on file with NAHC; not notified.	NA	Certified Mail; May 13, 2019	None to date
Lee Clauss, Director of Cultural Resources San Manuel Band of Mission Indians	Certified Mail; August 29, 2018	Email response received September 5, 2018	Certified Mail; May 13, 2019	Email response received on May 15, 2019.
Delia Dominguez, Chairperson Kitanemuk and Yowlumne Tejon Indians	Certified Mail; August 29, 2018	None: Letter unclaimed and unable to be forwarded; returned to Dudek on September 21, 2018	Certified Mail; May 13, 2019	None to date
Sandonne Goad, Chairperson Gabrielino-Tongva Nation	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Kenneth Kahn, Chairperson Santa Ynez Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	Phone conversation on May 21, 2019

Table 4.4-3. Tribal Outreach Results for Native American Heritage Commission-Listed Contacts

Native American Tribal Representatives	First Round: Method of Notification/Date	Response Received	Second Round: Method of Notification/ Date	Response Received
Anthony Morales, Chairperson Gabrieleño/Tongva San Gabriel Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Joseph Ontiveros, Cultural Resource Department Soboba Band of Luiseno Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Rudy Ortega Jr., President Fernandeño Tataviam Band of Mission Indians	Certified Mail; August 29, 2018	Email response with attached Tataviam area map received September 21, 2018	Certified Mail; May 13, 2019	None to date
Robert Robinson, Chairperson Kern Valley Indian Council	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Andrew Salas, Chairperson Gabrieleño Band of Mission Indians – Kizh Nation	Certified Mail; August 29, 2018	Email response received September 10, 2018	Certified Mail; May 13, 2019	Email response with attached letter dated May 29, 2019 requesting consulting party status under AB 52. Response was forwarded to the City.
Patrick Tumamait, Barbareño/Ventureño Band of Mission Indians	Certified Mail; August 29, 2018	Left a voicemail on September 5, 2018	Certified Mail; May 13, 2019	Phone conversation on May 21, 2019
Julie Lynn Tumamait-Stennslie, Chair Barbareño/Ventureño Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Lynn Valbuena, Chairwoman San Manual Band of Mission Indians	Certified Mail; August 29, 2018	None to date	Certified Mail; May 13, 2019	None to date
Robert Dorame, Chairman Gabrieleño Band of Mission Indians	Not Notified	NA	Certified Mail; May 13, 2019	None to date

Notes: NA = not applicable; AB = Assembly Bill; City = City of Santa Clarita.

Assembly Bill 52

A project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment (PRC Section 21084.2). Under AB 52, a TCR must have tangible, geographically defined properties that can be impacted by project implementation. The proposed project is subject to compliance with AB 52.

1. The City sent notification of the proposed project to all California Native American tribal representatives that have requested project notifications from the City pursuant to AB 52 and that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area on September 12, 2018. These notification letters included a project map and description inquiring if the tribe would like to consult to discuss the proposed project and the potential to impact any TCRs. AB 52 allows tribes 30 days after receiving notification to request consultation. If a response is not received within the allotted 30 days, it is assumed that consultation is declined. To date, government-to-government consultation initiated by the City has not resulted in the identification of a TCR within or near the proposed project site. To date, one response was received as a result of the City's AB 52 consultation notification. Table 4.4-4 summarizes the results of the AB 52 process for the proposed project. The confidential AB 52 consultation results are on file with the City.

Table 4.4-4. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Sadonne Goad, Chairperson Gabrielino/Tongva Nation	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Linda Candelaria, Chairperson Gabrielino-Tongva Tribe	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Andrew Salas, Chairperson Gabrieleño Band of Mission Indians – Kizh Nation	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Charles Alvarez, Councilmember Gabrielino-Tongva Tribe	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Jairo F. Avila, Tribal Historic and Cultural Preservation Officer Fernandeno Tataviam Band of Mission Indians (FTBMI; Tribe)	Notification letter submitted as an attachment via email; September 12, 2018	Response received via email on October 12, 2018. In his email, Mr. Avila requested Tribal consulting party status on behalf of the FTBMI. The confidential details of Mr.	On-going

Table 4.4-4. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date
		Avila's response are included in Appendix E of this EIR.	

Notes: EIR = Environmental Impact Report.

Senate Bill 18

According to SB 18, the City has a responsibility to initiate consultation with tribes/groups listed on the California NAHC's official SB 18 contact list for amendment of a General Plan. SB 18 requires the City to send a letter to each contact on the NAHC's SB 18 list, extending an invitation for consultation. Tribes will have 90 days from receipt of the letter to request consultation. The City must also send a notice to all contacts 45 days prior to adopting the amended General Plan, as well as a third notice 10 days prior to any public hearing regarding the General Plan amendment.

2. The City sent notification of the proposed project to all California Native American tribal representatives that have requested project notifications pursuant to SB 18 and that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area on September 12, 2018. These notification letters included a project map and description inquiring if the tribe would like to consult on the proposed project. To date, government-to-government consultation initiated by the City has not resulted in the identification of a TCR within or near the proposed project site. Table 4.4-5 summarizes the results of the SB 18 process for the proposed project. The confidential SB 18 consultation results are on file with the City.

Table 4.4-5. Senate Bill 18 Native American Tribal Outreach Results

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Sadonne Goad, Chairperson Gabrielino/Tongva Nation	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Linda Candelaria, Chairperson Gabrielino-Tongva Tribe	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Andrew Salas, Chairperson Gabrieleño Band of Mission Indians – Kizh Nation	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.
Charles Alvarez, Councilmember Gabrielino-Tongva Tribe	Certified mail; September 12, 2018	No Response	As no response was received, consultation was concluded.

4.4.1.2 Cultural Resource Survey

Field Methods

Dudek archaeologists, Linda Kry and Erica Nicolay, conducted an initial reconnaissance-level survey of the proposed project site on September 20, 2018. An additional survey of the added detention basin was conducted on May 2, 2019. The survey was conducted in 10-meter interval transects, and all accessible areas were inspected. Inaccessible areas include areas comprised of extremely dense vegetation and steep terrain. The goal of survey was to identify and record any cultural resources within the proposed project site. Surveyors examined the ground surface for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), historical artifacts (e.g., metal, glass, ceramics), sediment discolorations that might indicate the presence of a cultural midden, depressions, and other features that might indicate the former presence of structures or buildings (e.g., post holes, foundations).

Standard methods require, should cultural materials be encountered, that all data necessary to complete the appropriate State of California Department of Parks and Recreation 523 series forms be gathered. Additionally, per California Office of Historic Preservation guidelines, any cultural material more than 45 years old is to be recorded as an archaeological site, built environment resource, or isolate, as appropriate. As no cultural resources were identified, no such documentation was required. All fieldwork was documented using field notes and iPad technology with close-scale field maps, and aerial photographs. Location-specific photographs were taken using an Apple Generation 7 iPhone equipped with 12-megapixel camera and iPad. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

2018 Survey Results

The proposed project site consists of an abandoned nine-hole golf course, concrete-paved golf cart/walking paths, a small restroom structure at the southwest corner that is no longer in use, and areas of undeveloped hilly terrain, primarily along the northern boundary of the proposed project site. Ground visibility throughout the proposed project site is low (approximately 0%–25%) due to the presence of dense vegetation comprised of grasses, brush, cholla, and ornamental trees. Aspects of the abandoned golf course such as sand traps, irrigation lines, and concrete pathways are present throughout the proposed project site. In addition, the abandoned golf course possesses a lake feature, located on the east side of the proposed project site (Figure 4 in Appendix E). The easternmost portion of the proposed project site appears to be recently graded (Figure 5 in Appendix E). There is a large amount of refuse material within the proposed project site apparently from previous demolition activities. In the center of the proposed project site, there are several push-piles of spoils dirt, concrete, and plant debris (Figure 6 in Appendix E). Aspects of the proposed project site that were inaccessible and, therefore, not surveyed included the steep hills and valleys along the northern edge of the proposed project site (Figure 7 in Appendix E). These areas were visually inspected, and it was determined that because of the low ground visibility and the steep terrain, intensive pedestrian survey would not be conducted. Soils in the proposed project site were variable and ranged from a medium grayish brown clayey loam to reddish-yellow brown loamy sand. There were gravel inclusions throughout the soils present in the site (Figure 8 in Appendix E). No archaeological resources were identified within the proposed project site as a result of the pedestrian survey.

Built Environment

The survey identified only one building located at the southwest corner of the proposed project site. This building was constructed as part of the Robinson Ranch Golf Course between 1994 and 2002 and is a rectangular, one-story restroom. This building is not historical in age under the California Environmental Quality Act (CEQA) Guidelines and was therefore not evaluated for the NRHP or CRHR.

2019 Survey Results

The proposed location of the detention basin, in the southwest portion of the proposed project site, is currently dominated by various grasses and weeds and ground visibility is moderate to poor (less than 60%) (Figure 10 in Appendix E). A southwest-trending drainage leading to the area where the proposed detention basin location is heavily vegetated with tall grasses and trees on both banks (Figure 11 in Appendix E). Large boulders have been placed within the drainage. There are several areas of standing water within the detention basin area, and irrigation lines have been placed throughout the area, indicating past landscaping activities (Figure 12 in Appendix E). The proposed detention basin location is bordered on the south by grasses; on the west by a pathway, a bridge, and landscaping; on the north by an existing golf tee and Robinson Ranch Road; and on the east by landscaping and grass. No cultural resources were observed during the survey of the proposed detention basin location.

In summary, no cultural resources were identified within the proposed project site as a result of the CHRIS records search, Native American outreach, or reconnaissance-level survey.

4.4.2 Regulatory Framework

State

California Register of Historical Resources

In California, the term "historical resource" includes

> any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. (California PRC Section 5020.1[j])

In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and TCRs:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource"; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5[b][2]):

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria (PRC Section 21083.2[g]):

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

California State Assembly Bill 52

AB 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American tribe and that is either of the following:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project site, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or EIR.

Section 1 (a)(9) of AB 52 establishes that "a substantial adverse change to a TCR has a significant effect on the environment." Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a TCR or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to TCRs, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program, where applicable, shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

Senate Bill 18

The Local and Tribal Intergovernmental Consultation process, commonly known as SB 18, was signed into law September of 2004 and took effect March 1, 2005. SB 18 refers to PRC Section 5097.9 and 5097.995, which defines cultural places as:

- Native American sanctified cemetery place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9).
- Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.993).

SB 18 established responsibilities for local governments to contact, provide notice to, refer plans to, and consult with California Native American tribes that have been identified by the NAHC and if that tribe requests consultation after local government outreach as stipulated in Government Code Section 65352.3. The purpose of this consultation process is to protect the identity of the cultural place and to develop appropriate and dignified treatment of the cultural place in any subsequent project. The consultation is required whenever a General Plan, Specific Plan, or open space designation is proposed for adoption or to be amended. Once local governments have sent notification, tribes are responsible for requesting consultation. Pursuant to Government Code Section 65352.3(a)(2), each tribe has 90 days from the date on which they receive notification to respond and request consultation.

In addition to the requirements stipulated previously, SB 18 amended Government Code Section 65560 to "allow the protection of cultural places in open space element of the general plan" and amended Civil Code Section 815.3 to add "California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places."

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has examined the remains (Health and Safety Code Section 7050.5[b]). PRC

Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code Section 7050.5[c]). The NAHC will notify the "most likely descendant." With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and/or items associated with Native Americans.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the project would:

1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
3. Disturb any human remains, including those interred outside of formal cemeteries.
4. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.4.4 Impact Analysis

Threshold CUL-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

As part of the cultural resources study prepared for the proposed project (Appendix E), a records search of the CHRIS at the SCCIC was conducted on August 2, 2018, and April 3, 2019. The CHRIS search included a review mapped prehistoric, historical, and built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. Additional consulted sources include historical maps of the proposed project site, the NRHP, the CRHR, the California Historic Property Data File, the lists of California State Historical Landmarks, California Points of Historical Interest, and the Archaeological Determinations of Eligibility. In addition, a pedestrian survey of the proposed project site was conducted on September 20, 2018, and May 2, 2019. No historical resources were identified within the proposed project site or immediate vicinity as a result of the CHRIS records search or intensive pedestrian survey. Moreover, there are no buildings or structures

within the proposed project site that are considered to be historical resources for the purposes of CEQA. As such, impacts to historical resources are considered **less than significant**, and no mitigation is required.

Threshold CUL-2. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*

No archaeological resources were identified within the proposed project site as a result of the CHRIS records search or intensive pedestrian survey. The proposed project site has been extensively changed over time due to the construction of the Sand Canyon Country Clubs and the 2016 Sand Fire. Thus, archaeological resources that may have been located within the proposed project site have likely been disturbed or destroyed by the grading that has occurred on site or by the 2016 fire; however, this does not preclude the potential for archaeological resources to be identified during construction activities associated with the proposed project. If such unanticipated discoveries were encountered, impacts to encountered resources could be **potentially significant**.

Threshold CUL-3. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No prehistoric or historic burials were identified within the proposed project site as a result of the CHRIS records search, NAHC SLF search and tribal outreach, or pedestrian survey. Additionally, the proposed project site has been subject to mass grading activities and natural disasters, and as such, the possibility of encountering human remains within the proposed project site is low. However, the possibility of encountering human remains within the proposed project site exists. The discovery of human remains would require handling in accordance with PRC 5097.98, which states that in the event that human remains are discovered during construction, construction activity shall be halted, and the area shall be protected until consultation and treatment can occur as prescribed by law. In the unexpected event that human remains are unearthed during construction activities, impacts would be **potentially significant**.

Threshold TCR-1. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

CHRIS records searches were conducted at the SCCIC on August 2, 2018, and April 3, 2019, for the proposed project site and a 0.5-mile radius of proposed project site. No previously recorded archaeological resources of Native American origin or TCRs listed in the CRHR or a local register were identified within the proposed project site. Further, no TCRs have been identified by California Native American tribes as part of the City's AB 52 and SB 18 notification and consultation process. Impacts are considered **less than significant**. No mitigation is required.

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

The NAHC provided the City with a list of five Native American tribes and/or individuals who may have knowledge of cultural resources in the proposed project site. On September 12, 2018, the City mailed certified notification letters to all five contacts provided by the NAHC as part of the City's AB 52 and SB 18 notification and consultation process. Additionally, one AB 52 notification letter was sent to Jairo F. Avila, Tribal Historic and Cultural Preservation Officer of the Fernandeno Tataviam Band of Mission Indians, as an attachment via email on September 12, 2018. Mr. Avila responded via email on October 12, 2018, requesting consulting party status and stated that the proposed project site is culturally sensitive and may have potential for discoveries of Native American cultural resources. Although the letter did not identify any TCRs or other known cultural resources that could be directly impacted by the proposed project, Mr. Avila requested to review the Cultural Resources Technical Study prepared by Dudek (Appendix E of this EIR) before providing further comments and recommendations.

The City has determined that no TCRs are present in the proposed project site. However, the AB 52 consultation between the City and Mr. Avila suggests that there is still some potential for unknown subsurface TCRs to be impacted by the proposed project. This would result in a **potentially significant impact**.

4.4.5 Mitigation Measures

The following mitigation measures (MMs) would reduce potentially significant impacts to archaeological resources, human remains, and TCRs to a less-than-significant level.

MM-CUL-1 Inadvertent Discovery of Archaeological Resources

In the event that archaeological resources are inadvertently unearthed during excavation and grading activities for the proposed project, the contractor shall cease all earth-disturbing activities within a 100-foot radius of the area of discovery. The project cultural resources professionals, including the appropriate tribe(s), shall evaluate the significance of the find and determine the appropriate course of action. Pursuant to California Public Resources Code Section 21083.2(b), avoidance is the preferred method of preservation for archaeological resources. If avoidance of the resources is not feasible, salvage operation requirements pursuant to Section 15064.5 of the California Environmental Quality Act (CEQA) Guidelines shall be followed and shall take in to account tribal preferences and sensitivity concerns. If potentially significant features or sites are discovered, an Evaluation Plan shall be developed by the project archaeologist and the Native American representative and shall contain, at a minimum, a research design and field methodology designed to address the criterion outlined in the California Register of Historical Resources (CRHR). If a site is determined to be significant, data recovery excavations may be necessary unless the resource is avoided and preserved/protected in place. Evaluation and treatment shall be

supervised by an individual or individuals that meet the Secretary of the Interior's Professional Qualification Standards.

After the find has been appropriately avoided or mitigated and cleared by the City of Santa Clarita, the project cultural resources professional and, if applicable, the Native American monitor, work in the area may resume.

MM-CUL-2 Inadvertent Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found within the project site, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, they shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant of the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

MM-TCR-1 Inadvertent Discovery of Tribal Cultural Resources

While no tribal cultural resources (TCRs) have been identified that may be affected by the proposed project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources. Should a potential TCR be encountered, construction activities shall be temporarily halted within 50 feet of the discovery and the City of Santa Clarita (City) shall be notified. The City will notify Native American tribes that have been identified by the Native American Heritage Commission (NAHC) to be traditionally and culturally affiliated with the geographic area of the project. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure (MM) CUL-1. If the City determines that the potential resource is a TCR (as defined by PRC, Section 21074), tribes consulting under Assembly Bill 52 and Senate Bill 18 would be provided a reasonable period of time, typically 5 days from the date of a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. A qualified archaeologist shall implement a plan for the treatment and disposition of any discovered TCRs based on the nature of the resource and considering the recommendations of the tribe(s). Implementation of proposed recommendations will be made based on the determination of the City that the approach is reasonable and feasible. All activities would be conducted in accordance with regulatory requirements.

4.4.6 Level of Significance After Mitigation

Threshold CUL-2. ***Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?***

With implementation of MM-CUL-1, which requires that all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find, potentially significant impacts to archaeological resources would be reduced to **less than significant**.

Threshold CUL-3. ***Would the project disturb any human remains, including those interred outside of formal cemeteries?***

With the implementation of MM-CUL-2, which requires immediate notification of the county coroner and halting construction activities in the vicinity of the find, impacts to human remains would be considered **less than significant**.

Threshold TCR-1. ***Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:***

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

Protocols for the inadvertent discovery of TCRs, as outlined in the letter provided by Mr. Avila, dated October 14, 2019, are included as MM-TCR-1, which will reduce any potentially significant impacts to **less than significant with mitigation**.

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4.5 Energy

This section describes the existing setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project.

4.5.1 Existing Conditions

Electricity

According to the California Energy Commission (CEC) California Energy Demand Updated Forecast 2016–2026, California used approximately 280,536 gigawatt-hours of electricity in 2014 (CEC 2016). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Because of the state's energy efficiency standards and efficiency and conservation programs, California's per-capita energy use has remained stable for more than 30 years, while the national average has steadily increased.

Southern California Edison (SCE) provides electricity to the City of Santa Clarita (City). SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Public Utilities Commission (CPUC), approximately 76 billion kilowatt-hours (kWh) of electricity were used in SCE's service area in 2014. Demand forecasts anticipate that approximately 75 billion kWh of electricity will be used in SCE's service area in 2020 (CPUC 2016).

SCE receives electric power from a variety of sources. According to CPUC's 2016 Biennial Renewables Portfolio Standard (RPS) Program Update, 23.2% of SCE's power came from eligible renewables, such as biomass/waste, geothermal, small hydroelectric, solar, and wind sources during the 2014–2016 compliance period (CPUC 2016). This is an increase from the 19.9% that SCE maintained for the 2011–2013 compliance period (CPUC 2014). SCE maintains a lower percentage of renewable energy procurement when compared with California's two other large investor-owned utilities. The other two large utilities, Pacific Gas and Electric Company and San Diego Gas and Electric Company, procured 28% and 36% of their electric power, respectively, from eligible renewables in the 2014–2016 compliance period (CPUC 2016). SCE also maintains a slightly lower percentage of renewables relative to statewide procurement. The CEC estimates that about 26% of the state's electricity retail sales in 2015 came from renewable energy (CEC 2017). The RPS Program establishes a goal for California to increase the amount of electricity generated from renewable energy resources to 20% by 2010 and to 33% by 2020. Recent legislation revised the current RPS target for California to obtain 50% of total retail electricity sales from renewable sources by 2030, with interim targets of 40% by 2024 and 45% by 2027 (CPUC 2016).

Natural Gas

According to the CEC, the state used approximately 12,571 million therms of natural gas in 2017 (CEC 2019a). By sector, industrial uses utilize 35.9% of the state's natural gas, followed by 35.5% from electric power, 16.9% from residential, 10.1% from commercial, and 1.6% from transportation uses (EIA 2016a). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (CEC 2019a).

The Southern California Gas Company (SoCalGas) provides the City with natural gas service. The SoCalGas service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California

Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in the SoCalGas service territory. As of 2012, approximately 7,357 million therms[1] were used in the SoCalGas service area per year. Around the time of project building in 2020, natural gas demand is anticipated to be approximately 7,388 million therms per year in the SoCalGas service area (CEC 2014). The total capacity of natural gas available to SoCalGas in 2016 is estimated to be 3.9 billion cubic feet per day. In 2020, the total capacity available is also estimated to be 3.9 billion cubic feet per day[2] (California Gas and Electric Utilities 2016). This amount is approximately equivalent to 3.98 billion thousand British thermal units (kBTU) per day or 39.8 million therms per day. Over the course of a year, the available capacity would therefore be 14.5 billion therms per year, which is well above the existing and future anticipated natural gas demand in the SoCalGas service area.

Petroleum

According to the CEC, the state used approximately 18.6 billion gallons of petroleum in 2017 (CEC 2019b). This equates to a daily use of approximately 51 million gallons of petroleum.

By sector, transportation uses utilize 86.7% of the state's petroleum, followed by 11.6% from industrial, 1.0% from commercial, 0.8% from residential, and 0.02% from electric power uses (EIA 2016b). In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. Production of petroleum in the United States was 9.7 million barrels per day during April 2015, which was the highest output since April 1971 (CEC 2015).

4.5.2 Regulatory Framework

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the act includes other provisions related to energy efficiency:

- Renewable fuel standard (RFS) (Section 202)
- Appliance and lighting efficiency standards (Sections 301–325)
- Building energy efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels to replace petroleum (Section 202, RFS). The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that

[1] One therm is equal to 100,000 BTU or 100 kBTU.
[2] One cubic foot of natural gas has approximately 1,020 BTUs of natural gas or 1.02 kBTUs of natural gas.

transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007 (EISA), the RFS program was expanded in several key ways that laid the foundation for achieving significant reductions of greenhouse gas (GHG) emissions through the use of renewable fuels, for reducing imported petroleum, and for encouraging the development and expansion of our nation's renewable fuels sector. The updated program is referred to as RFS2 and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces (EPA 2015).

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

Federal Vehicle Standards

In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for carbon dioxide (CO_2) emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup

trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, the EPA and NHTSA released a notice of proposed rulemaking called Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). This rule would modify the existing Corporate Average Fuel Economy standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026. SAFE standards are expected to uphold model year 2020 standards through 2026 (NHTSA 2018).

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. The rule includes state-specific CO_2 goals reflecting the CO_2 emission performance rates and guidelines for the development, submittal, and implementation of state plans that establish emission standards or other measures to implement the CO_2 emission performance rates. Initial plan compliance with state emission goals begins in 2022 with full compliance with final goals required in 2030. The goals are established by state in units of pounds of CO_2 per net megawatt-hour or total short tons of CO_2. For California, the goals for 2030 are 828 pounds of CO_2 per net megawatt-hour or 96.8 million short tons of CO_2. CARB anticipates that the state's plan will rely heavily on existing programs such as the Cap-and-Trade Program, RPS, energy efficiency standards, and Mandatory GHG Reporting Regulation (for compliance determinations) (CARB 2015).

Concurrently, the EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil fuel-fired electric utility generating units. Separate standards of performance were set for fossil fuel-fired electric utility steam-generating units and fossil fuel-fired stationary combustion turbines. The standards apply to new units commencing construction after January 8, 2014, or existing units commencing modification or reconstruction after June 18, 2014. The rule applies only to units with a base load rating greater than 250 million BTUs of fossil fuel per hour and serving a generator or generators capable of selling greater than 25 megawatts of electricity to a utility power distribution system. Implementation of the Clean Power Plan has been stayed by the U.S. Supreme Court pending resolution of several lawsuits.

State

Title 24 of the California Code of Regulations

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Energy consumption by new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local

government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in Title 24 guidelines. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficiency technologies and methods. The premise for the standards is that energy-efficient buildings require less electricity, natural gas, and other fuels. The Title 24, Part 6 standards are updated every 3 years. The most recent amendments to Title 24, Part 6, referred to as the 2016 standards, will become effective on January 1, 2017. The previous amendments were referred to as the 2013 standards and are currently effective. The 2013 standards are 21.8% and 16.8% more efficient for electricity and natural gas in nonresidential construction as compared to the 2008 standards. The project will comply with Title 24 Part 6 per state requirements.

Title 24 also includes Part 11, known as the California Green Building Standards (CALGreen). The CALGreen standards took effect in January 2011, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings, as well as schools and hospitals. The mandatory standards require:

- 20% mandatory reduction in indoor water use
- 50% of construction and demolition waste must be diverted from landfills
- Mandatory inspections of energy systems to ensure optimal working efficiency
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards

The project will comply with Title 24 Part 11 per state requirements.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented per the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements through more strict water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements through even more strict water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 30% cement reduction, and cool/solar reflective roofs.

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law Senate Bill 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the CPUC.

The CEC has designated the following regulations:

- Establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds CO_2 per megawatt-hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of GHGs.
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long-term while meeting the state's standards for environmental impact.
- Establish a public process for determining the compliance of proposed investments with the emissions performance standard (Perata, Chapter 598, Statutes of 2006).

Senate Bill 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, Senate Bill (SB) 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see Assembly Bill 1493), the composition of fuels (see Executive Order [EO] S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining California Environmental Quality Act (CEQA) requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative planning strategy.

In September 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the Southern California Association of Governments are an 8% reduction in emissions per capita by 2020 and a 13% reduction by 2035. Achieving these goals through adoption of an SCS will be the responsibility of the metropolitan planning organizations. The Southern California Association of Governments prepared its Final RTP/SCS, which was adopted by the Southern California Association of Government's Regional Council in April 2016. The plan quantified an 8% reduction by 2020 and an 18% reduction by 2035 (SCAG 2016).

California Air Resources Board's Airborne Toxics Control Measures

CARB's Airborne Toxic Control Measures were approved by CARB on April 26, 2007. The list of Mobile and Stationary Source Airborne Toxic Control Measures are codified in the California Code of Regulations. Regulatory measures apply to in-use off-road and on-road regulations, and the California Cap-and-Trade Program.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB will propose new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero-emissions vehicles (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

Heavy-Duty Vehicle Greenhouse Gas Regulation

CARB adopted a regulation in December 2008 (and issued amendments in December 2010) to reduce GHG emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires. The tractors and trailers subject to this regulation must use EPA SmartWay-certified tractors and trailers or retrofit their existing fleet with SmartWay-verified technologies. Trucks serving the project that are not drayage trucks will be regulated under this statute and required to comply with SmartWay standards to reduce GHG emissions. As part of the regulatory package for the Heavy-Duty Vehicle GHG Regulation, CARB also reviewed and implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address emissions from trucks (CARB 2010).

Executive Order B-16-12

Governor Brown issued EO B-16-12 on March 23, 2012. The EO requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It orders CARB, the CEC, the CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate ZEVs, each with infrastructure plans and streamlined permitting.
- The state's manufacturing sector will be expanding ZEV and component manufacturing.
- The private sector's investment in ZEV infrastructure will be growing.
- The state's academic and research institutions will be contributing to ZEV research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's ZEV infrastructure will be able to support up to one million vehicles.
- The costs of ZEVs will be competitive with conventional combustion vehicles.
- ZEVs will be accessible to mainstream consumers.
- There will be widespread use of ZEVs for public transportation and freight transport.
- Transportation sector GHG emissions will be falling as a result of the switch to ZEVs.
- Electric vehicle charging will be integrated into the electricity grid.
- The private sector's role in the supply chain for ZEV component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million ZEVs will be on California roads, and their market share will be expanding.
- Californians will have easy access to ZEV infrastructure.
- The ZEV industry will be a strong and sustainable part of California's economy.
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the EO establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

Renewable Energy Sources

Established in 2002 under SB 1078, and accelerated by SB 107 (2006) and SB 2 (2011), California's RPS obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33% of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal, landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multifuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process. In 2013, SCE produced 21.6% of its electricity from renewable sources. By 2020, SCE is required to produce 33% of its electricity from renewable sources. This represents the off-site renewable sources available to the project through electricity provided by SCE.

On September 10, 2018, SB 100 was signed, which revised RPS goals to a 50% renewable resources target by December 21, 2026, and to a 60% target by December 31, 2030.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed EO B-55-18, to achieve carbon neutrality by moving the State of California to 100% clean energy by 2045. This EO also includes specific measures to reduce GHG emissions via clean transportation, energy-efficient buildings, directing cap-and-trade funds to disadvantaged communities, and better management of state's forest land.

Local

Local Plan

City of Santa Clarita General Plan

The Conservation and Open Space Element of the City of Santa Clarita General Plan has identified the following goals, objectives and policies aimed at greenhouse gas reduction in private development projects in the City (City of Santa Clarita 2011).

Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.

Policy CO 8.1.1: Create and adopt a Climate Action Plan [CAP] within 18 months of the OVOV [One Valley One Vision] adoption date of the City's General Plan Update that meets State requirements and includes the following components:

a. Plans and programs to reduce GHG emissions to State-mandated targets, including enforceable reduction measures;
    i. The CAP may establish goals beyond 2020, which are consistent with the applicable laws and regulations referenced in this paragraph and based on current science;
    ii. The CAP shall include specific and general tools and strategies to reduce the City's current and projected 2020 inventory and to meet the CAP's target for GHG reductions by 2020;
    iii. The CAP shall consider, among other GHG reduction strategies, the feasibility of development fees; incentive and rebate programs; and, voluntary and mandatory reduction strategies in areas of energy efficiency, renewable energy, water conservation and efficiency, solid waste, land use and transportation.
b. Mechanisms to ensure regular review of progress towards the emission reduction targets established by the Climate Action Plan;
c. Procedures for reporting on progress to officials and the public;
d. Procedures for revising the plan as needed to meet GHG emissions reduction targets; and
e. Allocation of funding and staffing for Plan implementation.

Policy CO 8.1.3: Revise codes and ordinances as needed to address energy conservation, including but not limited to the following:

a. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24;
b. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives;
c. Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation;
d. Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.

Policy CO 8.1.4: Provide information and education to the public about energy conservation and local strategies to address climate change.

Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.

Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.

Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.

Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.

Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not be limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.

Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.

Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.

Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.

Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.

Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.

City of Santa Clarita Climate Action Plan

In June 2011, the City Council adopted a new General Plan (formerly referred to as One Valley One Vision), which is intended to guide growth and development within all portions of the Santa Clarita Valley. As noted above, Policy CO 8.1.1 of the City's General Plan states the City shall create and adopt a Climate Action Plan (CAP) within 18 months of the One Valley One Vision adoption date of the City's General Plan Update that meets state requirements. Consistent with this policy, in January 2011, the City began the process of developing a CAP, with the Final CAP published in August 2012 (City of Santa Clarita 2012). The CAP, part of the General Plan, serves as a component of the general plan document for the City to address GHG emissions. Using the goals, objectives, and policies of the General Plan as a starting point, the CAP identifies mitigation measures that can be quantified and translated into significant reductions in the GHG emissions by the year 2020. The development of a CAP begins with a premise that establishing a complete GHG emissions inventory within the City's boundary is the critical foundation for the remainder of the project. The CAP has identified GHG reduction measures that include the building energy sector as a main target.

4.5.3 Thresholds of Significance

The CEQA Guidelines provide no specific thresholds for impacts associated with energy consumption. However, Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts with regard to energy. Based on CEQA Guidelines Appendix G, a project could have a significant impact on energy conservation if the project would:

1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.5.4 Impact Analysis

Threshold ENG-1. ***Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Implementation of the project would increase the demand for electricity and natural gas at the project site and petroleum consumption in the region during construction and operation.

Electricity

Construction Use. Temporary electric power for as-necessary lighting and electronic equipment such as computers may be needed inside temporary construction trailers. However, the electricity used for such activities would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

Operational Use. The operational phase would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics.

The California Emissions Estimator Model (CalEEMod, version 2016.3.2) was used to estimate project emissions from energy uses (see Appendix B). Default electricity generation rates in CalEEMod were used (based on the proposed land use and climate zone) based on compliance with 2016 Title 24. According to these estimations, the project would consume approximately 2,715,160 kWh per year, not accounting for mitigation measures such as Energy Star lighting. This equates to approximately 2,715 megawatt-hours per year. In 2017, SCE supplied 55,411 million kWh of electricity to nonresidential customers (CEC 2020a).

As described above, the electricity demand calculation for the project assumes compliance with Title 24 standards for 2016. The project would be required to meet the California Building Energy Efficiency Standards (24 CCR, Part 6) which improve the energy efficiency of nonresidential buildings. The Title 24, Part 6, standards are updated every 3 years.

Although electricity consumption would increase due to the implementation of the project, the building envelope; heating, ventilation, and air conditioning; lighting; and other systems, such as electric motor equipment, shall be designed to maximize energy performance. The project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains voluntary energy measures that are applicable to project under CALGreen. The project would meet Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Project-consumed electricity is also subject to the cap-and-trade regulation. For these reasons, the electricity consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant**.

Natural Gas

Construction Use. Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption.

Operational Use. Natural gas consumption during operation would be required for various purposes, including, but not limited to, building heating and cooling.

Default natural gas generation rates in CalEEMod for the proposed land use and climate zone were used and adjusted based on compliance with 2016 Title 24 (see Appendix B). According to these estimations, the project would consume approximately 8,462,300 kBTUs per year. In 2018, SoCal Gas supplied 300,869 million kBTU of natural gas to nonresidential customers (CEC 2020b).

As with electricity demand, natural gas demand calculation for the project assumes compliance with Title 24 standards for 2016. Although natural gas consumption would increase due to the implementation of the project, the building envelope; heating, ventilation, and air conditioning; lighting; and other systems shall be designed to maximize energy performance. The project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains voluntary energy measures that are applicable to project under CALGreen. The project would meet Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Project-consumed natural gas is also subject to the

cap-and-trade regulation. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant**.

Petroleum

Construction Use

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities and haul trucks involved in relocating dirt around the project site would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during construction. CalEEMod was used to estimate construction equipment usage; results are included in Appendix B of this Environmental Impact Report. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 30,080 hours, as summarized in Table 4.5-1.

Table 4.5-1. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Demolition	480
Site Preparation	1,400
Grading	3,200
Building Construction	1,500
Paving	8,500
Architectural Coating	15,000
Total	**30,080**

Source: Appendix B.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2018). The estimated diesel fuel use from construction equipment is shown in Table 4.5-2.

Table 4.5-2. Construction Equipment Diesel Demand

Phase	Pieces of Equipment[a]	Equipment CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Demolition	6	17.00	10.21	1,665.07
Site Preparation	7	62.64	10.21	6,134.72
Grading	8	157.08	10.21	15,384.75
Building Construction	9	347.51	10.21	34,036.33
Paving	6	30.04	10.21	2,942.34

Table 4.5-2. Construction Equipment Diesel Demand

Phase	Pieces of Equipment[a]	Equipment CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Architectural Coating	1	5.11	10.21	500.15
			Total	**60,663.36**

Sources:
[a] Appendix B.
[b] The Climate Registry 2018.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor trips was estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled.

Calculations for total worker and vendor fuel consumption are provided in Table 4.5-3 and Table 4.5-4.

Table 4.5-3. Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Demolition	150	0.74	8.78	84.48
Site Preparation	450	2.23	8.78	253.43
Grading	1,000	4.94	8.78	563.17
Building Construction	249,000	1213.17	8.78	138,174.12
Paving	450	2.15	8.78	244.52
Architectural Coating	6,640	31.68	8.78	3,607.96
			Total	**142,927.68**

Sources:
[a] Appendix B.
[b] The Climate Registry 2018.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.5-4. Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg/CO_2/Gallon[b]	Gallons
Demolition	0	0.00	10.21	0.00
Site Preparation	0	0.00	10.21	0.00
Grading	0	0.00	10.21	0.00
Building Construction	97,200	1193.59	10.21	116,903.93
Paving	0	0.00	10.21	0.00
Architectural Coating	0	0.00	10.21	0.00
			Total	**116,903.93**

Sources:
[a] Appendix B.
[b] The Climate Registry 2018.
Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.5-2 through 4.5-4, the project is estimated to consume 325,789 gallons of petroleum during the construction phase. By comparison, approximately 32.2 billion gallons of petroleum would be consumed in California over the course of the project's construction phase based on the California daily petroleum consumption

estimate of approximately 52.9 million gallons per day (CEC 2019b). The project would be required to comply with CARB's Airborne Toxics Control Measures, which restrict heavy-duty diesel vehicle idling time to 5 minutes. Therefore, because petroleum use during construction would be temporary and relatively minimal, and would not be wasteful or inefficient, impacts would be **less than significant**.

Operational Use

The majority of fuel consumption resulting from the project's operational phase would be attributable to workers traveling to and from the project site, and worker vehicles traveling around the project site.

Petroleum fuel consumption associated with motor vehicles and water trucks traveling to and from the Project site during operation is a function of VMT. As shown in Appendix B, the annual VMT attributable to the project is expected to be 2,468,064 VMT per year. Similar to construction worker and vendor trips, fuel consumption for operation was estimated by converting the total CO_2 emissions from each land use type to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The worker vehicles were assumed to be gasoline powered and the water trucks were assumed to be diesel.

Calculations for annual mobile-source fuel consumption are provided in Table 4.5-5. Mobile sources from the project would result in approximately 109,148 gallons of gasoline per year and 7,631 gallons of diesel consumed per year beginning in 2023. By comparison, California as a whole consumes approximately 19.3 billion gallons of petroleum per year (CEC 2019b).

Table 4.5-5. Petroleum Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon	Gallons
Gasoline	958.32	8.78	109,147.75
Diesel	77.91	10.21	7,630.83
		Total	**116,778.58**

Sources:
[a] Appendix B.
[b] The Climate Registry 2018.
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

Over the lifetime of the project, the fuel efficiency of the vehicles being used by the employees is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020, and 18% by 2035 for light-duty passenger vehicles in the planning area for the Southern California Association of Governments. As such, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

In summary, although the project would increase petroleum use during operation as a result of employees commuting to the site and vendor trucks, the use would be a small fraction of the statewide use and, due to efficiency increases, would diminish over time. Given these considerations, petroleum consumption associated with the project would not be considered inefficient or wasteful and would result in a **less-than-significant** impact.

Threshold ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and nonresidential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.

Part 6 of Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. The project would comply with Title 24, Part 6 per state regulations. In accordance with Title 24 Part 6, the project would have energy-efficient appliances, high-efficiency lighting, and solar energy on site. The project would also include on-site electric vehicle charging stations in accordance with CALGreen code.

Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the project under CALGreen. As discussed under Threshold ENG-1, the project would result in an increased demand for electricity, natural gas, and petroleum. Because the project would comply with Title 24, Part 6 and Part 11, no conflict with existing energy standards and regulations would occur. Therefore, impacts would be considered **less than significant**.

4.5.5 Mitigation Measures

Project impacts are less than significant, and no mitigation is required.

4.5.6 Level of Significance After Mitigation

Project impacts are less than significant without mitigation.

4.5.7 References Cited

California Gas and Electric Utilities (Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southwest Gas Corporation, City of Long Beach Gas & Oil Department, and Southern California Edison Company). 2016. *2016 California Gas Report*. Accessed December 2018. https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf.

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4.6 Geology and Soils

This section describes the existing geological setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.6.1 Environmental Setting

This section describes the existing conditions in the project area and also identifies the resources that could be affected by the proposed project.

Regional Geology

The project site is located in the Transverse Range Geomorphic Province of California, which is characterized by east–west trending mountains and faults. Sedimentary basins within the Transverse Range include the Ventura Basin, Soledad Basin, Ridge Basin, and the San Fernando Valley. The Ventura, Soledad, and Ridge sedimentary basins are the result of the interplay of the San Andreas Fault and the Transverse Range fault system. Seismic activity along the San Andreas Fault is in response to differential movement between the Pacific geologic plate (west of the fault) and the North American geologic plate (east of the fault). The project site overlies the western Soledad (sedimentary) Basin, along the northern flanks of the western San Gabriel Mountains. The San Gabriel Fault Zone, located approximately 3 miles southwest of the site, defines the southwestern boundary of the Soledad Basin.

Local Geology

The site topography is dominated by a major northwest-trending bedrock ridge between Sand Canyon and Oak Springs Canyon, which descends towards the Santa Clara River, located approximately 1 mile north of the site. Several minor westerly and easterly trending ridges descend onto the site from the main northwest-trending ridge. The natural slopes on site include gradients of approximately 4:1 (horizontal to vertical) to approximately 1.5:1. Site elevations range from approximately 1,590 feet above mean sea level in the northwest portion of the site to approximately 1,740 feet above mean sea level in the southeast portion (Appendix F, Geotechnical Report).

Earth materials on site include artificial fill, alluvium, and bedrock units assigned to the Mint Canyon Formation. The latter underlie the project site at depth and are exposed at the ground surface in areas of higher topographic relief. The Mint Canyon Formation consists of fine- to coarse-grained sandstone, interbedded with conglomerate, siltstone, and claystone. Beds are several inches to several feet thick, with a few widely spaced (i.e., greater than 20 feet) joints, or fractures. The joints are tight, with no separation, and continuous over 3 to 10 feet in length. As a result of past site activities associated with grading and development of the golf course, there is a moderately thin (i.e., 0.5 to 3 feet thick) cover of artificial fill materials overlying some of the areas identified as Mint Canyon Formation (Appendix F).

Prior to grading for the existing golf course, Holocene age alluvial deposits mantled all of the canyons and drainage courses within the project boundaries, but were either removed or blanketed by artificial fill. As observed in exploratory excavations for the project-specific geotechnical investigation (Appendix F), the alluvium consists of fine- to coarse-grained sand and silty sand. Artificial fill deposits are present over half the site, placed within previous canyon areas or to establish the various golf course features. The artificial fill is composed of sand and silty sand mixtures derived from the on-site or nearby alluvial and bedrock materials.

Seismicity and Faulting

As is the case for all of Southern California, the project is located in a seismically active area. The California Geological Survey (CGS) (CGS 2018) classifies faults as follows:

- Holocene-active faults, which are faults that have moved during the past approximate 11,700 years. These faults are capable of surface rupture.
- Pre-Holocene faults, which are faults that have not moved in the past 11,700 years. This class of fault may be capable of surface rupture, but is not regulated under the Alquist-Priolo Earthquake Fault Zoning Act of 1972, which regulates construction of buildings to be used for human occupancy.
- Age-undetermined faults, which are faults where the recency of fault movement has not been determined.

Holocene-active faults have been responsible for large historical earthquakes in Southern California, including the 1971 San Fernando earthquake (moment magnitude [Mw] 6.6), the 1992 Landers earthquake (Mw 7.3), the 1952 Kern County earthquake (Mw 7.5), and the 1933 Long Beach earthquake (Mw 6.4). The Southern California region also includes blind thrust faults, which are faults that do not rupture all the way up to the surface, but are capable of substantial earthquakes. Examples include the 1987 Whittier Narrows earthquake (Mw 5.9) and the 1994 Northridge earthquake (Mw 6.7). Both of these earthquakes occurred on previously unidentified thrust faults (USGS 1971, 1988, 1994; SCEDC 2013).

Prominent Holocene-active and pre-Holocene faults in the project region are listed in Table 4.6-1 and shown on Figure 4.6-1, Regional Faulting.

Table 4.6-1. List of Earthquake Faults

Fault Name	Closest Distance from Project Site (in miles)	Direction from Project
San Gabriel	3	Southwest
San Fernando	7	Southwest
San Andreas	16	Northeast
San Cayetano	21	West
Verdugo	13	Southeast
Sierra Madre	20	Southeast
Malibu Coast	30	Southwest
Santa Monica	25	South
Raymond	23	Southeast
Newport-Inglewood	24	South
Whittier	29	Southeast
Elsinore	62	Southeast

Sources: CGS 2010, USGS 2018a.

Based on the Alquist-Priolo Earthquake Fault Zoning Act, only those faults that have direct evidence of movement within the last 11,000 years are required to be zoned. The CGS considers fault movement within this period a characteristic of faults that have a relatively high potential for ground rupture in the present or future. As discussed in Section 4.6.2, Regulatory Framework, the Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish earthquake fault zones around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. These zones, which generally

extend 200 to 500 feet on each side of a known active fault based on location, precision, complexity, or regional significance of the fault, identify areas where potential surface fault rupture along an active fault could prove hazardous and identify where special studies are required to characterize hazards to habitable structures. If a site intended for human occupancy lies within an earthquake fault zone on an official CGS map, a geologic fault rupture investigation must be performed before issuance of permits to demonstrate that the proposed development is not threatened by surface displacement from the fault.

The project site is not underlain by Holocene-active faults or Alquist-Priolo earthquake fault zones. The closest such faults are the San Gabriel and San Fernando faults, located approximately 3 miles and 7 miles southwest of the site, respectively. On-site faulting is confined to the Miocene age Mint Canyon Formation, which is considered pre-Holocene and inactive (RTF&A 2018; CGS 2010; USGS 2018a). Ground Shaking

Seismically induced ground shaking is the primary cause of damage during earthquakes. Based on the proximity of the Northridge and San Fernando earthquakes, as well as the relative proximity to the San Andreas Fault, seismic parameters determined for the project site resulted in an anticipated peak ground acceleration (PGA) of 0.95 percent of gravity. This PGA value was based on a mean contribution from all earthquake sources of magnitude 6.9, at a distance of about 7 miles (Appendix F). For perspective, with respect to mortgage loans, the U.S. Geological Survey considers regions to have a high seismic risk if there is a 10% or greater probability of the maximum PGA being equal to or greater than 0.15 percent of gravity at any point in a 50-year period (Fannie Mae 2017).

Liquefaction/Lateral Spreading

Liquefaction occurs when partially saturated soil enters a liquid state, resulting in the soil's inability to support overlying structures. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Lateral spreading consists of lateral movement of gently to steeply sloping saturated soil deposits that is caused by earthquake-induced liquefaction. The Seismic Hazards Mapping Act of 1990 directs the California Department of Conservation, Division of Mines and Geology (now the CGS) to identify and mitigate seismic hazards. Based on the Seismic Hazards Zone Map for the Mint Canyon quadrangle (CGS 1999), the alluviated canyon bottoms within the western portion of the project site are considered potential liquefaction areas, as shown on Figure 4.6-2, Seismic Hazards. A project-specific liquefaction analysis, including completion of borings, laboratory testing, and engineering analysis, indicate that the maximum seismic-induced ground settlement associated with liquefaction is 2.85 inches (Appendix F).

Landslides

Slope failures include many phenomena that involve the downslope displacement and movement of material, triggered either by gravity or seismic forces. Exposed bedrock slopes may experience rockfalls, rockslides, rock avalanches, and deep-seated rotational slides, and soil slopes may experience soil slumps and rapid debris flows. Slope stability can depend on a number of complex variables, including the geology, structure, and amount of groundwater, as well as external processes such as climate, topography, slope geometry, and human activity. The factors that contribute to slope movements include those that decrease the resistance in the slope materials and those that increase the stresses on the slope. Slope failure can occur on slopes of 15% or less, but the probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges.

Based on the Seismic Hazards Zone Map for the Mint Canyon quadrangle (CGS 1999), an area of potential earthquake induced landslides is located along the northwest property boundary. In addition, two areas of potential earthquake induced landslides are located in the eastern portion of the site, as shown on Figure 4.6-2. However, a

site-specific geotechnical analysis indicated that no known landslides are located on site. Any landslides that previously existed within the project boundaries were removed during development of the golf course (Appendix F).

Debris flows, consisting of a moving mass of heterogeneous debris lubricated by water, are generated by shallow soil slips in response to heavy rainfall. Debris flows only occur during heavy rainfall. In general, building lots most susceptible to potential debris flows are those lots located directly below and adjacent to natural slopes. Four of the proposed Lot 1 single-story building pads, including Pads 1615, 1619, 1623, and 1634, could be susceptible to debris flow hazard. Test pits excavated to assess the depth of potential debris flow material (i.e., loose to moderately dense soil) at the site encountered soils susceptible to debris flow to depths ranging from 0.5 to 1.5 feet (Appendix F).

Subsidence

Land subsidence is the downward settlement of a large area of land, which can potentially result in surface infrastructure damage. Historical subsidence in California has resulted from several processes, including oil and gas production, groundwater withdrawal, hydrocompaction, and peat oxidation. Subsidence associated with water or gas withdrawal occurs when compressible subsurface deposits are depressurized as a result of removing water or gas and can no longer support the weight of the overlying material. In the case of groundwater withdrawal, subsidence occurs primarily when groundwater withdrawal from confined aquifers results in the depressurization and dewatering of compressible clay layers. Subsidence generally occurs slowly, and can continue for a period of several years after pumping has terminated, as water continues to migrate from compressible clay layers. The project site is not underlain by an oil field (CalGEM 2020) or an area of ground subsidence as a result of oil extraction, groundwater pumping, or peat loss (USGS 2018b).

Expansive Soil

Expansive soils tend to swell with seasonal increases in soil moisture in the winter months and shrink as soils become drier in the summer months. Repeated shrinking and swelling of the soil can lead to stress and damage of structures, foundations, fill slopes, and other associated facilities. Expansive soils owe their characteristics to the presence of swelling clay minerals. The on-site alluvial soils are expected to have a very low potential for expansion. However, soils generated from grading of the Mint Canyon Formation are expected to have up to a medium potential for soil expansion (Appendix F).

4.6.2 Regulatory Framework

Federal

U.S. Geological Survey Landslide Hazard Program

In fulfillment of the requirements of Public Law 106-113, the U.S. Geological Survey created the Landslide Hazard Program in the mid-1970s. According to the U.S. Geological Survey, the primary objective of the National Landslide Hazards Program is to reduce long-term losses from landslide hazards by improving our understanding of the causes of ground failure and suggesting mitigation strategies (USGS 2020. The federal government takes the lead role in funding and conducting this research, whereas the reduction of losses due to geologic hazards is primarily a state and local responsibility.

State

The statewide minimum public safety standard for mitigation of earthquake hazards, as established through the California Building Code (CBC), Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act, is that the minimum level of mitigation for a project should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy.[1] But in most cases, this safety standard is not required to prevent or avoid the ground failure itself. It is not feasible to design all structures to completely avoid damage in worst-case earthquake scenarios. Accordingly, regulatory agencies have generally defined an acceptable level of risk as that which provides reasonable protection of the public safety, although it does not necessarily ensure continued structural integrity and functionality of a project (14 CCR 3721[a]). Nothing in these acts, however, precludes lead agencies from enacting more stringent requirements, requiring a higher level of performance, or applying these requirements to developments other than those that meet the acts' definitions of "project."

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Earthquake fault zones are designated by the CGS and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in trenches excavated across fault traces. The project is not located on a site designated to be an active earthquake fault zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (California Public Resources Code, Chapter 7.8, Section 2690 et seq.) directs the CGS to protect the public from earthquake-induced liquefaction and landslide hazards (note that these hazards are distinct from fault surface rupture hazard regulated by the Alquist-Priolo Act). This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with CGS Special Publication 117A, adopted March 13, 1997, by the State Mining and Geology Board, as updated in 2008.

California Building Code

The CBC has been codified in the California Code of Regulations as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or those standards are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability, by regulating and controlling the design,

[1] A "structure for human occupancy" is any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year.

construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The 2016 edition of the CBC is based on the 2015 International Building Code, published by the International Code Conference.

Chapters 16 and 16A of the 2016 CBC include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include (but are not limited to) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2016 CBC includes (but is not limited to) requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

As indicated previously, the CBC is updated and revised every 3 years. The 2019 version of the CBC became effective January 1, 2020. It is anticipated that the proposed project would use the most current CBC at the time of building permit issuance.

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction operations. In California, the California Occupational Safety and Health Administration has responsibility for implementing state standards that have been determined to be as effective as federal rules relevant to worker safety, including slope protection during construction excavations. The California Occupational Safety and Health Administration's requirements are more restrictive and protective than federal Occupational Safety and Health Administration standards.

4.6.3 Thresholds of Significance

In 2015, the California Supreme Court, in *California Building Industry Association v. Bay Area Air Quality Management District*, held that the California Environmental Quality Act (CEQA) generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of the project. The revised thresholds are intended to comply with this decision. The decision held that an impact from the existing environment to the project, including future users and/or residents, is not an impact for the purposes of CEQA. However, if the project, including future users and residents, exacerbates existing conditions that already exist, that impact must be assessed, including how it might affect future users and/or residents of the project.

In accordance with Appendix G of the CEQA Guidelines and the *California Building Industry Association v. Bay Area Air Quality Management District* decision, a significant impact related to geology and soils would occur if the project would:

1. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving:
   a. Rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault.
   b. Strong seismic ground shaking.
   c. Seismic-related ground failure, including liquefaction.
   d. Landslides.
2. Result in substantial soil erosion or the loss of topsoil.
3. 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.
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property.
5. 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.
6. Directly or indirectly destroy a unique paleontological resource on site or unique geologic feature.

Additionally, the City of Santa Clarita (City) Local Guidelines include the following additional City-specific threshold related to geology and soils, in which a significant impact would occur if the project would involve (City of Santa Clarita 2005):

7. Movement or grading of earth exceeding 100,000 cubic yards.

4.6.4 Impact Analysis

Threshold GEO-1. ***Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault. (Refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?***

a. Alquist-Priolo Earthquake Faults

Several major active earthquake fault zones and smaller earthquake faults are located within the general region of the proposed project site. However, no Alquist-Priolo Earthquake Fault Zones are located in the vicinity of the project site. As such, **no impacts** would occur with respect to surface fault rupture.

b. Seismic Ground Shaking

As previously discussed in Section 4.6.1, Environmental Setting, the project site is located in an area of high seismic shaking potential such that impacts would be **potentially**

significant. A seismic analysis completed for the project site indicated that a PGA of 0.95 percent of gravity may occur as a result of an earthquake on a regional fault.

c. Seismic-Ground Failure and Landslides

As previously discussed, a seismic analysis completed for the project site indicated that a PGA of 0.95 percent of gravity may occur as a result of an earthquake on a regional fault. Much of the Santa Clarita Valley area is prone to liquefaction. As illustrated on Figure 4.6-2, the alluvial canyon bottom areas in the western portion of the project site are prone to liquefaction, and associated lateral spreading and seismically induced settlement, which can result in the shifting of foundations, settling of roadways, and rupture of underground pipelines and cables, thereby resulting in a **potentially significant impact**.

Threshold GEO-2. Would the project result in substantial soil erosion or the loss of topsoil?

Project grading would include substantial grading, including approximately 579,000 cubic yards of cut and 835,000 cubic yards of fill. Grading would be followed by vertical building construction, paving/concrete, and landscape installation. Each of these project-related activities would result in potential soil erosion, which in turn could result in siltation of the nearby Sand Canyon Creek, Oak Spring Creek, and downstream Santa Clara River.

However, the project applicant would be required to comply with South Coast Air Quality Management District Rule 403, Fugitive Dust, to minimize wind and water erosion at the site, as well as to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include best management practices (BMPs) and erosion control measures to prevent pollution in stormwater discharge.

Typical BMPs that could be used during construction include erosion/sediment control measures such as silt fences, fiber rolls, gravel bags, stormwater inlet protection, soil stabilization measures, and street sweeping. The SWPPP would be subject to review and approval by the City for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (PW 2010). Additionally, all project construction activities are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

Through compliance with these existing regulations, the project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during operations, most of the project site would be developed with impervious surfaces and landscaping, and all stormwater flows would be directed to storm drain features, resulting in no contact with bare soil surfaces. Therefore, project impacts related to soil erosion or the loss of topsoil are considered **less than significant**. No mitigation is required.

Threshold GEO-3. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Landslides

Based on the Seismic Hazards Zone Map for the Mint Canyon quadrangle (CGS 1999), an area of potential earthquake induced landslides is located along the northwest property boundary. In addition, two areas of potential earthquake induced landslides are located in the eastern portion of the site, as shown on Figure 4.6-2. However, a site-specific geotechnical analysis indicated that no known landslides are located on site. Any landslides that previously existed within the project boundaries were removed during development of the golf course (Appendix F).

Extensive project grading (i.e., approximately 579,000 cubic yards of cut and 835,000 cubic yards of fill) would result in excavations of unsuitable, unconsolidated material and excavations into hillsides, resulting in temporary and permanent cut slopes and fill slopes. In the absence of CBC- and City Building and Safety-mandated grading practices, over-steepening of temporary slopes and excavating into hillsides could result in slope failure. In addition, as described in Section 4.6.1, four of the proposed Lot 1 single-story building pads, including Pads 1615, 1619, 1623, and 1634, could be susceptible to debris flow hazard subsequent to project construction. Test pits excavated to assess the depth of potential debris flow material (i.e., loose to moderately dense soil) at the site encountered soils susceptible to debris flow to depths ranging from 0.5 to 1.5 feet. As such, there is the potential for **potentially significant** landslide impacts.

Liquefaction, Lateral Spreading, and Collapse

As described above under Threshold GEO-1, the alluviated canyon bottoms within the western portion of the project site are considered potential liquefaction areas, as shown on Figure 4.6-2. As such, the project could result in **potentially significant impacts** associated with liquefaction, lateral spreading, and collapse. The project-specific liquefaction analysis, including completion of borings, laboratory testing, and engineering analysis, indicate that the maximum seismic-induced ground settlement associated with liquefaction is 2.85 inches (Appendix F).

Subsidence

As discussed in Section 4.6.1, effects of land subsidence include damage to buildings and infrastructure such as roads and canals, increased flood risk in low-lying areas, and lasting damage to groundwater aquifers and aquatic ecosystems. The project site is not underlain by an oil field or an area of ground subsidence, as a result of oil extraction, groundwater pumping, or peat loss. In addition, project construction would not exacerbate the potential for subsidence to occur, as any project-related dewatering would have a minimal impact on localized shallow groundwater levels. Therefore, potential impacts associated with subsidence would be **less than significant**.

Threshold GEO-4. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

As discussed in Section 4.6.1, the on-site alluvial soils are expected to have a very low potential for expansion. However, soils generated from grading of the Mint Canyon Formation are expected to have up to a medium potential for soil expansion and therefore could result in **potentially significant impacts**.

Threshold GEO-5. Would the project 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?

The proposed project would be supported by a sanitary sewer system. Septic tanks or alternative wastewater disposal systems would not be utilized. As such, no impacts would occur.

Threshold GEO-6. Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic feature?

The proposed project area is located in the City of Santa Clarita, east of Sand Canyon Road and north of Robinson Ranch Road, and lies within the northernmost Transverse Ranges Geomorphic Province (Norris and Webb 1990; CGS 2002). This geomorphic province structure is east–west trending and is oblique to the normal northwest trend of coastal California. Regionally, the Transverse Ranges extend offshore west to include the continental shelf and offshore islands (Santa Cruz, Santa Rosa, and San Miguel) (Norris and Webb 1990; CGS 2002). Regional mountain ranges in the Transverse Ranges geomorphic province include the San Bernardino Mountains in the east, which have been displaced to the south along the San Andreas Fault. Geologically, these mountains are dominated by Cenozoic sedimentary and Mesozoic igneous rocks that have been folded and faulted by north–south compression that is squeezing the Transverse Ranges (Norris and Webb 1990; CGS 2002).

More specifically, the proposed project area lies within the central-eastern portion of the Santa Clara River Valley (Maxson 1928), and according to surficial geological mapping by Dibblee and Ehrenspeck (1996) at a scale of 1:24,000, is underlain by the middle to late Miocene (~ 15.97 million years ago—10.3 million years ago) terrestrial, fluviatile Mint Canyon Formation (map unit Tmc) in the elevated areas and Holocene (< 11,700 years ago) Quaternary alluvium (map unit Qa) in lower lying drainages. The alluvium is likely underlain by the older Quaternary alluvium or Mint Canyon Formation at an unknown depth. The Mint Canyon Formation lies within the lower watershed of the Santa Clara River, which extends from the Topatopa Mountains in the north to the Santa Susana Mountains to the south. The Mint Canyon Formation is described as a sequence of nonmarine rocks that are about 1,700 feet thick in Tick Canyon (Stitt 1980). The lower Mint Canyon Formation is not differentiated into members and comprises alternating beds of red, brown, and gray sandstone and conglomerate, with mottled red, brown, and green siltstone (Stitt 1980).

The Mint Canyon Formation has yielded fossil plant and vertebrate remains in Los Angeles County. Maxson (1928) reported fauna of horse (Equidae), camel (Camelidae), American antelope (Antilocapridae), rodents (Rodentia), elephant (Proboscidea), bird (Aves), and turtles (Testudinata) from the formation. Mount (1971) reported on Axelrod's (1940) CSCLA Locality 860 discussing the Mint Canyon flora as an oak savanna community which consisted of island lilac (*Ceanothus* n. sp.), mountain-mahogany (*Cercocarpus cuneatus*), Mojave ironwood (*Lyonothamnus mohavensis*), oak (*Quercus convexa*), and scrub oak (*Quercus dispersa*).

A paleontological records search request was submitted to the Natural History Museum of Los Angeles County (LACM) on August 03, 2018, and the results were received on August 17, 2018. The results of this search indicated that the museum does not have any vertebrate fossil localities recorded within the project site boundaries; however, they do have localities nearby from the same sedimentary deposits that occur within the project site. The closest LACM vertebrate fossil locality from the Mint Canyon Formation is LACM (CIT) 206, which is located northwest of the project area along Sand Canyon Road and yielded a fossil horse (*Hypohippus*) (McLeod 2018). The LACM also reported specimens of elephant (Gomphotheriidae) from locality LACM 4627 and rodent, primitive deer-like animals (Palaeomerycidae), and camel from locality LACM 4692 just north and northeast of the project site. Due south of

the westernmost portion of the project site, on the west side of Sand Canyon at the northern end of Reynier Canyon, Mint Canyon Formation Locality LACM (CIT) 98 produced a specimen of the fossil peccary (*Prosthennops*). Just west of locality LACM (CIT) 98, Mint Canyon Formation locality LACM (CIT) 351 produced fossil leaves in an ash bed. Based on these localities and the potential for the discovery of new localities from within the proposed project area, the LACM recommended paleontological monitoring of significant excavations into Quaternary alluvium and all excavations into the Mint Canyon Formation (McLeod 2018).

No paleontological resources were identified within the project site as a result of the institutional records search and desktop geological review. As such, and because the project area is underlain by younger Quaternary alluvium derived from alluvial fan deposits and the Mint Canyon Formation, the project site is not anticipated to be underlain by unique geologic features. However, given the proximity of past fossil discoveries in the surrounding area and the potential for intact, undisturbed middle to late Miocene age Mint Canyon deposits in more elevated terrain, the project area has high paleontological sensitivity. In the event that intact paleontological resources are located in the project area, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation and excavations for underground utilities, have the potential to destroy a unique paleontological resource or site. Without mitigation, damage to paleontological resources during construction would be a **potentially significant impact**.

Threshold GEO-7. Would the project result in the movement or grading of earth exceeding 100,000 cubic yards?

As discussed under Threshold GEO-2, project construction would include substantial grading, including approximately 579,000 cubic yards of cut and 835,000 cubic yards of fill. Grading would be followed by vertical building construction, paving/concrete, and landscape installation. Each of these project-related activities would result in potential soil erosion, which in turn could result in siltation of the nearby Sand Canyon Creek, Oak Spring Creek, and downstream Santa Clara River.

However, the project applicant would be required to comply with South Coast Air Quality Management District Rule 403, Fugitive Dust, to minimize wind and water erosion at the site, as well as to prepare and implement a SWPPP, in accordance with the National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include BMPs and erosion control measures to prevent pollution in stormwater discharge.

Typical BMPs that could be used during construction include erosion/sediment control measures such as silt fences, fiber rolls, gravel bags, stormwater inlet protection, soil stabilization measures, and street sweeping. The SWPPP would be subject to review and approval by the City for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (PW 2010). Additionally, all project construction activities are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

Through compliance with these existing regulations, the project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during operations, most of the project site would be developed with impervious surfaces and landscaping, and all stormwater flows would be directed to storm drain features, resulting in no contact with bare soil surfaces. Therefore, project impacts related to soil erosion or the loss of topsoil are considered **less than significant**. No mitigation is required.

4.6.5 Mitigation Measures

The following mitigation measures (MMs) would ensure that the project has a less-than-significant impact on geology and soils.

MM-GEO-1 During final design, grading, and construction, the applicant shall implement all recommendations provided in the site-specific geotechnical investigation by RTF&A, included as Appendix F, Geotechnical Report, in this Environmental Impact Report.

MM-GEO-2 **Paleontological Resource Monitoring**. Prior to the commencement of any grading activity, the applicant shall retain a qualified paleontologist to ensure the implementation of a paleontological monitoring program. The Society of Vertebrate Paleontology (SVP 2010) defines a qualified paleontologist as having the following:

1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience.
2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts.
3. Proficiency in recognizing fossils in the field and determining significance.
4. Expertise in local geology, stratigraphy, and biostratigraphy.
5. Experience collecting vertebrate fossils in the field.

The qualified paleontologist shall attend any preconstruction meetings and manage the paleontological monitor(s) if he or she is not doing the monitoring. A paleontological monitor should be on site during all excavations below the depth of 5 feet below the ground surface in areas underlain by Quaternary alluvium and all excavations into areas underlain by the Mint Canyon Formation. The SVP (2010) defines a qualified paleontological monitor as having the following:

1. BS or BA degree in geology or paleontology and one year experience monitoring in the state or geologic province of the specific project. An associate degree and/or demonstrated experience showing ability to recognize fossils in a biostratigraphic context and recover vertebrate fossils in the field may be substituted for a degree. An undergraduate degree in geology or paleontology is preferable, but is less important than documented experience performing paleontological monitoring, or
2. AS or AA in geology, paleontology, or biology and demonstrated two years of experience collecting and salvaging fossil materials in the state or geologic province of the specific project, or
3. Enrollment in upper division classes pursuing a degree in the fields of geology or paleontology and two years of monitoring experience in the state or geologic province of the specific project.
4. Monitors must demonstrate proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques.

The paleontological monitor shall be equipped with necessary tools for the collection of fossils and associated geological and paleontological data. The monitor shall complete daily logs detailing the day's excavation activities and pertinent geological and paleontological data. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

Following the paleontological monitoring program, a final monitoring report shall be submitted to the City of Santa Clarita for approval. The report should summarize the monitoring program and include geological observations and any paleontological resources recovered during paleontological monitoring for the proposed project.

4.6.6 Level of Significance After Mitigation

Threshold GEO-1. ***Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault. (Refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?***

b. Seismic Ground Shaking

The project applicant would be required to design and construct the project in conformance with the most recently adopted CBC design parameters and City Building and Safety Division building codes, which includes completion of recommendations of the site-specific geotechnical report by RTF&A (Appendix F) as required by MM-GEO-1. Adherence to current building codes and engineering practices would ensure that the project would not expose people, property, or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with locations in the Southern California region. In addition, although the proposed project could be subject to severe seismic shaking, it would not increase or exacerbate the potential for earthquakes to occur and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismically induced ground shaking. As such, conformance with building codes and standards, including implementation of MM-GEO-1, would ensure that impacts related to ground shaking would be **less than significant with mitigation incorporated**.

c. Seismic-Ground Failure and Landslides

The project would conform to the seismic design requirements as outlined within the CBC, which contains universal standards for proper site preparation and grading practices, adequate design of foundation, and guidelines for the appropriate selection and use of construction materials. These design standards also include completion of recommendations by the site-specific geotechnical investigation report by RTF&A

(Appendix F) (MM-GEO-1), including removal of all existing artificial fill materials, alluvium, colluvium, and other unsuitable materials, such that all areas of proposed structures are underlain by competent earth materials. Areas to be filled for development would be compacted, as specified in the geotechnical report. These remedial grading methods would minimize the potential for seismically induced ground failure. The local agency that enforces the CBC with respect to the project site is the City's Building and Safety Division, which reviews applications for building permits for compliance with the CBC. Grading plans would also be reviewed for compliance with state and local standards related to seismicity.

Because the site would be required to comply with state and local building and grading standards, substantial adverse effects from seismically induced ground failure, including liquefaction, would be avoided or reduced to acceptable levels. In addition, although the proposed project could be subject to seismically induced ground failure, the project would not increase or exacerbate the potential for earthquakes to occur and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismically induced ground failure. Project impacts related to liquefaction and other forms of seismically induced ground failure are considered **less than significant with implementation of mitigation**.

Threshold GEO-3. ***Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

Landslides

The project would conform to the design requirements as outlined within the CBC, which contains universal standards for proper site preparation and grading practices (including slope specifications) and adequate design of foundation, and guidelines for the appropriate selection and use of construction materials. CBC standards also include completion of recommendations by the site-specific geotechnical investigation report by RTF&A (Appendix F), as required by MM-GEO-1. With respect to slope stability, these recommendations include cut- and fill-slope design and construction specifications, as well as stability fills to be constructed over several cut slopes. With respect to debris flows, these recommendations include construction of structures or devices to control and impound potential debris material, such as debris walls, berms, or basins. Therefore, potential impacts associated with debris flows are considered **less than significant with implementation of mitigation.**

Liquefaction, Lateral Spreading, and Collapse

The project would conform to the seismic design requirements as outlined within the CBC, which contains universal standards for proper site preparation and grading practices and adequate design of foundation, and guidelines for the appropriate selection and use of construction materials. CBC standards also include completion of recommendations by the site-specific geotechnical investigation report by RTF&A (Appendix F) (MM-GEO-1). These recommendations include removal of all existing artificial fill materials, alluvium, colluvium, and other unsuitable materials, such that all areas of proposed structures are underlain by competent earth materials. Areas to be filled for development would be compacted, as specified in the geotechnical report. These remedial grading methods would minimize the potential for seismically induced ground failure, including liquefaction, lateral spreading, and collapse. The local agency that enforces the CBC with respect to the project site is the City's Building and Safety

Division, which reviews applications for building permits for compliance with the CBC. Grading plans would also be reviewed for compliance with state and local standards related to seismicity.

Because the site would be required to comply with state and local building and grading standards, substantial adverse effects from seismically induced ground failure, including liquefaction, lateral spreading, and collapse, would be avoided or reduced to acceptable levels. In addition, although the proposed project could be subject to seismically induced ground failure, the project would not increase or exacerbate the potential for earthquakes to occur and therefore would not cause instability in on-site geologic units or soil. Potential impacts associated with liquefaction, lateral spreading, and soil collapse are considered **less than significant with implementation of mitigation**.

Threshold GEO-4. ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?***

The project would be designed and constructed in conformance with the CBC and City Building and Safety Division regulations, which include completion of recommendations by the site-specific geotechnical investigation report by RTF&A (Appendix F). These recommendations include import of only non-expansive soils; mixing non-expansive soils with expansive soils in areas of engineered fill; over-excavation of expansive Mint Canyon bedrock in areas of proposed structures, pavement, and hardscapes, followed by backfilling with non-expansive material; and special construction techniques, including pad subgrade saturation or post-tensional slabs. Thus, with implementation of MM-GEO-1, which requires incorporation of recommendations included within the Geotechnical Report, the project would not create direct or indirect risk to individuals and/or property. In addition, the project would not exacerbate existing expansive soil conditions. Project impacts related to expansive soils are considered **less than significant with implementation of mitigation**.

Threshold GEO-6. ***Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic feature?***

Upon implementation of MM-GEO-2, impacts would be reduced to below a level of significance. Impacts of the proposed project on paleontological resources are considered **less than significant with mitigation incorporated** during construction**.**

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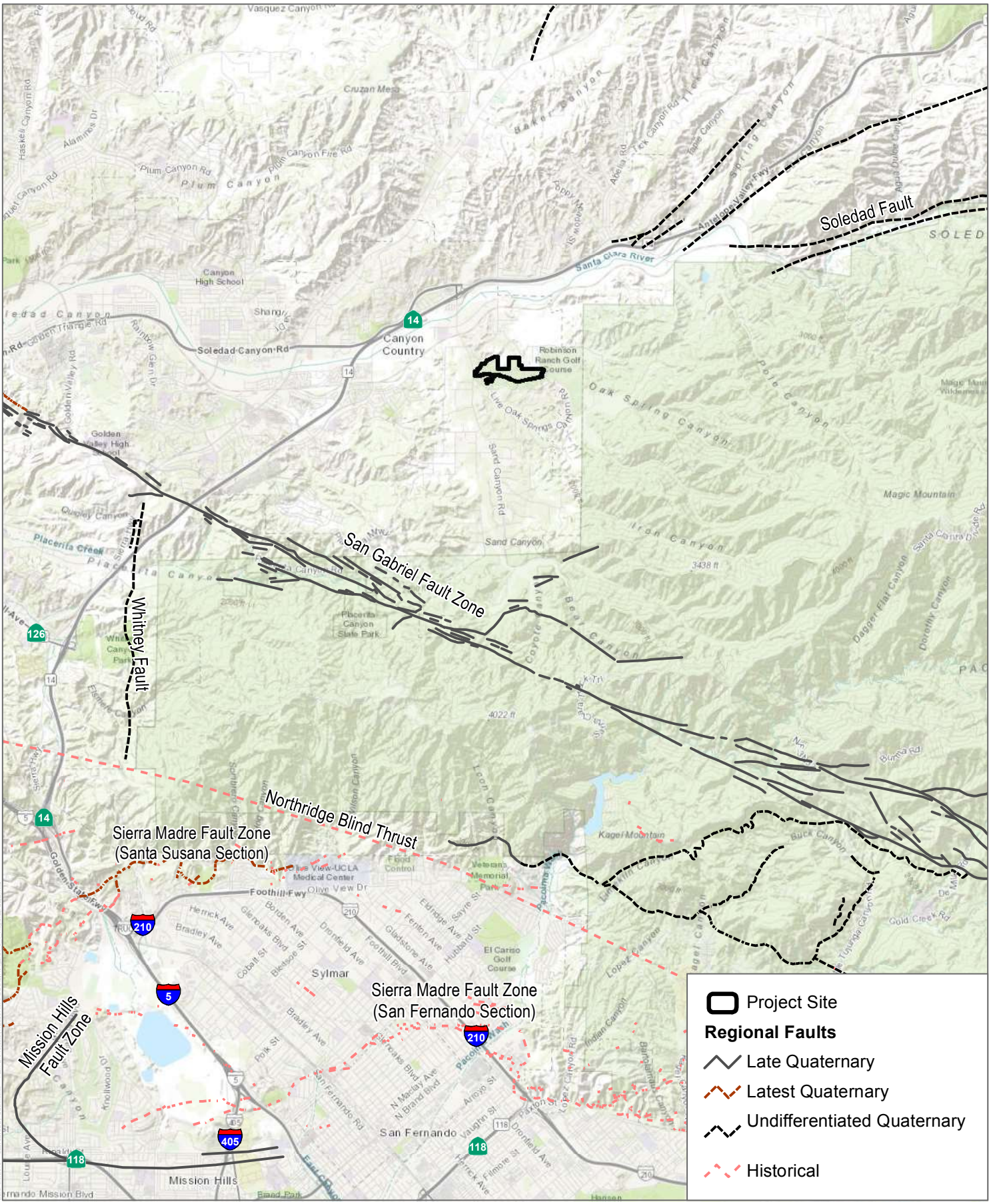

SOURCE: ESRI 2019, USGS 2019

DUDEK

0 4,000 8,000 Feet

FIGURE 4.6-1

Regional Faulting

Sand Canyon Resort Project

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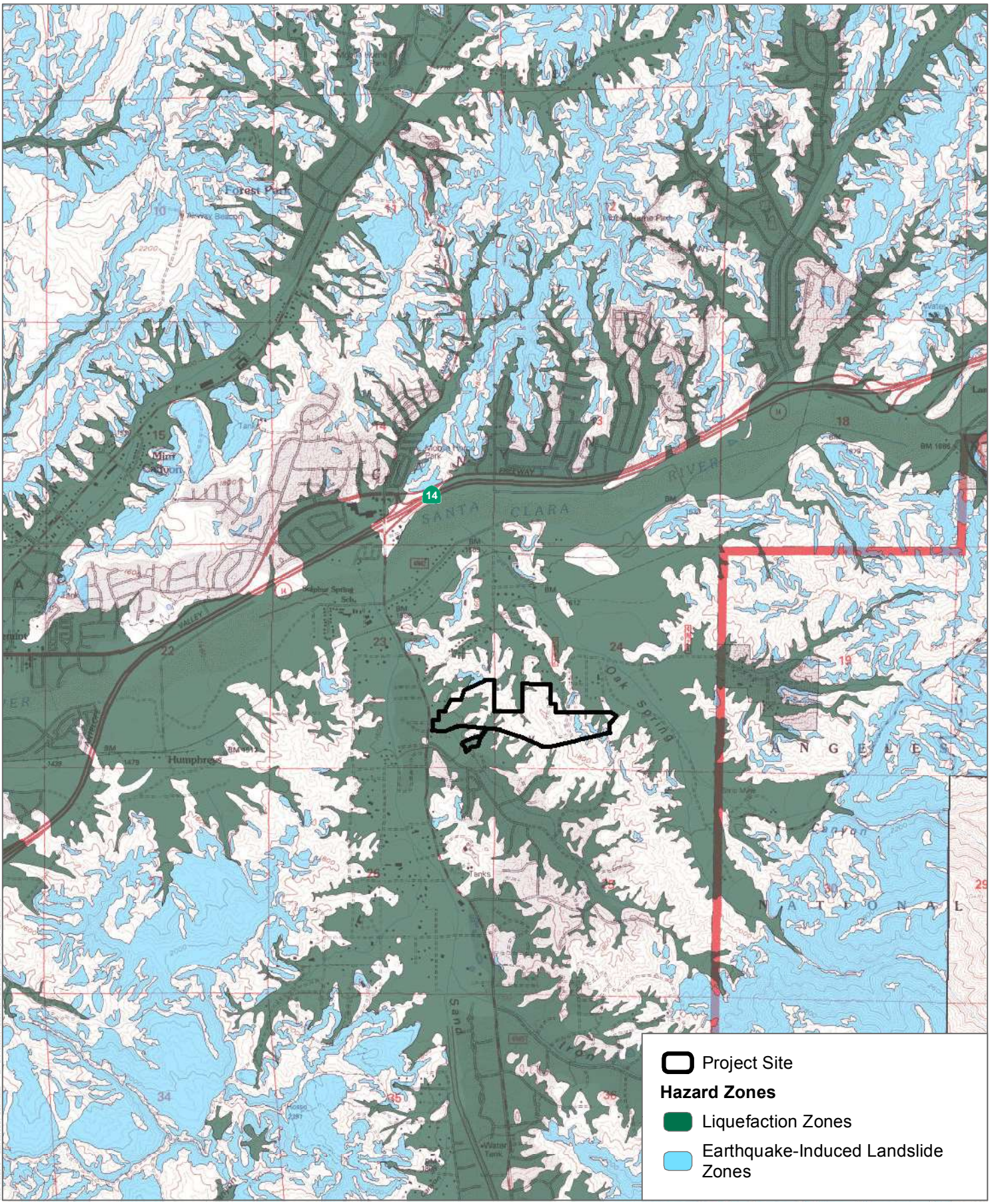

SOURCE: CA Geological Survey 1999

FIGURE 4.6-2

Seismic Hazards

Sand Canyon Resort Project

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4.7 Greenhouse Gas Emissions

This section describes the existing setting of the proposed Sand Canyon Resort Project (project) site related to greenhouse gas (GHG) emissions and climate change, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.7.1 Environmental Setting

4.7.1.1 Greenhouse Effect and Greenhouse Gases

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). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: 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 GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone, and water vapor. Some GHGs, such as CO_2, CH_4, and N_2O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely byproducts of fossil-fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Human-caused GHGs, which are produced by certain industrial products and processes, have a much greater heat-absorption potential than CO_2. They include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the average temperature of the Earth would be about 0°F (−18°C) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of the gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, CO_2 is the reference GHG and has a GWP of 1. CH_4 and N_2O are substantially more potent than CO_2, with GWPs of 25 and 298, respectively.[1] Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG gas emissions are typically measured in terms of tons or metric tons (MT) of CO_2 equivalent (CO_2e).

4.7.1.2 Contributions to Greenhouse Gas Emissions

Per the U.S. Environmental Protection Agency (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2016, total United States GHG emissions were approximately 6,511 million metric tons (MMT) of CO_2e in 2016 (EPA 2019). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 81% of total GHG emissions (5,313 MMT CO_2e). The largest source of CO_2, and of overall GHG

[1] In the Scoping Plan Update published by the California Air Resources Board in 2014, the GWPs for CH_4 and N_2O were updated from 21 to 25 and from 310 to 298, respectively. This analysis relies upon these updated GWPs.

emissions, was fossil-fuel combustion, which accounted for approximately 94% of CO_2 emissions in 2016 (4,966 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2016 are higher by 5%, down from a high of 16% above 1990 levels in 2007. GHG emissions decreased from 2015 to 2016 by 2% (83 MMT CO_2e), and overall, net emissions in 2016 were 12% below 2005 levels (EPA 2019).

According to California's 2000–2016 GHG emissions inventory (2018 edition), California emitted 429 MMT CO_2e in 2016, including emissions resulting from out-of-state electrical generation (CARB 2017a). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2016 are presented in Table 4.7-1.

Table 4.7-1. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total*
Transportation	176.1	41%
Industrial	98.8	23%
Electricity (in state)	42.9	10%
Electricity (imports)	25.8	6%
Agriculture	34.4	8%
Residential	30.1	7%
Commercial	21.5	5%
Total	**429.4**	**100%**

Source: CARB 2017a.
Notes: MMT CO_2e = million metric tons of carbon dioxide equivalent.
* Column may not add due to rounding.

The latest GHG inventory for the City of Santa Clarita (City) is provided in the 2012 Climate Action Plan (CAP) (City of Santa Clarita 2012). The 2005 baseline emission inventory for the City is shown in Table 4.7-2.

Table 4.7-2. Greenhouse Gas Emissions Sources in Santa Clarita

Source Category	Annual GHG Emissions (MT CO_2e)	Percent of Total*
Transportation	1,065,718	62.0%
Building and Industrial	531,611	30.9%
Waste	50,439	2.9%
Water	49,641	2.9%
Agricultural	11,619	0.7%
Lighting	8,615	0.5%
Refrigerant	5	0.0%
Total	**429.4**	**100%**

Source: City of Santa Clarita 2012.
Notes: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide equivalent.
* Column may not add due to rounding.

4.7.1.3 Potential Effects to the Environment and Human Health Due to Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire, public health, and electricity demand and supply (CCCC 2012). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates could induce more extreme climate changes during the twenty-first century than were observed during the twentieth century.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased leading to more extreme hot days and fewer cold nights. Shifts in the water cycle have been observed with less winter precipitation falling as snow and both snowmelt and rainwater running off earlier in the year. Sea levels have risen. Wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a).

Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011 and warming in the Sierra Nevada area has been the greatest (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures would rise more than winter temperatures, and the increases would be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There would be fewer extremely cold nights (CCCC 2012). A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in Central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation would decline by more than 10% below the historical average (CCCC 2012).

Wildfire risk in California will increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season would directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012).

Reduction in the suitability of agricultural lands for traditional crop types may occur. However, adaptation could allow farmers and ranchers to minimize potential negative effects on agricultural outcomes through adjusting timing of plantings or harvesting and changing crop types. Public health-related effects of increased temperatures and prolonged temperature extremes, including heat stroke, heat exhaustion, and exacerbation of existing medical conditions, could be particular problems for the elderly, infants, and those who lack access to air conditioning or cooled spaces (CNRA 2009).

4.7.2 Regulatory Framework

International Treaties and Other Developments

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. It was adopted in Kyoto, Japan, on December 11, 1997, and entered into force on February 16, 2005. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions. The targets amount to an average of 5% reduction against 1990 levels over the 5-year period 2008–2012. The major distinction between the Protocol and the Convention is that while the Convention encouraged industrialized countries to stabilize GHG emissions, the Protocol commits them to do so. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities" (United Nations 1998).

Negotiations after Kyoto have continued in an attempt to address the period after the first "commitment period" of the Kyoto Protocol, concluded at the end of 2012. In Durban, South Africa in 2011, parties to the protocol agreed in principle to negotiate a new comprehensive and legally binding climate agreement by 2015 and to enter it into force for all parties starting from 2020. However, significant divisions remain in determining the parameters of any such new protocol, including its enforcement mechanisms and the degree to which developing economies will begin to be subject to binding emissions targets.

During the Paris Climate Conference (21st Conference of the Parties) on December 12, 2015, parties to the United Nations Framework Convention on Climate Change reached "a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future" (United Nations 2015). The Paris Agreement aims to limit global warming to "well below 2 degrees Celsius above pre-industrial levels" (United Nations 2015). On November 4, 2019, the government of the United States of America notified the secretary-general of the United Nations of its decision to withdraw from the Agreement, which shall take effect on 4 November 2020 in accordance with Article 28 (1) and (2) of the Agreement (United Nations 2019).

Federal

Massachusetts v. U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a)

of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

It was expected that Congress would enact GHG legislation, primarily for a cap-and-trade system. However, proposals circulated in both the House of Representative and the Senate were controversial and it may be some time before Congress adopts major climate change legislation. Under the Consolidated Appropriations Act of 2008 (House Resolution 2764), Congress has established mandatory GHG reporting requirements for some emitters of GHGs. In addition, on September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the EPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 MT or more a year of GHGs.

Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the EPA and the National Highway Traffic Safety Administration (NHTSA) announced fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles from model years 2014–2018 (EPA and NHTSA 2016). EPA and NHTSA have adopted Phase 1 standards for CO_2 emissions and fuel consumption, respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to EPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by 9% to 23%. In August 2016, EPA and NHTSA announced adoption of Phase 2 standards, affecting model years 2021–2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks, and expected to reduce GHG emissions beyond the first phase by 16%–25%. The second round of regulation introduces an additional vehicle category, trailers. Commitments for trailers are voluntary from 2018–2021 and mandatory after 2021, and are projected to reduce GHG emissions up to 9%. The final rule was adopted on August 16, 2016.

In August 2018, the EPA and NHTSA released a notice of proposed rulemaking called Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks. This rule would modify the existing Corporate Average Fuel Economy standards and tailpipe CO_2 emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026. Safer Affordable Fuel-Efficient Vehicles standards are expected to uphold model year 2020 standards through 2026 (NHTSA 2018).

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following to aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
2. Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA and National Highway Traffic Safety Administration Joint Final Rule for Vehicle Standards

The EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016 (April 2010) that is intended to reduce GHG emissions and improve fuel economy. The EPA approved the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA approved Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act (75 FR 25324–25728), which became effective on July 6, 2010 (75 FR 25324–25728).

American Recovery and Reinvestment Act

On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act of 2009. The act was passed in response to the economic crisis of the late 2000s, with the primary purpose to maintain existing jobs and create new jobs. Among the secondary objectives of the American Recovery and Reinvestment Act was investment in "green" energy programs, including funding the following through grants, loans, or other funding; private companies developing renewable energy technologies; local and state governments implementing energy efficiency and clean energy programs; research in renewable energy, biofuels, and carbon capture; and development of high efficiency or electric vehicles (74 FR 55215).

Multistate

The Western Regional Climate Action Initiative

The Western Regional Climate Action Initiative is a partnership among seven states including California and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The Western Regional Climate Action Initiative will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15% below 2005 levels by 2020. When the Western Regional Climate Action Initiative adopted this goal in 2007, it estimated this would require 2007 levels to be reduced worldwide between 50% and 85% by 2050. California is working closely with the other states and provinces to design a regional GHG reduction program that includes a cap-and-trade approach.

The California Air Resources Board (CARB) has implemented a cap-and-trade program that is also intended to link California and the other member states and provinces. The cap-and-trade regulation, which is a key element of

California's climate plan, took effect in January 2012 and compliance obligation began in January 2013. The cap-and-trade program sets a statewide limit on sources responsible for 85% of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. As of January 1, 2014, California's cap-and-trade program is linked to Quebec's pursuant to the Agreement Between the CARB and the Gouvernement du Québec Concerning the Harmonization and Integration of Cap-and-Trade Programs Reducing Greenhouse Gas Emissions, in accordance with the direction in CARB Board Resolution 13-7 (CARB 2013). As of January 1, 2018, California's cap-and-trade program and Québec's program linked with Ontario's cap-and-trade program. However, on July 3, 2018, the Ontario government revoked its cap-and-trade regulation. With Ontario's withdrawal from the linked program, California and Québec will work together to ensure that the environmental integrity and stringency of the cap-and-trade program/market is sustained (CARB 2018).

The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions. The first phase of the cap-and-trade regulation included electricity generated in and imported into California, large combustion sources (i.e., generally those emitting more than 25,000 MT CO_2e per year), and certain industrial sectors. The second phase added providers of transportation fuels and other combustion fuels (e.g., natural gas, propane) to the cap-and-trade program. The regulation requires that emissions generated by these facilities and combustion of fuels be reduced over time under a declining cap. Appendix F of the CAP includes additional detail on the cap-and-trade program (City of Santa Clarita 2012).

Pacific Coast Action Plan on Climate and Energy

On October 28, 2013, the Governors of California, Oregon, and Washington and the Premier of British Columbia signed a clean energy pact, known as the Pacific Coast Action Plan on Climate and Energy. Although the Pacific Coast Action Plan does not impose legally enforceable obligations and lacks a specific schedule for implementation, the pact sets out a number of goals and aspirational measures. The Pacific Coast Action Plan calls upon each of the parties to undertake a number of measures to address the use of carbon-based fuels in the transportation sector, including the adoption or maintenance of low-carbon fuel standards, the development of targets and action plans in order to encourage public and private investment in low-carbon commercial fleets that use alternative fields, and the expansion of the sale of zero-emissions vehicles to a goal of 10% of new vehicle purchases by 2016.

State

California Code of Regulations, Title 20

Title 20, Public Utilities and Energy, of the California Code of Regulations, was most recently updated in 2017. Title 20 provides regulations to supplement the Warren-Alquist State Energy Resources Conservation and Development Act, including energy conservation, environmental protection, solar energy policies, appliance energy efficiency standards, and other energy and development standards and regulations.

California Code of Regulations, Title 24

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California to reduce energy demand and consumption. The Title 24, Part 6 standards are updated every 3 years. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, will become effective on January 1, 2020.

Title 24 also includes Part 11, known as California's Green Building Standards. California's Green Building Standards, which initially took effect in January 2011, were updated effective January 1, 2014, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The standards were further revised with the 2016 Building Energy Efficiency Standards. For non-residential buildings, the most substantial efficiency improvement is alignment with the ASHRAE 90.1 2013 national standards. The non-residential standards include new efficiency requirements for elevators, escalators, and moving walkways and direct digital controls and requirement revisions for building envelope, lighting, and mechanical and electrical systems. The 2016 Building Energy Efficiency Standards by the California Energy Commission (CEC), which become on effective January 1, 2017, are the most current version of these standards.

Assembly Bill 1493

In response to the transportation sector accounting for more than half of California's CO_2 emissions, Assembly Bill (AB) 1493 was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. Compared to the 2009 fleet, the near-term (2009–2012) standards resulted in a reduction of about 22% in GHG emission rates from passenger vehicles and the mid-term (2013–2016) standards will result in a reduction of about 30% (CARB 2002).

Executive Order S-3-05

Executive Order S-3-05 (June 2005) established California's GHG emissions reduction targets. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. Under the executive order, the California EPA is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued the 2006 Climate Action Team Report to Governor Schwarzenegger and the Legislature (CAT 2006).

The 2009 Climate Action Team Biennial Report (CAT 2010b) expands on the policy outlined in the 2006 assessment. The 2009 report identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. Subsequently, the 2010 Climate Action Team Report to Governor Schwarzenegger and the California Legislature (CAT 2010a) reviews past climate action milestones, including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard (LCFS), a statewide renewable energy standard, and the cap-and-trade program.

The extent to which GHG emissions from traffic at the project will change in the future depends on the quantity (e.g., number of vehicles, average daily mileage) and quality (i.e., carbon content) of fuel that will be available and required to meet both regulatory standards and residents' needs. As discussed above, renewable power requirements, the LCFS, and vehicle emissions standards will all decrease GHG emissions per unit of energy delivered or per vehicle mile traveled. Future regulated fuel decarbonization will reduce the carbon emissions from the vehicular emissions for the proposed project.

The CEC published the State Alternative Fuels Plan (CEC 2007), in which it noted the existence of "challenging but plausible ways to meet 2050 [transportation] goals." The main finding from this analysis is that reducing today's

average per capita driving miles by about 5% (or back to 1990 levels), in addition to the decarbonization strategies listed below, would achieve Executive Order S-03-05 goals of 80% below 1990 levels. The approach described below is directly from the CEC report (CEC 2007) and similar to CARB's anticipated path (CARB 2008).

An 80% reduction in GHG emissions associated with personal transportation can be achieved even though population grows to 55 million, an increase of 50%. The following set of measures could be combined to produce this result:

- Lowering the energy needed for personal transportation by tripling the energy efficiency of on-road vehicles in 2050 with the following:
  - Conventional gas, diesel, and flexible fuel vehicles averaging more than 40 miles per gallon
  - Hybrid gas, diesel, and flexible fuel vehicles averaging almost 60 miles per gallon
  - All electric and plug-in hybrid electric vehicles averaging well over 100 miles per gallon (on a GHG equivalents basis) on the electricity cycle
  - Fuel cell vehicles averaging over 80 miles per gallon (on a GHG equivalents basis)
- Moderating growth in per capita driving, reducing today's average per capita driving miles by about 5% or back to 1990 levels
- Changing the energy sources for transportation fuels from the current 96% petroleum based to approximately:
  - 30% from gasoline and diesel from traditional petroleum sources or lower GHG emission fossil fuels such as natural gas
  - 30% from transportation biofuels
  - 40% from a mix of electricity and hydrogen
- Producing transportation biofuels, electricity, and hydrogen from renewable or very low carbon-emitting technologies that result in, on average, at least 80% lower life cycle GHG emissions than conventional fuels
- Encouraging more efficient land uses and greater use of mass transit, public transportation, and other means of moving goods and people

Studies have shown that in order to meet the 2050 target, aggressive technologies in the transportation and energy sectors, such as electrification and maturation of technologies such as advanced batteries and more efficient biofuels will be required (CARB 2008).

Due to the wholesale shifts in energy technology required and more aggressive regulations needed, neither of which are currently in place, analyzing a project's impacts relative to the 2050 target are speculative for purposes of the California Environmental Quality Act (CEQA). As a result, this report does not analyze the project's consistency with the 2050 target.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32, the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed in September 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB was assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required

to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early action GHG emissions reduction measures in June 2007. In December 2008, CARB approved the Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan) (CARB 2008) to achieve the goals of AB 32. An update to the Scoping Plan (First Scoping Plan Update) was adopted in May 2014 (CARB 2014). In November 2017, CARB published California's 2017 Climate Change Scoping Plan (Second Scoping Plan Update) (CARB 2017b). The Second Scoping Plan Update was adopted by CARB on December 14, 2017.

The Second Scoping Plan Update outlines CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32, including continuation of the cap-and-trade program through 2030, and incorporation of a mobile source strategy that includes strategies targeted to increase zero emission vehicle fleet penetration and a more stringent target for the LCFS by 2030. The Second Scoping Plan Update also incorporates approaches to cutting short-lived climate pollutants under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017) and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon.

With regard to project-level GHG emissions reduction actions and thresholds, the Second Scoping Plan Update states "achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (CARB 2017c).

Senate Bill 1368

In September 2006, Governor Schwarzenegger signed SB 1368, which requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

Executive Order S-1-07

Issued on January 18, 2007, Executive Order S-1-07 sets a declining LCFS for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The LCFS is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

Senate Bill 375

In August 2008, the legislature passed, and in September 2008, Governor Schwarzenegger signed SB 375, which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. By September 30, 2010, CARB was required to assign regional GHG reduction targets for the automobile and light truck sector for 2020 and 2035. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region that, after considering transportation measures and policies, will achieve the GHG reduction targets. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or Alternative Planning Strategy. In September 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations.

On April 7, 2016, the Southern California Association of Governments (SCAG) adopted the 2016–2040 RTP/SCS (SCAG 2016), which looks to build on the success of the 2012–2035 RTP/SCS (SCAG 2012). Targets for the SCAG region in the updated plan include an 8% per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18% reduction by 2035, and a 21% reduction by 2040 compared with 2005 levels (SCAG 2016).

Supreme Court Ruling in Center for Biological Diversity v. California Fish and Wildlife

In its 2015 decision, *Center for Biological Diversity v. Department of Fish and Wildlife*, S217763 (Newhall),[2] the California Supreme Court evaluated the California Department of Fish and Wildlife's analysis of potential impacts caused by GHG emissions contained in the Environmental Impact Report (EIR) for the proposed land development called Newhall Ranch. In the EIR, the California Department of Fish and Wildlife analyzed GHG emissions under AB 32, using the business-as-usual comparison as its sole criterion of significance.

In Newhall, the California Supreme Court concluded that a finding of consistency with meeting statewide emission reduction goals is a legally permissible criterion of significance when analyzing potential impacts of GHG emissions under CEQA. However, the Court found that the EIR's conclusion that the project's emissions would be less than significant under that criterion was not supported by substantial evidence, and remanded back to the appellate court the narrow issue of whether substantial evidence supported the application of AB 32's statewide GHG reduction goal of 29% to new land use projects.

The Court then identified potential options for lead agencies evaluating cumulative significance of a proposed land use development's GHG emissions in future CEQA documents:

1. Business-As-Usual Model: While the Court cautioned that the Scoping Plan may not be appropriate at the project-level, the business-as-usual model might be used to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals pursuant to AB 32.
2. Compliance With Regulatory Programs Designed To Reduce Greenhouse Gas Emissions: The Court suggests that a lead agency could rely on a showing of compliance with regulatory programs designed to reduce GHG emissions. The Court clarifies that a significance analysis based on compliance with such statewide regulations only goes to impacts within the area governed by the regulations.

[2] The Newhall decision is available at https://caselaw.findlaw.com/ca-supreme-court/1719578.html (accessed November 2018).

3. Local CAP Or Other "Geographically Specific Greenhouse Gas Emission Reduction Plans:" The Court points out that these plans may provide a basis for the tiering or streamlining of project-level CEQA analysis, so long as the plan is "sufficiently detailed and adequately supported."
4. Regional SCS: The Court also articulates that a lead agency need not additionally analyze GHG emissions from cars and light trucks in CEQA documents for certain residential, mixed use and transit priority projects that are consistent with an applicable SCS adopted pursuant to SB 375.
5. Numerical GHG Significance Thresholds: Although noting that such thresholds are GHG significance thresholds, which are based on compliance with AB 32, and use a "service population" GHG ratio threshold for land use projects and a 10,000-ton annual GHG emission threshold for industrial projects, the Court remanded for further consideration the application of the 29% overall Scoping Plan metric, which is used by several air districts and, like the favorably cited Bay Area Air Quality Management District metric, is based on AB 32.

Citing Executive Orders S-3-05 and B-30-15, the Court cautioned that those EIRs taking a goal-consistency approach to CEQA significance may in the future need to consider the project's effects on meeting emissions reduction targets beyond 2020.

Senate Bills 1078, 107, X1-2, and 100 (Renewable Portfolio Standards)

As most recently amended by SB 350, California's Renewables Portfolio Standard Program requires retail sellers of electric services and local publicly owned electric utilities to increase procurement from eligible renewable energy resources to 33% of total retail sales by 2020, 40% of total retail sales by 2024, 45% of total retail sales by 2027, and 50% of total retail sales by 2030. On September 10, 2018, the goals of this standard were revised to a 50% renewable resources target by December 21, 2026, and to a 60% target by December 31, 2030.

Senate Bill 350

Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the Renewable Portfolio Standard by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency.

Executive Order B-30-15

On April 29, 2015, Governor Jerry Brown issued an executive order that identified an interim GHG reduction target in support of targets previously identified under Executive Order S-3-05 and AB 32. Executive Order B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in Executive Order S-3-05. To facilitate achievement of this goal, Executive Order B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The executive order also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197

Enacted by the legislature in August 2016, SB 32 and AB 197 are companion bills that will extend GHG reduction targets and make changes to CARB membership; increase legislative oversight of CARB climate change activities;

and expand dissemination of GHG, criteria air pollutant, and toxic air contaminant (TAC) emissions data to enhance transparency and accountability. SB 32 requires CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the senate and three members of the assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the legislature to CARB as nonvoting members; requires CARB to make available and update at least annually via its website emissions of GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

Assembly Bill 1613 (Waste Heat and Carbon Emissions Reduction Act)

AB 1613 directed the CEC, the California Public Utilities Commission, and CARB to implement the Waste Heat and Carbon Emissions Reduction Act, which is designed to encourage development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts.

A January 2011 decision by an administrative law judge determined that the pilot program will not be established due to lack of customer interest and difficulties in instituting a program that meets California Department of Corporations requirements (CPUC 2007).

Assembly Bill 341

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter (California Public Resources Code, Section 41780.01[a]). In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the state's policy goal (California Public Resources Code, Section 41780.02; CalRecycle 2012).

Senate Bill X7-7 (Water Conservation Act of 2009)

The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20% by December 31, 2020. The state was required to make incremental progress toward this goal by reducing per-capita water use by at least 10% by December 31, 2015. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.

Executive Order B-55-18

On September 10, 2018, Governor Brown signed Executive Order B-55-18, to achieve carbon neutrality by moving the state of California to 100% clean energy by 2045. This executive order also includes specific measures to reduce GHG emissions via clean transportation, energy efficient buildings, directing cap-and-trade funds to disadvantaged communities, and better management of state's forest land.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is the association of air pollution control officers representing all 35 air quality agencies throughout California. CAPCOA is not a regulatory body, but it has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues. The GHG analysis set forth in this EIR has been informed, in part, by the expertise

and methodologies described in the following documents published by CAPCOA: (1) CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act (CAPCOA 2008) and (2) Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures (CAPCOA 2010).

Regional

South Coast Air Quality Management District

CEQA Guidelines and Proposed GHG Thresholds

The South Coast Air Quality Management District (SCAQMD) is principally responsible for comprehensive air pollution control in the South Coast Air Basin, which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino Counties, including the project site. SCAQMD works directly with SCAG, county transportation commissions, and local governments and cooperates actively with all federal and state government agencies to regulate air quality.

In April 2008, SCAQMD convened a working group to develop GHG significance thresholds. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. As to all other projects, where the SCAQMD is not the lead agency, the SCAQMD Governing Board has, to date, only adopted an interim threshold of 10,000 MT CO_2e per year for industrial stationary source projects (SCAQMD 2008).

For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions, Tier 2 is consistency with a GHG reduction plan, Tier 3 is a screening value or bright line, Tier 4 is a performance based standard, and Tier 5 is GHG mitigation offsets (SCAQMD 2008).

Local

City of Santa Clarita General Plan

The Conservation and Open Space Element of the City of Santa Clarita General Plan has identified the following goals, objectives and policies aimed at greenhouse gas reduction in private development projects in the City (City of Santa Clarita 2011).

Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.

Policy CO 8.1.1: Create and adopt a Climate Action Plan within 18 months of the OVOV adoption date of the City's General Plan Update that meets State requirements and includes the following components:

a. Plans and programs to reduce GHG emissions to State-mandated targets, including enforceable reduction measures;
    i. The CAP may establish goals beyond 2020, which are consistent with the applicable laws and regulations referenced in this paragraph and based on current science;
    ii. The CAP shall include specific and general tools and strategies to reduce the City's current and projected 2020 inventory and to meet the CAPs target for GHG reductions by 2020;
    iii. The CAP shall consider, among other GHG reduction strategies, the feasibility of development fees; incentive and rebate programs; and, voluntary and mandatory reduction strategies in areas of energy efficiency, renewable energy, water conservation and efficiency, solid waste, land use and transportation.
b. Mechanisms to ensure regular review of progress towards the emission reduction targets established by the Climate Action Plan;
c. Procedures for reporting on progress to officials and the public;
d. Procedures for revising the plan as needed to meet GHG emissions reduction targets; and,
e. Allocation of funding and staffing for Plan implementation;

Policy CO 8.1.2: Participate in the preparation of a regional Sustainable Communities Strategy (SCS) Plan to meet regional targets for greenhouse gas emission reductions, as required by SB 375.

Policy CO 8.1.3: Revise codes and ordinances as needed to address energy conservation, including but not limited to the following:

a. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24;
b. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives;
c. Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation;
d. Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.

Policy CO 8.1.4: Provide information and education to the public about energy conservation and local strategies to address climate change.

Policy CO 8.1.5: Coordinate various activities within the community and appropriate agencies related to GHG emissions reduction activities.

Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.

Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.

Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.

Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.

Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not be limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.

Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.

Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.

Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.

Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.

Policy CO 8.3.11: Consider allowing carbon off-sets for large development projects, if appropriate, which may include funding off-site projects or purchase of credits for other forms of mitigation, provided that any such mitigation shall be measurable and enforceable.

Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.

City of Santa Clarita Climate Action Plan

The State of California requires all cities that create a new general plan or update their general plan document to consider its impacts on GHG emissions. In order to do so, cities must complete a CAP. The CAP must achieve the emission reduction goals outlined by the Global Warming Solutions Act of 2006 (AB 32). AB 32 requires that statewide GHG emissions must be reduced to 1990 levels by 2020. Measures identified in the City's CAP will not only meet but exceed the state's AB 32 GHG emission reduction mandate (City of Santa Clarita 2012).

In June 2011, the City Council adopted a new General Plan (referred to as One Valley One Vision), which is intended to guide growth and development within all portions of the Santa Clarita Valley. As noted above, Policy CO 8.1.1 of the City's General Plan states the City shall create and adopt a CAP within 18 months of the adoption of the City's General Plan Update that meets state requirements. Consistent with this policy, in January 2011, the City began the process of developing a CAP, with the Final CAP published in August 2012. The CAP, part of the General Plan, serves as a component of the general plan document for the City to address GHG emissions. Using the goals, objectives, and policies of the General Plan as a starting point, the CAP identifies mitigation measures that can be quantified and translated into significant reductions in the GHG emissions by the year 2020. The development of a CAP begins with a premise that establishing a complete GHG emissions inventory within the City's boundary is the critical foundation for the remainder of the project.

The CAP also defines a local threshold of significance for GHG emissions for project level submittals that trigger review by the CEQA. Because goals, objectives, and policies approved under the General Plan are forecast to meet the GHG emission reduction targets mandated by AB 32, development projects that are able to demonstrate consistency with the General Plan and zoning ordinance will by association demonstrate consistency with the CAP. However, because the CAP is only certified through 2020 and the project is expected to be built out in 2021 it does not apply herein.

4.7.3 Thresholds of Significance

The project's potential impacts on GHGs will be assessed using the GHG thresholds set forth in Appendix G, Environmental Checklist Form, of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, the project would have a significant impact related to GHGs if the project would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of

significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). Additional guidance regarding assessment of GHG's is discussed below.

California Environmental Quality Act Guidelines

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's greenhouse gas emissions or rely on a "qualitative analysis or other performance based standards" (14 CCR 15064.4[b]). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4[c]). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research's technical advisory titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Cumulative Nature of Climate Change

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project in the South Coast Air Basin, such as the project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change.

While the project would result in emissions of GHGs during construction and operation, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global

climate. However, it is generally believed that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory, as scientific uncertainty regarding the significance of a project's individual and cumulative effects on global climate change remains.

Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the California Natural Resources Agency, which noted in its Public Notice for the proposed CEQA amendments (pursuant to SB 97) that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009). Similarly, the Final Statement of Reasons for Regulatory Action on the CEQA Amendments confirms that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009). Accordingly, further discussion of the project's GHG emissions and their impact on global climate is addressed below.

Status of Proposed South Coast Air Quality Management District Thresholds

In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This guidance document, which builds on the previous guidance prepared by the CAPCOA, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (SCAQMD 2008).

SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population for project level analyses and 6.6 MT CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

This assessment of the project's GHG impacts relied upon the application of Tier 3 and a numerical threshold of 3,000 MT CO_2e per year. Project GHG emissions in excess of 3,000 MT CO_2e would result in a significant cumulative impact.

4.7.4 Impact Analysis

Threshold GHG-1. ***Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Construction

As discussed in Section 4.2.4, Impact Analysis, of Section 4.2, Air Quality, on-site construction of the project is anticipated to occur in 2021 and 2022. The total emissions from construction are summarized in Table 4.7-3.

Table 4.7-3. Construction Greenhouse Gas Emissions

Year	Emissions[a] (MT)			
	CO_2	*CH_4*	*N_2O*	*CO_2e*
2021[b]	1,918.37	0.19	0.00	1,923.19
2022	1,203.54	0.09	0.00	1,205.76
			Total	**3,128.95**
			30-year Amortized[c]	*104.30*

Notes: MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

[a] Emissions estimated with California Emissions Estimator Model (CalEEMod) version 2016.3.2.

[b] Includes emissions from the detention basin.

[c] One-time emissions from construction were amortized over a 30-year period.

Total GHG emissions from all proposed project construction phases are 3,129 MT CO_2e. When amortized over 30-year project lifetime, the construction GHG emissions are 104 MT CO_2e per year.

Operations

California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment (CAPCOA 2017). Emissions from each category are discussed in the following text with respect to the project. For additional details, see Section 4.2.4 for a discussion of operational emission calculation methodology and assumptions, specifically for area, energy (natural gas), and mobile sources. Operational year 2023 was assumed consistent with the project's traffic report.

Energy Sources

As represented in CalEEMod, energy sources include GHG emissions associated with building electricity and natural gas usage (non-hearth).

CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. The program uses data collected during the California Commercial End-Use Survey to develop energy intensity values (electricity and natural gas usage per square foot per year) for non-residential buildings. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the heating, ventilation, and air conditioning system; water heating system; and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. The previous amendments were referred to as the 2016 standards. CalEEMod 2016.3.2 includes compliance with the 2016 Title 24 standards. The project will include energy efficient appliances, high-efficiency lighting, and solar panels.

Solid Waste

The project would generate solid waste and would, therefore, result in CO_2e emissions associated with landfill off-gassing. Solid waste generation was derived from the CalEEMod default rates for each land use type. Emission estimates associated with solid waste were estimated using CalEEMod. A solid waste diversion rate of 75% was assumed in accordance with AB 939.

Water Supply and Wastewater

Water supplied to the project requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Annual water use for the project and GHG emissions associated with the electricity used for water supply were calculated based upon default water use estimates for each land-use type, as estimated by CalEEMod and Southern California Edison factors. The project would include low-flow fixtures in all buildings and water efficient landscaping.

The estimated operational (year 2023) project-generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, and water usage and wastewater generation are shown in Table 4.7-4.

Table 4.7-4. Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	0.02	0.00	0.00	0.02
Energy	1,106.78	0.04	0.02	1,112.56
Mobile	1,036.29	0.05	0.00	1,037.54
Solid waste	11.02	0.65	0.00	27.29
Water supply and wastewater	103.23	0.26	0.01	112.01

Table 4.7-4. Estimated Annual Operational GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Total				**2,289.42**
Amortized Construction Emissions				*104.30*
Operation + Amortized Construction Total				**2,393.72**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
These emissions reflect California Emissions Estimator Model "mitigated" output and operational year 2023.

As shown in Table 4.7-4, estimated annual project-generated GHG emissions in 2023 would be approximately 2,389 MT CO_2e per year as a result of project operations. Estimated annual project-generated emissions in 2023 from area, energy, mobile, solid waste, and water/wastewater sources and amortized project construction emissions would be approximately 2,394 MT CO_2e per year. The project would not exceed the SCAQMD significance threshold of 3,000 MT CO_2e per year. Therefore, the project would have a **less than significant impact**.

Threshold GHG-2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Consistency with AB 32

The project is consistent and compliant with applicable statewide regulatory programs designed to reduce GHG emissions consistent with AB 32, as described in Table 4.7-5.

Table 4.7-5. Consistency with Assembly Bill 32 Regulatory Programs

Regulatory Program	Project Level Evaluation
Construction	
CARB In-Use Off-Road Regulation	*Consistent.* Off-road equipment used for construction of the project will utilize equipment in compliance with CARB ATCMs.
Mobile Sources	
California Assembly Bill 1493 (Pavley Standards)	*Consistent.* This regulatory program applies to vehicle manufacturers, and not directly to land use development. That being said, the vehicles operated by future occupants of and visitors to the project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet for model years 2017 through 2025.
Advanced Clean Cars Program	*Consistent.* This regulatory program applies to vehicle manufacturers, and not directly to land use development. That being said, the vehicles operated by future occupants of and visitors to the project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet for model years 2017 through 2025.
Low Carbon Fuel Standard Regulation	*Consistent.* This regulatory program applies to fuel suppliers, and not directly to land use development. That being said, the vehicles operated by future occupants of and visitors to the project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet.

Table 4.7-5. Consistency with Assembly Bill 32 Regulatory Programs

Regulatory Program	Project Level Evaluation
Heavy-Duty Vehicle GHG Emission Reduction Regulation	*Consistent.* This regulatory program is intended to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, semi-trucks, pickup trucks and vans, and all types and sizes of work trucks and buses in between. The project construction and operational analysis includes the benefit of reductions from these programs.
CARB In-Use On-Road Heavy-Duty Diesel Vehicles Regulation	*Consistent.* This regulatory program applies to vehicle manufacturers, and not directly to land use development. That being said, the vehicles operated during project construction and operations would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from the vehicle fleet.
Energy Use	
California Title 20 Standards Appliance Energy Efficiency Standards	*Consistent.* The project would result in new land use development that would be outfitted with appliances that accord to the CEC's Title 20 standards to the extent required by law.
California Title 24, Part 6 Standards Building Energy Efficiency Standards	*Consistent.* The project will design and construct buildings that accord to the CEC's 2016 Title 24 standards to the extent required by law.
California Title 24, Part 11 Standards Green Building Standards Code	*Consistent.* The development facilitated by the project would comply with CALGreen as a matter of law.
California Senate Bill X1-2 Renewable Portfolio Standards	*Consistent.* This regulatory program applies to investor-owned utilities, electric service providers and community choice aggregators, and not directly to land use development. That being said, the project would benefit from and be consistent with this regulatory program in the form of reduced GHG emissions from building energy consumption. The project will purchase electricity from Southern California Edison, which is required to procure 20% and 33% of retail sales from renewable energy resources by 2013 and 2020, respectively.
Water Supply, Treatment and Distribution	
Senate Bill X7-7 Water Use Efficiency Program	*Consistent.* This regulatory program is implemented through the California Department of Water Resources and urban water suppliers, not land use developers. The project would accord to water conservation objectives through use of the latest water-efficiency technologies, including those relating to water-conserving plumbing fixtures, weather-sensitive irrigation controls, drought-tolerant landscaping palettes, and the use of recycled water for irrigation purposes.
Executive Order B-29-15	*Consistent.* Mandatory water reductions are implemented via Executive Order B-29-15 and a regulatory framework developed by the State Water Resources Control Board. These regulatory programs apply to urban water suppliers, not land use developers. The project would accord to water conservation objectives through use of the latest water-efficiency technologies, including those relating to water-conserving plumbing fixtures, weather-sensitive irrigation controls, drought-tolerant landscaping palettes, and the use of recycled water for irrigation purposes.
California Title 24, Part 11 Standards Green Building Standards Code	*Consistent.* The project would comply with CALGreen as a matter of law. The use of water saving design elements (such as water-efficient toilets/urinals and faucets) will allow the project to comply with required 20% reduction in indoor potable water use.

Table 4.7-5. Consistency with Assembly Bill 32 Regulatory Programs

Regulatory Program	Project Level Evaluation
County of Riverside Ordinance No. 859	*Consistent.* The project will incorporate drought tolerant landscaping, smart irrigation controls, and a non-potable water system that meets "purple pipe" standards and provides the entirety of outdoor water demand.
Solid Waste	
California Assembly Bill 341 Mandatory Commercial Recycling	*Does not apply.* This regulatory program applies to commercial businesses and local land use jurisdictions, not land use developers. That being said, any businesses located in the project would be required to comply with the program to the extent required by law; the project would not hinder implementation of the program.
General	
California Cap-and-Trade Regulation	*Does not apply.* This regulatory program does not classify land use development as a covered entity. That being said, implementation of the regulatory program serves to reduce emissions at sources that are indirectly related to land use development (e.g., transportation fuel refineries).

Notes: CARB = California Air Resources Board; ATCM = Airborne Toxic Control Measure; GHG = greenhouse gas; CEC = California Energy Commission; CALGreen = California Green Building Standards.

Consistency Evaluation with Senate Bill 375 (Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy)

SCAG's 2016 RTP/SCS is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The SCS will integrate land use and transportation strategies that will achieve GHG emissions reduction targets that are forecasted to achieve reduction in GHG emissions to achieve the state's 2035 and 2040 GHG reduction goals.

The project is expected to generate up to 500 jobs (250 full time and 250 part time). The 2016 RTP/SCS shows employment in the City of 73,500 in 2012 and a forecast of 95,900 in 2040. This allows the creation of 800 jobs per year between 2012 and 2040. Since the jobs created by the project are within the job growth projections in the 2016 RTP/SCS, it will not impair the region's ability to achieve the GHG reductions from project related mobile sources as required by SB 375 because the land use development pattern proposed by the project results in jobs within the total number of jobs projected by SCAG's 2016 RTP/SCS, and is consistent with the underlying assumptions upon which SCAG's 2016 RTP/SCS was based. Thus, the project is consistent with the principles of the 2016 RTP/SCS and the project would have a less than significant impact.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 RTP/SCS) for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020.

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for Southern Californians. Because the project is not growth inducing, this type of consistency analysis

does not apply. However, the major goals of the Connect SoCal are outlined in Table 4.7-6, along with the project's consistency with them.

Table 4.7-6. Project Consistency with the SCAG Connect SoCal RTP/SCS

RTP/SCS Measure	Proposed Project Consistency
Encourage regional economic prosperity and global competitiveness.	*Consistent.* The project would create up to 500 jobs (250 full time and 250 part time).
Improve mobility, accessibility, reliability, and travel safety for people and goods.	*Does not apply.* The project would not inhibit SCAG from strengthening the regional transportation network for goods movement.
Enhance the preservation, security, and resilience of the regional transportation system.	*Does not apply.* The project would not inhibit SCAG from enhancing the resilience of the regional transportation system.
Increase person and goods movement and travel choices within the transportation system.	*Does not apply.* The project would not inhibit SCAG from increasing person and goods movement and travel choices within the transportation system.
Reduce greenhouse gas emissions and improve air quality.	*Consistent*. The project would result in criteria air pollutant and GHG emissions during construction and operation. However, emissions would not exceed the SCAQMD significance thresholds.
Support healthy and equitable communities.	*Does not apply*. The project would not inhibit SCAG from supporting healthy and equitable communities.
Adapt to a changing climate and support an integrated regional development pattern and transportation network.	*Does not apply*. The project would not inhibit SCAG from adapting to a changing climate.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	*Does not apply.* The project would not inhibit SCAG from leveraging technology for the transportation system.
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	*Does not apply.* The project would not inhibit SCAG from encouraging development of diverse housing types.
Promote conservation of natural and agricultural lands and restoration of habitats.	*Consistent*. The project would not impact natural lands during construction or operation. The project site is currently vacant and undeveloped but was formerly a part of the Mountain Course within the Robinson Ranch Golf Course.

Source: SCAG 2020.
Note: SCAG = Southern California Association of Governments; GHG = greenhouse gas; SCAQMD = South Coast Air Quality Management District.

As shown in Table 4.7-6, the project would be consistent with all applicable measures within the SCAG Connect SoCal RTP/SCS.

Consistency with City of Santa Clarita Climate Action Plan

As stated previously, the City's adopted CAP defines a local threshold of significance for GHG emissions for project level submittals that trigger review by CEQA. Because goals, objectives, and policies approved under the General Plan are forecast to meet the GHG emission reduction targets mandated by AB 32 and SB 32, development projects that are able to demonstrate consistency with the General Plan will by association demonstrate consistency with the CAP and AB 32. Table 4.7-7 illustrates that the project would be consistent with the City's General Plan. Because

the CAP is only certified through 2020, this consistency analysis is provided for information only and is not relied upon for determination of significance.

Table 4.7-7. Project Consistency with Applicable Greenhouse Gas Policies of the General Plan

Objective/Policy	Consistency Analysis
Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.	
Policy CO 8.1.1: Create and adopt a Climate Action Plan within 18 months of the OVOV adoption date of the City's General Plan Update that meets State requirements.	*Consistent.* The City published its CAP in August 2012. As shown above, the project would be consistent with the GHG reduction measures and design features recommended in the City's adopted CAP. Specifically, the project would reduce its associated GHG emissions by 12.1% below the business-as-usual scenario defined in the City's CAP. This reduction is consistent with the overall reduction expected in the CAP.
Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.	
Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.	*Consistent.* The project will be built to meet and exceed the state's 2016 Green Building Standards.
Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.	*Consistent.* The project will include solar paneling on the highest point of the three-story Main Hotel building.
Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.	*Consistent.* The project will include trees and landscaping that would provide shade to reduce heating and cooling energy loads.
Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.	*Consistent.* The project will include energy efficient appliances, high-efficiency lighting, and solar panels. The project will be built to meet and exceed the state's 2016 Green Building Standards.
Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.	*Consistent.* The project will include high-efficiency lighting and outdoor lighting would be used minimally to illuminate the project site for safety and security.

Source: City of Santa Clarity 2011
Note: CAP = Climate Action Plan.

As discussed above, the project would be consistent with applicable GHG reduction measures found within the Scoping Plan and AB32, the SCAG 2016 RTP/SCS, and the City's Climate Action Plan. Therefore, the project would not conflict with an applicable GHG reduction plan and impacts would be considered **less than significant**.

4.7.5 Mitigation Measures

Project impacts would be less than significant, and no mitigation is required.

4.7.6 Level of Significance After Mitigation

Project impacts would be less than significant without mitigation.

4.7.7 References Cited

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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4.8 Hazards and Hazardous Materials

This section describes the existing hazardous materials within the vicinity of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.8.1 Environmental Setting

The existing conditions presented in this section are based on review of a Phase I Environmental Site Assessment (ESA) prepared for the project site in July 2018. The Phase I ESA is included as Appendix G of this EIR. The Phase I ESA included a search of available environmental records conducted by Environmental Data Resources Inc. The database search identified facilities within a 1-mile radius of the project site that are known to have environmental concerns or are listed as facilities with permits to generate, handle, store, or dispose of hazardous materials. The Phase I ESA also included review of agency files from the Los Angeles Regional Water Quality Control Board (RWQCB), the Department of Toxic Substances Control (DTSC), the South Coast Air Quality Management District, the Los Angeles County Fire Department, the Los Angeles County Department of Public Works, and the Los Angeles County Sanitation District. Lastly, the Phase I ESA included a site visit on June 15, 2018, an interview with the Chief Executive Officer of the Sand Canyon Country Club (property owner representative), and review of historical land use information (historical aerial photographs, topographic maps, building permits, and City Directory listings).

Site Description and History

The project site consists of approximately 77 acres of land. A small area in the southwestern portion of the project site was first developed in the 1940s or 1950s as a single-family residence. The remainder of the project site was undeveloped at that time. In the late 1990s or early 2000s, the project site was developed as a nine-hole golf course and the former single-family residence was replaced with a restroom structure for the golf course. The golf course and restroom structure on the project site have been unused since May 2016, and in July 2016, the Sand Fire burned the project site. Following the wildfire, in 2016, flooding from record rainfall covered the project site. As such, since July 2016, the project site has remained undeveloped and in its current abandoned state (CAL FIRE 2020). Some minor earthmoving activities have been conducted on the project site since that time.

Surrounding land uses include an operational golf course and related structures and parking areas to the south and east, single-family residences to the west, and undeveloped land and single-family residences to the north. The operational golf course and related structures to the south and east are associated with the Sand Canyon Country Club. The golf course was previously known as the Robinson Ranch Golf Course and the Hunters Green Golf Course. Robinson Ranch Road separates the project site from the golf course to the south. The golf course on the project site, when operational, consisted of holes 10 through 18 of the Robinson Ranch Golf Course. The existing golf course to the south consists of holes 1 through 9 of the same course. Structures on the existing golf course to the south include a clubhouse and maintenance building.

The project site is located in an area of hilly terrain. The elevation of the project site is approximately 1,600 to 1,800 feet above mean sea level. According to the Phase I ESA, an intermittent stream is present on the western portion of the project area. This area is also located within the 100-year flood zone. The Santa Clara River is approximately 0.75 miles north of the project site.

Based on a groundwater monitoring report from 2001 for the Robinson Ranch Golf Course, the depth to water in the vicinity of the project site is approximately 90 feet. The Phase I ESA noted that the groundwater flow direction was estimated to be towards the northwest.

The project site is approximately 0.5 miles southeast of the Sulphur Springs Community Elementary School and the Gorman Learning Center. Jumpstart Daycare and Preschool Center is located approximately 1 mile west of the project site.

Based on a review of the National Pipeline Mapping System Public Viewer on March 24, 2020, a gas transmission pipeline is present approximately 0.25 miles north of the project site. No hazardous liquid pipelines were mapped in the vicinity of the project site (DOT 2020).

The Phase I ESA notes that the potential for methane beneath the project site is considered low. Additionally, based on the age of the only current on-site structure, the potential for asbestos-containing materials or lead-based paint to occur is also considered to be low.

Database Search and Agency Files

A database search, included in the Phase I ESA, was conducted in May 2018. One site within the project site's vicinity was listed in the database search. This site, Robinson Ranch Golf, shares the same address as the project site (27734 Sand Canyon Road) because this site and the project site were previously part of the same golf course. The Robinson Ranch Golf site was listed in the Los Angeles County Hazardous Materials Site (HMS); Facility Index System/Facility Registry System (FINDS); Facility and Manifest Data (HAZNET); and Spills, Leaks, Investigations and Cleanup (SLIC) databases. The Phase I ESA noted that these listings were associated with the existing golf course to the south of the project site, rather than the project site itself, as the noted maintenance facilities are located on the southern adjacent site.

According to the database listings and associated Los Angeles County Department of Public Works permit, the maintenance building and/or clubhouse on the southern adjacent property maintained a grease interceptor, an aboveground clarifier, a sand trap, and a garbage grinder. Additionally, in 2010, the Robinson Ranch Golf site disposed of waste off site, consisting of an aqueous solution with total organic residues less than 10%.

The Robinson Ranch Golf site is also listed in the SLIC database. This database typically indicates a release to the ground has occurred; however, based on the research conducted during the Phase I ESA, the SLIC listing is related to a groundwater monitoring program for fertilizers and pesticides. The groundwater monitoring program was noted in the Phase I ESA to be associated with a mitigation monitoring and reporting program for the golf course between 1998 and 2001. As part of the monitoring program, three groundwater monitoring wells were installed (the locations of the wells are not known), sampled, and analyzed for phosphorus, nitrate, and pesticides. No pesticides or phosphorus were detected in the wells during the monitoring period. Nitrate concentrations detected in one well exceeded the drinking water maximum contaminant level. The SLIC case remains open, but inactive. The Phase I ESA stated that the release case is not expected to present an environmental concern for the project site.

Available agency files from the RWQCB, DTSC, the South Coast Air Quality Management District, the Los Angeles County Fire Department, the Los Angeles County Department of Public Works, and the Los Angeles County Sanitation District were also reviewed in the Phase I ESA. The records indicate that a 2,000-gallon fuel aboveground storage tank and a charbroiler were associated with the golf course. Again, the Phase I ESA assumed that the listings were associated with the southern adjacent site that shares an address with the project site.

4.8.2 Regulatory Framework

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC 9601–9675), commonly known as "Superfund," was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Through CERCLA, the U.S. Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private-party cleanup through orders, consent decrees, and other small-party settlements. EPA is authorized to implement CERCLA in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

Emergency Planning and Community Right-to-Know Act

Authorized by Title III of the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right-to-Know Act was enacted by Congress as the national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. To implement the act, Congress requires each state to appoint a State Emergency Response Commission. The State Emergency Response Commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. Broad representation by firefighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

Oil Pollution Prevention

Under Title 40 of the Code of Federal Regulations, Part 112, specific facilities must prepare, amend, and implement Spill Prevention Control and Countermeasure plans. The Spill Prevention Control and Countermeasure rule is part of the Oil Pollution Prevention regulation, the purpose of which is to prevent oil discharges to navigable waters and adjoining shorelines. The Spill Prevention Control and Countermeasure rule applies to facilities that are engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and that store oil aboveground or belowground in volumes greater than 1,320 U.S. gallons and 42,000 U.S. gallons, respectively.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the United States Code. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 of the Code of Federal Regulations reflects laws passed by Congress as of January 2, 2006.

Occupational and Safety Health Act

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Its goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Occupational and Safety Health Act also created the National Institute for Occupational Safety and Health as the research institution for the Occupational Safety and Health Administration (OSHA). OSHA is a division of the U.S. Department of Labor that oversees the administration of the Occupational and Safety Health Act and enforces standards in all 50 states.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from "cradle to grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground storage tanks (USTs) storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive UST program.

State

Cortese List

California Government Code Section 65962.5 requires that information regarding environmental impacts of hazardous substances and wastes be maintained and provided at least annually to the Secretary for Environmental Protection. Commonly referred to as the Cortese List, this information must include the following: sites impacted by hazardous wastes, public drinking water wells that contain detectable levels of contamination, USTs with unauthorized releases, solid waste disposal facilities from which there is migration of hazardous wastes, and all cease and desist and cleanup and abatement orders. This information is maintained by various agencies, including DTSC, the State Department of Health Services, State Water Resources Control Board, and the local (typically county) Certified Unified Program Agency (CUPA). Each of the agencies has their own databases/records; thus, the Cortese List is not just a single list.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 330 et seq.). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Hazardous Waste Control Act

DTSC is responsible for the enforcement of the Hazardous Waste Control Act (California Health and Safety Code, Section 25100 et seq.), which creates the framework under which hazardous wastes are managed in California.

The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

According to Title 22 of the California Code of Regulations, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency management programs. The program is implemented at the local government level by CUPAs. The program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs:

- Hazardous Waste Generation (including on-site treatment under Tiered Permitting)
- Aboveground Petroleum Storage Tanks (only the spill prevention control and countermeasure plan)
- USTs
- Hazardous Material Release Response Plans and Inventories
- California Accidental Release Prevention Program (CalARP)
- Uniform Fire Code Hazardous Material Management Plans and Inventories

The Los Angeles County Fire Department is the CUPA for Los Angeles County.

California Accidental Release Prevention Program

Similar to the EPA Risk Management Program, CalARP (19 CCR 2735.1 et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. The overall purpose of CalARP is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. CalARP meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

The Accidental Release Prevention Law is implemented by the CUPA and requires that any business where the maximum quantity of a regulated substance exceeds the specified threshold quantity register with the county as a manager of regulated substances and prepare a risk management plan. A risk management plan must contain an off-site consequence analysis, a 5-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95, of the California Health and Safety Code (Section 25500 et seq.). Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. Hazardous materials business plans contain basic information about the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state.

Chapter 6.95 of the California Health and Safety Code establishes minimum statewide standards for hazardous materials business plans (California Health and Safety Code Section 25503.5). Each business must prepare a hazardous materials business plan if that business uses, handles, or stores a hazardous material (including hazardous waste) or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount (highly toxic with a threshold limit value of 10 parts per million or less)
- Extremely hazardous substances in threshold planning quantities

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare an EPA Risk Management Program plan and a CalARP plan. The EPA Risk Management Program plan and CalARP plan provide information about the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Emergency Services Act

Under the Emergency Services Act (California Government Code Section 8550 et seq.), the State of California developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an integral part of the emergency response plan, which is administered by the Governor's Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the California Environmental Protection Agency, California Highway Patrol, RWQCB, air quality management districts, and county disaster response offices.

Water Protection

The State Water Resources Control Board protects water quality in California by setting statewide policy. The State Water Resources Control Board supports the nine RWQCBs, which, within their areas of jurisdiction, protect surface and groundwater from pollutants discharged or threatened to be discharged to the waters of the state. This protection is carried out by the RWQCB through the issuance and enforcement of National Pollutant Discharge Elimination System permits, regulation of leaking USTs and contaminated properties through the Leaking Underground Storage Tank (LUST) and SLIC programs respectively. USTs are regulated under Chapter 6.7 of the California Health and Safety Code and Title 23, Chapter 16 of the California Code of Regulations.

Local

Certified Unified Program Agency

A CUPA is a local agency that has been certified by the California Environmental Protection Agency to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority.

The Los Angeles County Fire Department was designated the CUPA for the City of Santa Clarita (City) in 1997. The CUPA is the local administrative agency that coordinates the regulation of hazardous materials and hazardous wastes in the County of Los Angeles for five programs: Hazardous Waste, UST, Aboveground Petroleum Storage Tank, Hazardous Materials Disclosure/Business Emergency Plan, and CalARP.

City of Santa Clarita Santa Clarita General Plan

The following policies from the Safety Element of the City of Santa Clarita General Plan are related to hazardous materials, emergency response, and fire (City of Santa Clarita 2011):

- **Fire Protection Services:** The Los Angeles County Fire Department provides urban and wildland fire protection services for the City, as part of the Consolidated Fire Protection District. Fire prevention activities include brush clearance compliance programs and establishing access in new subdivisions, among other activities. The Los Angeles County Fire Department has adopted wildland fire prevention programs, including incorporating the State Fire Code standards for new development in hazardous fire areas. Guidelines for fire safety measures in urban/wildland interface areas have been prepared by the California Department of Forestry and Fire Protection. These guidelines include distances for defensible space around structures.
- **Emergency Response/Hazardous Materials:** Station 76 in Valencia supports the Los Angeles County Fire Department with hazardous materials incident response.
- **Emergency Preparedness:** The Standard Emergency Management System has been adopted by the County of Los Angeles and the City for effective emergency response; the National Incident Management System is also used. The County of Los Angeles has adopted an Operational Area Emergency Response Plan. The City has adopted a Natural Hazard Mitigation Action Plan.
- **Hazardous Waste:** Hazardous waste collection for businesses are to be arranged via private waste haulers for proper disposal.

Santa Clarita Municipal Code

Pursuant to Municipal Code Section 12.64.310, a vehicle transporting hazardous materials must be attended at all times and shall not be parked on a public roadway; near a school, bridge, or tunnel; or in a residential zone. Pursuant to Municipal Code Section 23.30.040, hazardous materials and oils shall not be allowed to accumulate on the ground surface and hazardous materials and waste shall not be dumped or stored unlawfully.

4.8.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to hazards and hazardous materials are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous material would occur if the project would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would it create a significant hazard to the public or the environment.
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.8.4 Impact Analysis

The analysis of the potential hazardous materials impacts is based on information from the 2018 Phase I ESA (Appendix G), which is used to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. Potential public safety hazards (related to airports, emergency response plans, and wildland fires) are based on the information presented in the subsections below. In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable state and local ordinances and regulations (summarized in Section 4.8.2, Regulatory Framework).

Threshold HAZ-1. ***Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Construction of the proposed project would involve demolition, grading, and construction of new buildings and structures. Operation of the proposed facilities would involve use of hazardous chemicals such as commercially available cleaning products, landscaping chemicals and fertilizers, pool chemicals, and various other commercially available substances. The potential for the project to result in impacts under construction and operation is discussed below.

Construction

A variety of hazardous materials would be transported to, stored, and used during construction activities. These would include fuels for equipment and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers and applicators containing such materials. If not transported, used, or disposed of in a safe manner,

hazardous materials used during construction could represent a potential threat to the public and the environment. However, these materials would be transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. For example, hazardous materials would not be disposed of or released onto the ground or into the underlying groundwater or any surface water during construction of the proposed project, and completely enclosed containment would be provided for all refuse generated in the planning area. Additionally, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, or disposal. Use of these materials during construction for their intended purpose would not pose a significant risk to the public or the environment. Consistent with federal, state, and local requirements, transport, removal, and disposal of hazardous materials would be conducted by a permitted and licensed service provider. Any handling, transport, use, or disposal would comply with all applicable federal, state, and local agencies and regulations, including EPA, DTSC, Cal/OSHA, the California Department of Transportation, the RCRA, and the Department of Public Health (the CUPA for Los Angeles County).

Given the former uses within the project vicinity, site conditions observed, the findings reported in the Phase I ESA, and the age of restroom structure on the property, hazardous materials and/or building materials containing asbestos or lead-based paint are not anticipated. As such, construction-related activities are not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be **less than significant**. No mitigation is required.

Operations

During operations, any potential hazardous chemicals such as cleaning products, landscaping chemicals and fertilizers, pool chemicals, and various other commercially available substances, would be used in compliance with existing regulations and guidelines of OSHA, Cal/OSHA, the National Institute for Occupational Safety and Health, U.S. Department of Transportation, EPA, California Department of Public Health, and Los Angeles County Fire Department. The use, storage, and transport of hazardous materials and hazardous wastes is subject to all applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public and the environment associated with hazardous materials. As such, the proposed project would not result in a foreseeable significant hazard to public health or the environment by routine use, transport, and disposal of hazardous chemicals. Therefore, impacts would be **less than significant**, and no mitigation is required.

Threshold HAZ-2. ***Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Construction

Construction of the proposed project would involve demolition of a small restroom structure, remedial earthwork excavation, and extensive site grading followed by construction of the proposed resort. During construction, hazardous materials such as fuels and lubricants would be transported to and used on site in construction vehicles and equipment. However, the potential for use of these materials to result in significant hazards to the public or the environment would be low, for the reasons described below.

The project contractor and construction crews would be required to comply with all applicable regulations governing the storage, handling, and disposal of hazardous materials and waste. As discussed in Section 4.9, Hydrology and Water Quality, the City requires preparation of a Stormwater Pollution Prevention Plan, which would be approved by

and filed with the City. The Stormwater Pollution Prevention Plan would identify potential pollutant sources that may be associated with construction activity, identify non-stormwater discharges, and recommend means and methods to effectively prohibit the entry of pollutants into the public storm drain system during construction. In addition, the Stormwater Pollution Prevention Plan would include Best Management Practices (BMPs), including proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The BMPs must be implemented during demolition or at the start of new construction. These BMPs would be required to remain in place until a Certificate of Occupancy for the project has been issued.

These BMPs would help control the use of hazardous substances during construction and would minimize the potential for such substances to leave the site, thus reducing the potential for the public to be exposed to construction-related chemicals and materials and reducing the potential for such substances to be released into the environment. With implementation of applicable construction BMPs and adherence to applicable hazardous materials and waste regulations, impacts involving the release of hazardous materials into the environment due to upset and accident conditions during project demolition and construction would be less than significant.

In addition, due to the lack of known or anticipated site contamination, and due to the restroom structure's approximate construction date of 2000, no hazardous materials or hazardous wastes are anticipated to be encountered during demolition or grading at the project site. Therefore, there is a low risk of upset of hazardous materials during construction; impacts would be **less than significant**, and no mitigation is required.

Operation

During project operation, use of commercial cleaners, lubricants, or paints associated with janitorial, maintenance, and repair activities during resort operations as well as household cleaning supplies, would be relatively limited and would be subject to federal, state, and local health and safety requirements. As such, during operations, by adhering to existing requirements and regulations, impacts associated with reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment would be **less than significant**, and no mitigation is required.

Threshold HAZ-3. ***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

The proposed project involves the construction and operation of a new resort on the former Mountain Course of the Sand Canyon Golf Course (formerly known as the Robinson Ranch Golf Course). The nearest schools to the project site are Sulphur Springs Community Elementary School and the Gorman Learning Center, each located approximately 0.5 miles northwest of the project site. As such, there are no existing or proposed schools within 0.25 miles of the project site. Therefore, the project would not impact an existing or proposed school. Furthermore, regulations are in place regarding the handling of hazardous materials. Through compliance with regulations governing the use of hazardous materials, the potential to affect Sulphur Springs Community Elementary School and the Gorman Learning Center is limited, and impacts would be **less than significant**. No mitigation is required.

Threshold HAZ-4. ***Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would it create a significant hazard to the public or the environment?***

California Government Code Section 65962.5 combines several regulatory lists of sites that have the potential to pose a hazard related to known hazardous materials or substances. DTSC's EnviroStor database identifies sites that have

known contamination or sites for which there may be reasons to investigate further. As discussed in Section 4.8.1, Existing Conditions, a search of selected government databases was conducted as part of the Phase I ESA (Appendix G). Based on the Phase I ESA, the address associated with the project site was identified in the Los Angeles County HMS, FINDS, HAZNET, and SLIC databases. The Phase I ESA noted that these listings were associated with the existing golf course to the south of the project site, rather than the project site itself, and noted the maintenance facilities of concern are located on the specified southern adjacent site. Therefore, the project site itself is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

While the project site is located within close proximity to a site currently listed in the Los Angeles County HMS, FINDS, HAZNET, and SLIC databases, compliance with existing regulations regarding handling of hazardous materials would reduce the operation of the maintenance facilities on the adjacent site's potential to affect the project site and proposed resort facilities. As such, through compliance with existing regulations, impacts would be **less than significant**, and no mitigation is required.

Threshold HAZ-5. ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?***

The nearest public airport (Whiteman Airport) is located more than 10 miles from the project site. Furthermore, the project site is not located with the airport influence area for Whiteman Airport. As such, construction and operation of the proposed project would not pose a safety hazard for people residing or working in the project area. **No impacts** would occur.

Threshold HAZ-6. ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

This threshold addresses the potential effect of the proposed project on adopted emergency response/evacuations plans. Fire service response standards are addressed in Section 4.13, Public Services. In addition, impacts associated with the wildfire are discussed in Section 4.17, Wildfire, of this Draft EIR.

The City has identified that the terrain and layout of the Santa Clarita Valley can affect evacuation during a wildfire event or other emergency (City of Santa Clarita 2010). The City ensures that impacts to evacuation are addressed through collaboration with Los Angeles County Fire and Sheriff's Departments and through implementation of the City's General Plan, Unified Development Code, and Unified Building Code. The City's Hazard Mitigation Plan (City of Santa Clarita 2010) outlines several mitigation actions intended to facilitate emergency evacuation, including coordinating with the Los Angeles County Fire and Sheriff's Departments to coordinate the Public Alert and Warning Notification System, coordinating with the Los Angeles County Fire Department to enhance emergency services to increase the efficiency of wildfire response and recovery activities, and incorporating mass notification procedures (e.g., text, social media) into evacuation notification efforts. The Hazard Mitigation Plan also includes a goal of identifying safe evacuation routes in high-risk natural disaster areas and to coordinate with Los Angeles County to identify emergency transportation routes. The proposed project is adjacent to a secondary disaster route as identified by Los Angeles County (County of Los Angeles 2010). Sand Canyon Road serves as the secondary disaster route and joins a primary disaster route (Highway 14) approximately 1 mile north of the intersection of Sand Canyon Road and Robinson Ranch Road. From the furthest (easternmost) project site area on Robinson Ranch Road, site evacuation traffic would need to travel approximately 0.6 miles west on Robinson Ranch Road to reach the closest secondary disaster route (Sand Canyon Road).

Construction

During project construction, temporary lane closures may be necessary on Robinson Ranch Road, and construction equipment and vehicles may block on Robinson Ranch Road and/or slow traffic on Sand Canyon Road. Potential road closures and slower traffic during construction could interfere with emergency response activities, including evacuations. However, construction would be temporary and would affect only a small portion of identified disaster routes at any one time. Additionally, the Los Angeles County Sheriff's Department guidance for the City's planned response to extraordinary emergency situations would continue. However, the impact to identified disaster routes during project construction would be **potentially significant**.

Operation

During project operations, it is anticipated that all project streets and area roads would remain open at all times and would therefore not conflict with any approved emergency response or evacuation plan. Project impacts during operations would therefore be considered **less than significant**.

Threshold HAZ-7. ***Would the project expose people or structures, either directly or indirectly, 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?***

The project site is located within a Very High Fire Hazard Severity Zone. Discussion related to the project's potential to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires is further detailed in Section 4.17 of this Draft EIR.

As presented in Section 4.17, the project site is located within a Very High Fire Hazard Severity Zone and therefore has the potential to expose people or structures to significant risk involving wildland fires. Wildland fires have historically occurred on the project site, and this could present a **potentially significant impact**.

4.8.5 Mitigation Measures

Mitigation Measure (MM) FIRE-1 through MM-FIRE-11 from Section 4.17 would reduce impacts related to hazards and hazardous materials, and specifically impacts associated with an adopted emergency response plan or emergency evacuation plan and wildfire risks, to a less-than-significant level. The full text of these mitigation measures can be found in Section 4.17.

4.8.6 Level of Significance After Mitigation

Threshold HAZ-6. ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Construction

Implementation of MM-FIRE-1, which requires that the project applicant, in consultation with the City, develop an Emergency Vehicle Access Plan, would reduce this impact to **less than significant**.

Threshold HAZ-7. ***Would the project expose people or structures, either directly or indirectly, 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?***

As stated in Section 4.17, with incorporation of MM-FIRE-1 through MM-FIRE-11, potentially significant impacts would be reduced to a **less-than-significant** level.

4.8.7 References Cited

CAL FIRE (California Department of Forestry and Fire Protection). 2020. "Sand Fire, General Information." Accessed March 2020. https://www.fire.ca.gov/incidents/2016/7/22/sand-fire/.

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County of Los Angeles. 2010. "Disaster Route Maps." https://dpw.lacounty.gov/dsg/DisasterRoutes/city.cfm

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4.9 Hydrology and Water Quality

This section describes the existing hydrology and water quality of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project.

4.9.1 Environmental Setting

Regional Hydrology

The project site is located within the 1,634-square-mile Santa Clara River Watershed. The main channel of the Santa Clara River is the last major undammed river system in Southern California. Most precipitation in the watershed occurs between November and March, with precipitation varying significantly throughout the watershed and most strongly influenced by elevation and distance from the Pacific Ocean. The wettest areas occur along the high-relief mountain ranges on the west, north, and south sides of the watershed, while the driest areas occur in the lowlands of the Santa Clarita and Acton Basins. Overall, from 1971 to 2000, average annual precipitation in the watershed ranged from 9 to 45 inches, with the wettest areas in the headwaters of Sespe Creek (Stillwater Sciences 2011). The 50-year, 24-hour precipitation event for the project site is 5.8 to 6.0 inches (Appendix H).

The project site is located approximately 3,500 feet southeast of Reach 7 of the Santa Clara River, as shown in Figure 4.9-1, Regional Topography and Hydrology, which extends from Bouquet Canyon Road to eastern Santa Clarita. The portion of the Santa Clara River Watershed that is located generally upstream or east of the project site is approximately 191 square miles. The river flows generally west from its headwaters near Acton to its terminus at the Pacific Ocean, near the City of Ventura, approximately 60 miles downstream of the project site. The Santa Clara River exhibits some perennial flow in its easternmost stretches within the Angeles National Forest, then flows intermittently westward, within Los Angeles County. Reach 7 of the river, in the vicinity of the project site, is generally dry except during periods of heavy rainfall, generally during the winter months, as this reach is a losing stream, where surface water infiltrates into the groundwater aquifer below (Santa Clarita Valley Water Agency 2018; Tebo Environmental Consulting Inc. 2017). The 77-acre project site represents a very small fraction of the 191-square-mile upstream watershed and the entire 1,634-square-mile Santa Clara River Watershed.

The Sand Canyon drainage, encompassing most of the project site and the adjoining drainage to the west, as shown in Figure 4.9-1, has been partially controlled by past development. Off-site stormwater flows occur through drainage swales along roadways and through earthen open channels within urbanized areas. Sand Canyon Creek is partially improved with stream stabilizers along various reaches, and timber and rail wall revetment along its lower reaches.

Site Topography and Hydrology

The site topography is dominated by a northwest-trending bedrock ridge between Sand Canyon and Oak Springs Canyon, which descends towards the Santa Clara River, as shown in Figure 4.9-1 and Figure 4.9-2, Existing Hydrology. Several minor westerly and easterly trending ridges descend onto the site from the main northwest-trending ridge. The natural slopes on site occur at gradients of approximately 4:1 (horizontal to vertical) to approximately 1.5:1. Site elevations range from approximately 1,590 feet above mean sea level in the northwest portion of the site to approximately 1,740 feet above mean sea level in the southeast portion (Appendix F).

The western portion of the project site, which drains mostly north or west, receives off-site water from Live Oak Springs Creek, running roughly parallel to Live Oak Springs Canyon Road. The stream originates southeast of the project site, in the Magic Mountain Wilderness Area. Therefore, the total acreage of this local watershed, downstream to the Santa Clara River, is 750 acres. Live Oak Springs Creek ultimately drains into Sand Canyon Creek and the Santa Clara River. The eastern portion of the site drains to the north and northeast, toward Oak Spring Creek, which in turn flows to the Santa Clara River (Appendix H).

Water Quality

The project site is located within the Santa Clara-Calleguas Hydrologic Unit (400.51) of the Santa Clara Watershed, as designated by the Los Angeles Regional Water Quality Control Board (RWQCB). Beneficial uses of surface waters within this subarea include industrial service and process supply, agricultural supply, groundwater recharge, water contact and non-contact recreation, freshwater replenishment, wildlife habitat, warm water fish habitat, and fish spawning habitat. Beneficial uses of groundwater include municipal and domestic water supply, industrial service and process supply, and agricultural supply (RWQCB 2014).

As previously discussed, the project site is also located upstream of Reach 7 of the Santa Clara River. This portion of the river is considered an impaired water body with respect to coliform bacteria (RWQCB 2018). A Total Maximum Daily Load (TMDL) for indicator bacteria was proposed in 2011 for Reaches 3, 5, 6, and 7 of the Santa Clara River (SWRCB 2011), but final development of the TMDL has not been completed. A TMDL establishes the maximum amount of a pollutant allowed in a waterbody and serves as the starting point or planning tool for restoring water quality. Similarly, a TMDL for chloride was proposed for the Upper Santa Clara River (SWRCB 2007), but has not been completed. High levels of chloride in downstream Santa Clara River Reaches 3, 5, and 6 are causing impairment of listed beneficial uses for agricultural irrigation. Irrigation of salt-sensitive crops, such as avocados and strawberries, with water containing elevated levels of chloride can result in reduced crop yields. A chloride TMDL for these lower reaches was approved in 2005. Chloride comprises a large proportion of the total dissolved solids, which is also somewhat elevated in these downstream reaches (EPA 2003; Tebo Environmental Consulting Inc. 2017).

Both the City of Santa Clarita (City) and the County of Los Angeles (County) are responsible for maintaining surface water quality through street sweeping, catch basin clearing, public education, and other measures required by the National Pollutant Discharge Elimination System (NPDES) permits issued by the RWQCB (City of Santa Clarita 2011a).

Groundwater

Water supply in the Santa Clarita area is derived from numerous sources, including groundwater, imported water, recycled water and, when needed, groundwater banking programs. Of these sources, imported water, primarily State Water Project supplies, comprise the largest portion, with over 50% of all supplies as of 2015. Local supplies, consisting primarily of local groundwater, comprise approximately 45%. In comparison, recycled water currently comprises less than 1% of water supplies (CLWA 2016; Kennedy/Jenks Consultants 2018).

The southwest corner of the project site, where Live Oak Springs Creek traverses the site, and the adjoining Sand Canyon overlie the Santa Clara River Valley East Groundwater Basin (Basin No. 4-4.07), as shown in Figure 4.9-3, Groundwater Basin (California Department of Water Resources 2019a). This basin, which is the sole source of local groundwater for urban water supply in the City, encompasses an area of approximately 103 square miles and is bordered by the Piru Mountains on the north, impervious rocks of the Modelo and lower Saugus formations on the west, the San Gabriel Mountains on the south and east, and the Santa Susana Mountains on the south. This basin

consists of two aquifer systems, the Alluvial Aquifer and the Saugus Formation. The Alluvial Aquifer generally underlies the Santa Clara River system and its several tributaries, including Sand Canyon and Live Oak Springs Canyon, and reaches a maximum thickness of about 200 feet. The Saugus Formation underlies almost the entire Upper Santa Clara River area, to depths of at least 2,000 feet (CLWA 2016; Kennedy/Jenks Consultants 2018; City of Santa Clarita 2011b).

More specific to Sand Canyon, the southwestern portion of the project site and the adjoining Sand Canyon are underlain by the Sand Canyon Groundwater Basin, which is a subbasin of the Santa Clara River Valley East Groundwater Basin, as shown in Figure 4.9-3. This basin covers an area of approximately 1,260 acres, with a watershed of over 6,700 acres. Sand Canyon and its groundwater basin are defined by the uplifted slopes of the Mint Canyon Formation, which bound this canyon on the east and west. The southern end of the canyon is delineated by granitic rocks and the San Gabriel Fault Zone. The Sand Canyon Groundwater Basin is broader where Iron Canyon Creek joins Sand Canyon Creek (about 1 mile south of the project site), measuring about 1 mile in width, and narrowing just north of the project site to about 0.25 miles in width, as shown in Figure 4.9-3. This basin is composed of an upper Alluvial Aquifer that is unconfined and a lower aquifer associated with the underlying Mint Canyon Formation, which is semi-confined. The alluvium consists primarily of silt, sand, and gravel, whereas the Mint Canyon Formation consists of claystone, conglomerate, and sandstone. Two abandoned water wells are present within the western, Sand Canyon watershed portion of the project site, approximately 400 feet east of Live Oak Springs Canyon Creek (City of Santa Clarita 1996).

Surface runoff from the eastern portion of the site flows toward the Oak Spring Canyon Groundwater Basin, which also is a subbasin of the Santa Clara River Valley East Groundwater Basin, as shown in Figure 4.9-3. This basin is defined by the ridges of Mint Canyon Formation on the east and west, terminated at its southern apex by granitic bedrock, and bound by the Santa Clara River to the north. The basin covers an area of about 530 acres, with a watershed of about 3,650 acres. Similar to the Sand Canyon Groundwater Basin, this basin consists of two potential aquifers, including the upper Alluvial Aquifer and lower Mint Canyon Formation. Below the Mint Canyon Formation are crystalline basement rocks, which do not contain water and which crop out less than 0.5 miles south of the site (City of Santa Clarita 1996).

Flood Hazards

Sand Canyon is an area known to experience intermittent flooding. During storm events, transmission of storm flows within the street right-of-way may cause localized flooding in this area, rendering portions of Sand Canyon Road impassable. The Los Angeles County Flood Control District has constructed major flood control facilities in the City, including the concrete-lined portions of the Santa Clara River and its tributaries. The Los Angeles County Department of Public Works operates and maintains major drainage channels, storm drains, sediment basins, and streambed stabilization structures (City of Santa Clarita 2011a).

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the project site (Panel 06037C0845F), the far western portion of the project site is classified as Zone A, a Special Flood Hazard Area (without base flood elevation), and Zone AE, a Special Flood Hazard Area (with base flood elevations provided), as shown in Figure 4.9-4, Floodways. Special Flood Hazard Areas, also referred to as the base flood or 100-year flood zone, are defined as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year (FEMA 2008, 2019).

The natural stream areas in the project area are susceptible to major debris flows (or mudflows) because of erosion from steep mountain slopes with sparse vegetation. Most of the major flood events in the area are the result of high

intensity rains, which can be further aggravated by major fires that denude vegetation in the affected watershed. Flood control planning is therefore based on stream flows that are "burned and bulked," reflective of a burned watershed with high debris flows contained in the normal (clear) water flow. The project site is located within two debris potential areas within the Santa Clara Basin, including DPA-8 and DPA-9 (County of Los Angeles 2019; Appendix H).

Dam Failure

Dam failure can result from natural or human-made causes, including earthquakes, erosion, improper dam siting or design, rapidly rising flood waters, or structural flaws. Dam failure may cause loss of life, damage to property, and displacement of persons residing in the inundation path. Within the Santa Clarita Valley, the two major reservoirs that could have a significant impact on the Santa Clarita Valley in the event of a dam failure are Castaic Lake and Bouquet Creek Reservoir. The project site is not located within the potential inundation areas associated with dam failure of either of these dams (City of Santa Clarita 2011a).

4.9.2 Regulatory Framework

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The RWQCB is responsible for the protection of the beneficial uses of waters within the project area in the County. The RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) (RWQCB 2014) to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction (RWQCB 2014). Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The RWQCB has developed TMDLs for select reaches of water bodies.

Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers [ACOE] Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under

Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the ACOE prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA Section 404. For the project area, the RWQCB must provide the water quality certification required under Section 401 of the CWA. As discussed in Section 4.3, Biological Resources, of this Environmental Impact Report, an ACOE Section 404 permit is expected to be required for the project site. Water quality certification under Section 401 of the CWA, as well as the associated requirements and terms, is required in order to minimize or eliminate the potential water quality impacts associated with the action(s) requiring a federal permit.

Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In the state of California, the U.S. Environmental Protection Agency (EPA) has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less than 5.0 acres (small construction activity). The regulations also require that stormwater discharges from small municipal separate storm sewer systems (MS4s) be regulated by an NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes best management practices (BMPs) the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), which became effective July 1, 2010.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters (33 USC 1344). This permitting program is administered by the ACOE and enforced by the EPA. For more information on Section 404 of the CWA, see Section 4.3.

Safe Drinking Water Act

Congress passed the Safe Drinking Water Act in 1974 to protect public health by regulating the nation's public drinking water supply. The act authorizes EPA to set national health-based standards for drinking water to protect against both naturally occurring and human-made contaminants that may be found in drinking water.

Per Section 1424(e) of the Safe Drinking Water Act, EPA established the Sole Source Aquifer Program in 1977 to help prevent contamination of groundwater from federally funded projects. The Sole Source Aquifer Program allows for EPA environmental review of any project that is financially assisted by federal grants or federal loan guarantees to determine whether such projects would have the potential to contaminate a sole source aquifer. The Wellhead

Protection Program was developed as a part of the Ground Water Protection Strategy for States and Tribes under the 1986 Amendments to the Safe Drinking Water Act. The Wellhead Protection Program includes delineation of Wellhead Protection Program areas, detection of possible contamination, remediation and monitoring of contamination, contamination prevention, and public education and participation.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

State

Port-Cologne Water Quality Control Act

The Porter-Cologne Act of 1967 (California Water Code Section 13000 et seq.) is the basic water quality control law for California. This act requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. The SWRCB establishes statewide policy for water quality control and provides oversight of the RWQCBs' operations. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state could cause pollution or nuisance, including impacts to public health and the environment. The criteria for the proposed project area are contained in the Los Angeles Basin Plan, adopted by the RWQCB on September 11, 2014 (RWQCB 2014). Additionally, the following regulatory tools are unique to the Porter-Cologne Act:

Dredge/Fill Activities and Waste Discharge Requirements. Actions that involve, or are expected to involve, discharge of waste are subject to water quality certification under Section 401 of the CWA (e.g., if a federal permit is being sought or granted) and/or waste discharge requirements (WDRs) under the Porter-Cologne Act. Chapter 4, Article 4, of the Porter-Cologne Act (California Water Code, Sections 13260–13274) states that persons discharging or proposing to discharge waste that could affect the quality of waters of the state (other than into a community sewer system) shall file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law. For other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as isolated wetlands), WDRs are required and are issued exclusively under state law. WDRs typically require many of the same BMPs and pollution control technologies as required by NPDES-derived permits. Further, the WDRs application process is generally the same as for CWA Section 401 water quality certification, though in this case it does not matter whether the particular project is subject to federal regulation.

National Pollution Discharge Elimination System Permits

In California, the SWRCB and its RWQCBs administer the NPDES permit program. The NPDES permit system was established in the CWA to regulate both point source discharges and nonpoint source discharges to surface waters of the United States. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive stormwater management program. Construction and industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The RWQCB also issues WDRs that serve as NPDES permits under the authority delegated to the RWQCBs under the CWA. In November 1990, under Phase I of the urban runoff management strategy, the EPA published NPDES permit application requirements for municipal, industrial, and construction stormwater discharges. With regard to municipalities, the permit application requirements were directed at jurisdictions owning or operating MS4s serving populations of 100,000 or more, or contributing significant pollutants to waters of the United States.

Trash Amendments

On April 7, 2015, the SWRCB adopted an Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) to Control Trash and Part 1, Trash Provision of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries. The SWRCB's objective with Trash Amendments is to provide statewide consistency for the SWRCB's regulatory approach to reduce environmental issues associated with trash in state waters, while focusing limited resources on high trash generating areas.

The Trash Amendments prohibit the discharge of trash to surface waters of the state, or the deposition of trash where it may be discharged into surface waters of the state, and require systems to control mobilization and discharge of trash from areas with high trash generation rates (called "priority land uses"). The Trash Amendments provide a compliance schedule for retrofit of existing developed areas that discharge to municipal MS4s. The Trash Amendments will be implemented through revision of MS4 and other NPDES permits in the future.

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (California Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, while a Water Conservation District (California Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and even control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which greatly increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to "fix and collect fees and assessments for groundwater management" (California Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (California Water Code Section 10754.3).

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319—collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably, and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans (GSPs) for crucial (i.e., medium- to high-priority) groundwater basins in California.

The Santa Clara River Valley East Groundwater Basin is considered a high-priority basin with respect to SGMA (California Department of Water Resources 2019b). The passage of SGMA in 2014 requires replacing the Castaic Lake Water Agency (CLWA) Groundwater Management Plan (see the Local section) with a requirement that a GSP be prepared by 2022. The existing Groundwater Management Plan will be in effect until a GSP or alternative plan is submitted to the Department of Water Resources by 2022 (CLWA 2016).

Local

Flood Control Regulations

Both the City and County have adopted floodplain management ordinances to implement the National Flood Insurance Program and other federal requirements established by FEMA. In August 2008, the City adopted the Floodplain Management Ordinance (Chapter 10.06 of the Municipal Code). The Floodplain Management Ordinance is based on the California Model Floodplain Management Ordinance, issued by the California Department of Water Resources, which administers the National Floodplain Insurance Program for FEMA. The City's Floodplain Management Ordinance establishes floodway maps, governs land uses and construction of structures within floodplains, and establishes water surface elevations. Drainage requirements are also addressed in other portions of the City Unified Development Code and in the building code, in order to ensure that stormwater flows are directed away from buildings into drainage devices to prevent flooding.

Upper Santa Clara River Watershed Integrated Regional Water Management Plan

The Upper Santa Clara River Watershed Integrated Regional Water Management Plan (Santa Clarita Valley Water Agency 2018) examines current and future water related needs, identifies regional objectives for water related resource management, develops strategies to address identified needs, and then evaluates and offers various projects to meet the regional objectives. The purpose of this plan is to integrate planning and implementation efforts and facilitate regional cooperation, with the goals of reducing water demands, improving operational efficiency, increasing water supply, improving water quality, and promoting resource stewardship over the long term. The Integrated Regional Water Management Plan process is an open forum for stakeholders to engage on water related issues, including input on related planning efforts like the Urban Water Management Plan, Salt and Nutrient Management Plan, Enhanced Watershed Management Plan, Stormwater Resources Plan, and SGMA. The Integrated Regional Water Management Plan includes plan performance and monitoring requirements to ensure compliance with the plan.

Los Angeles County Low Impact Development Manual

The County prepared the 2014 Low Impact Development (LID) Standards Manual (LACDPW 2014) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4, within the coastal watersheds of Los Angeles County (CAS004001, Order No. R4-2012-0175), also known as the Los Angeles Water Quality Ordinance. The LID Standards Manual also fulfills the LID Standards of Chapter 17.95 of the City's Municipal Code.

This permit covers 84 cities and the unincorporated areas of Los Angeles County. Under the Permit, the Los Angeles County Flood Control District is designated as the Principal Permittee and the County, along with 84 incorporated cities, are designated as Permittees. In compliance with the Permit, the Permittees have implemented a stormwater quality management program, with the ultimate goal of accomplishing the requirements of the Permit and reducing the amount of pollutants in stormwater and urban runoff, wherein new development/redevelopment projects are required to prepare a LID report.

The County LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual addresses the following objectives and goals (LACDPW 2014):

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters, and other water bodies;
- Minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly-designed, technically-appropriate BMPs and other LID strategies; and
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly-designed, technically-appropriate hydromodification control development and technologies.

The LID Standards Manual requires that projects prioritize the selection of BMPs to retain 100% of the design storm on site through infiltration, evapotranspiration, stormwater runoff harvest and use, or a combination thereof, unless it is demonstrated that it is technically infeasible to do so. Projects that are unable to fully retain the design storm on site through retention-based stormwater quality control measures must implement alternative compliance measures, such as on-site biofiltration, off-site groundwater replenishment, off-site infiltration and/or bioretention, and off-site retrofit. Prior to off-site mitigation, the portion of the design storm that cannot be reliably retained on site must be treated to meet effluent quality standards.

City Standard Urban Stormwater Mitigation Plan

On January 1, 2016, the City adopted revised post-construction stormwater requirements for development and redevelopment projects (Chapter 17.95 of the Unified Development Code) to comply with the current MS4 Permit. The requirements aim to lessen the water quality impacts of development by using smart growth practices and integrating LID principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest, and reuse. The City has adopted by reference previously adopted Standard Urban Stormwater Mitigation Plan requirements and the County LID Standards Manual.

Chapter 17.95 of the Unified Development Code applies to the following:

- Development projects 1 acre or larger that add more than 10,000 square feet of impervious surface area

- Redevelopment projects that create more than 5,000 square feet of impervious surfaces (10,000 square feet if a single-family home)

Chapter 17.95 requirements include the following:

- New development shall not increase the peak rate of discharge of stormwater from the developed site if this increase would increase the probability of downstream erosion.
- Subdivisions shall:
    1. Concentrate or cluster new development on portions of the site while leaving the remaining land in a natural undisturbed condition;
    2. Limit clearing and grading of native vegetation to the minimum extent practicable, consistent with the construction of lots and to allow access and provide fire protection; and
    3. Preserve riparian areas and wetlands.
- Projects shall be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible, by minimizing impervious surfaces through infiltration, evapotranspiration, bioretention and/or rainfall harvest, and reuse.

To meet these standards, applicable development projects shall retain the Stormwater Quality Design Volume on site. The Stormwater Quality Design Volume is defined as the runoff from either of the following, whichever is greater:

- The 85th percentile, 24-hour runoff, as determined from the Los Angeles County 85th percentile precipitation isohyetal
- The volume of runoff produced from a 0.75-inch, 24-hour rain event

In addition, large-scale projects are required to manage the difference between the Stormwater Quality Design Volume pre- and post-construction, through on-site retention.

Landscape and Irrigation Standards

Water efficient landscape requirements, set forth in Chapter 17.51 of the City Unified Development Code, which apply to new and redevelopment projects, include the following:

- Plant materials emphasize drought-tolerant and/or native species
- Turf areas shall not exceed 50% or 20% of the total landscaped area for single-family and multi-family development, respectively

Santa Clara River Valley East Subbasin Groundwater Management Plan

CLWA prepared a Groundwater Management Plan in accordance with the provisions of California Water Code Section 10753, which was originally enacted by Assembly Bill 3030, Chapter 903, Statutes of 1991. The Groundwater Management Plan both complements and formalizes a number of existing water supply and water resource planning and management activities in CLWA's service area, which effectively encompasses the East Subbasin of the Santa Clara River Valley Groundwater Basin. CLWA's Groundwater Management Plan also includes a basin-wide monitoring program, the result of which provides input to annual reporting on water supplies and water

resources in the East Subbasin, as well as input to assessment of basin yield for water supply. The plan contains four management objectives for the basin, including the following:

1. Development of an integrated surface water, groundwater, and recycled water supply to meet existing and projected demands for municipal, agricultural, and other water uses
2. Assessment of groundwater basin conditions to determine a range of operational yield values that use local groundwater conjunctively with supplemental State Water Project supplies and recycled water to avoid groundwater overdraft
3. Preservation of groundwater quality, including active characterization and resolution of any groundwater contamination problems
4. Preservation of interrelated surface water resources, which includes managing groundwater to not adversely impact surface and groundwater discharges or quality to downstream basins(s)

A Memorandum of Understanding between CLWA and other neighboring agencies resulted in integration of their respective database management efforts and continued monitoring/reporting on the status of basin conditions, as well as on geologic and hydrologic aspects of their respective parts of the overall stream-aquifer system. These water suppliers developed and utilized a numerical groundwater flow model for analysis of groundwater basin yield and for analysis of extraction and containment of groundwater contamination.

The passage of SGMA in 2014 replaces the CLWA Groundwater Management Plan with a requirement that a GSP be prepared by 2022 in the East Subbasin, as this basin is considered a high-priority basin. The existing Groundwater Management Plan will be in effect until a GSP or alternative plan is submitted to the Department of Water Resources by 2022 (CLWA 2016).

4.9.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to hydrology and water quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the project would:

1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    i. Result in substantial erosion or siltation on- or off-site.
    ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
    iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
    iv. Impede or redirect flood flows.

4. In a flood hazard, tsunami, or seiches zones, risk release of pollutants due to project inundation.
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.9.4 Impact Analysis

Threshold HYD-1. ***Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

Construction

Project construction would include substantial grading, including approximately 579,000 cubic yards of cut and 835,000 cubic yards of fill (Appendix F). Grading would be followed by vertical building construction, paving/concrete, and landscape installation. Each of these project-related activities would result in potential soil erosion, which in turn could result in siltation of the nearby Sand Canyon Creek, Oak Spring Creek, and downstream Santa Clara River. In addition, during the construction phase of the project, petroleum hydrocarbons in site runoff could result from construction equipment/vehicle fueling or spills.

However, the project applicant would be required to comply with South Coast Air Management District Rule 403 – Fugitive Dust, to minimize wind and water erosion at the site, as well as to prepare and implement a SWPPP, in accordance with the NPDES Construction General Permit. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include BMPs, including erosion control measures and proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge.

Typical BMPs that could be incorporated into the SWPPP include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto City roadways
- Training, including for subcontractors, on general site housekeeping
- Using contained equipment wash-out and vehicle maintenance areas
- Providing educational materials on oil disposal and recycling programs
- Implementing spill control at fueling facilities

The construction-phase BMPs would assure effective control of not only sediment discharge, but also of pollutants associated with sediments, such as nutrients, heavy metals, and certain pesticides, including legacy pesticides. The SWPPP would be subject to review and approval by the City for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (LACDPW 2010). Additionally, all project construction activities

are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

Through compliance with these existing regulations, the project would not result in any significant water quality impacts related to soil erosion during the construction phase. Impacts would be **less than significant**, and no mitigation is required.

Operation

The proposed project includes replacement of existing open space, formerly used as a golf course, with a new resort including hotels, villas, restaurants, accessory buildings, and recreational facilities, including a nine-hole "chip and putt" golf course. A proposed parking lot would be designed for 400 parking stalls. In total, the proposed resort would result in the development of approximately 35 acres of the 77-acre resort site. This increase in impervious surfaces would result in increased stormwater runoff volume and rates, as well as potential impairment of water quality runoff. The major sources of pollution in runoff would be contaminants such as oil, grease, organics, pesticides, trash, and debris that accumulate on rooftops and other impervious surfaces, such as parking lots, driveways, and pedestrian walkways.

Contaminants that may be present in runoff derived from landscaped areas include nitrogen and phosphorous from fertilizers. Excess fertilizers can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter urban runoff after application on landscaped areas and can be toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. Oil and grease can enter dry-weather and stormwater runoff from vehicle leaks, traffic, and maintenance activities. Metals can enter runoff as surfaces corrode, decay, or leach. Potential gross pollutants associated with operational activities include clippings associated with landscape maintenance, street litter, and pathogens (bacteria).

During operations, the project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. All stormwater flows would be directed to storm drain features and water quality/detention basins, resulting in no contact with bare soil surfaces subject to erosion and associated siltation of downstream Sand Canyon Creek, Oak Springs Creek, and the Santa Clara River.

Water quality/detention basins would be constructed within Watershed 100, as shown in Figure 4.9-5, Water Quality LID Features, as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes. Water quality/detention basin No. 1, a 3.44 acre-feet basin located adjacent to on-site Live Oak Spring Creek, would receive runoff from the water quality treatment area illustrated on Figure 4.9-5, which includes all the development in the central and eastern portion of the site, with the exception of the proposed chip and putt golf course. Runoff from this water quality/detention basin would overflow into an existing debris basin located at the downstream, western portion of the project site. Similarly, water quality/detention basin No. 2 would detain flow from a small oak tree preserve (1.6 acres) and proposed villas in the western portion of the site. Runoff from this basin would similarly overflow into the existing debris basin (Appendix H).

Detention basins No. 1 and No. 2 are located on Holocene (past 11,700 years) colluvial soils, generally consisting of sheet wash, rock debris, and overbank deposits of sand, silt, and clay (USGS 1996). These relatively pervious alluvial sediments, located within tributary canyons to Live Oak Springs Creek, would enhance downward percolation of runoff and associated groundwater recharge, while naturally filtering out residual concentrations of

pollutants in stormwater. As a result, water quality impacts during project operations would be **less than significant**, and no mitigation is required.

Threshold HYD-2. ***Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

Based on the CLWA 2015 Urban Water Management Plan, the groundwater component of overall water supply in the Upper Santa Clara River Valley was derived from a CLWA Groundwater Management Plan (CLWA 2003). This plan was developed and analyzed to meet water requirements (municipal, agricultural, small domestic) while maintaining the Santa Clara River Valley East Groundwater Basin in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water). The Groundwater Management Plan is based on the concept that pumping can vary from year to year to allow increased groundwater use in dry periods and increased recharge during wet periods, to collectively assure that the groundwater basin is adequately replenished through various wet/dry cycles. As ultimately formalized in the Groundwater Management Plan, the operating yield concept has been quantified as ranges of annual pumping volumes to capture year-to-year pumping fluctuations in response to both hydrologic conditions and customer demand (CLWA 2003, 2016).

Ongoing work through implementation of the Groundwater Management Plan has produced three detailed technical reports, which are reflected in the Urban Water Management Plan. The primary conclusion of the technical analysis is that the groundwater operating plan will not cause detrimental short- or long-term effects to the groundwater and surface water resources in the Upper Santa Clara River Valley and is therefore sustainable. Pumping from the Alluvial Aquifer in a given year is governed by local hydrologic conditions in the eastern Santa Clara River watershed. Pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the State Water Project (CLWA 2003, 2016).

Natural or soft bottom drainage channels and wide natural floodways and flood plains maximize the groundwater recharge and help to replenish the aquifers. As an unchannelized river, the Santa Clara River and its tributaries provide opportunities for groundwater recharge. The best available evidence shows that no adverse impacts on Upper Santa Clara River Valley Basin recharge have occurred due to the existing or projected uses of local groundwater supplies, consistent with CLWA/purveyor groundwater operating plans for the basin. Urbanization in the Santa Clarita Valley has been accompanied by long-term stability in pumping and groundwater levels, as well as the addition of imported State Water Project water to the Upper Santa Clara River Valley, which together have not reduced recharge to groundwater, nor depleted the amount of groundwater in storage within the local groundwater basin (City of Santa Clarita 2010).

Based on a combination of historical operating experience and groundwater modeling analyses, the Alluvial Aquifer can supply groundwater on a long-term sustainable basis in the overall range of 30,000 to 40,000 acre-feet per year (AFY), with a probable reduction in dry years to a range of 30,000 to 35,000 AFY. Both of these ranges include almost 15,000 AFY of alluvial pumping for agricultural and other non-municipal water uses. The dry year reduction is a result of practical constraints in the eastern part of the basin, where lowered groundwater levels in dry periods have the effect of reducing pumping capacities in that shallower portion of the aquifer. Over time, directly related to the rate of suburban development and corresponding decrease in agricultural land use, the amount of alluvial pumping for agricultural water supply is expected to decrease, with an equivalent increase in the amount of alluvial pumping for municipal water supply. On an overall basis, Alluvial Aquifer pumping is intended to remain within the sustainable ranges, as summarized in the groundwater management plan (CLWA 2003, 2016).

For municipal water supply, with existing wells and pumps, the three retail water purveyors with Alluvial Aquifer wells have a combined pumping capacity from active wells of nearly 42,000 gallons per minute, which translates into a current full-time Alluvial Aquifer source capacity of approximately 67,000 AFY. In terms of adequacy and availability, the combined active Alluvial Aquifer groundwater source capacity of municipal wells (approximately 67,000 AFY) is more than sufficient to meet the current and potential future (i.e., through 2050) municipal, or urban, component of groundwater supply from the alluvium, which in the near-term (i.e., through 2020) is about 26,000 AFY of the total planned Alluvial Aquifer pumping of 38,600 AFY (including municipal and agriculture). This total anticipated pumping rate is within the 30,000 to 40,000 AFY basin yield (CLWA 2016).

In addition, although construction of buildings and hardscapes during project development would result in a decrease in pervious surfaces, with respect to the existing pervious undeveloped land, large portions of the project site would remain unpaved, as a result of (1) construction of a small chip and putt golf course in the east part of the project site, (2) large landscaped areas between proposed villas, (3) substantial open space areas, and (4) existing and proposed detention/infiltration basins. As a result, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. Impacts would be **less than significant**, and no mitigation is required.

Threshold HYD-3. ***Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:***

i. Result in substantial erosion or siltation on- or off-site?

The project site, which drains mostly northwest toward Sand Canyon Creek, receives off-site water from Live Oak Springs Creek, running through the southwest corner of the site, roughly parallel to Live Oak Springs Canyon Road, as shown in Figure 4.9-1. The stream originates southeast of the project site, in the Magic Mountain Wilderness Area. Therefore, the total acreage of this local watershed, downstream to the Santa Clara River, is 750 acres. This on-site stream ultimately drains into the Santa Clara River.

The proposed drainage watersheds would generally mimic the existing natural drainage courses. However, increased impervious surfaces associated with the proposed development would increase stormwater runoff volume and rates. (See Threshold HYD-3ii below regarding flooding.) As previously discussed, water quality/detention basins would be constructed within Watershed 100 as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes. Water quality/detention basin No. 1, a 3.44 acre-feet basin located adjacent to on-site Live Oak Spring Creek, would receive runoff from the water quality treatment area illustrated on Figure 4.9-5, which includes all the development in the central and eastern portion of the site, with the exception of the proposed chip and putt golf course. Runoff from this water quality/detention basin would overflow into an existing debris basin located at the downstream, western portion of the project site. Similarly, water quality/detention basin No. 2 would detain flow from a small oak tree preserve (1.6 acres) and proposed villas in the western portion of the site. Runoff from this basin would similarly overflow into the existing debris basin (Hunsaker 2018; Appendix H).

Table 4.9-1 provides a summary of proposed detention basin volumes, based on the 50-year, 24-hour rainfall event. Based on these analyses, proposed detention basins would accommodate proposed project-related increases in stormwater flow, such that downstream erosive scour and associated siltation would not occur. As a result, impacts would be **less than significant**, and no mitigation is required.

Table 4.9-1. Water Quality/Detention Summary

Basin No. 1	
LID Required Volume	1.67 acre-feet
Biofiltration Required Volume (150% of LID Required Volume)	2.51 acre-feet
Detention (Subarea 101-104; See Figure 4.9-5)	0.27 acre-feet
Total Required Volume (Biofiltration Volume + Detention)	2.78 acre-feet
Provided Volume	4.21 acre-feet
Basin No. 2	
LID Required Volume	0.21 acre-feet
Biofiltration Required Volume (150% of LID Required Volume)	0.32 acre-feet
Detention (Subarea 106; See Figure 4.9-5)	0.01 acre-feet
Total Required Volume (Biofiltration Volume + Detention)	0.33 acre-feet
Provided Volume	0.39 acre-feet

Source: Appendix H.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

For hydrologic analysis purposes, the project site has been divided into four watersheds in the existing and proposed conditions as shown in Figure 4.9-6, Proposed Hydrology. Each watershed was delineated using the proposed site grading for developed area and existing topography for undeveloped areas. The proposed drainage watersheds would generally mimic the existing natural drainage courses. Each watershed was subdivided into subareas of less than 40 acres for the hydrologic analysis (Hunsaker 2018; Appendix H).

Historical data indicates that spatial distribution of precipitation across the County is not uniform during storm events. To account for this spatial variability of rainfall, the Los Angeles County Department of Public Works developed rainfall isohyetal maps for the County. Isohyetal maps show the 24-hour rainfall depths expected for the 50-year storm frequency (LACDPW 2006). Based on these isohyetal maps, the 50-year, 24-hour peak runoff flow was calculated for each subarea. Although post-construction off-site stormwater discharge from Watershed 100 would increase 22% in comparison to pre-construction runoff, the watershed would similarly increase in size by 22% as a result of project grading (see Table 1 in Appendix H). However, post-construction stormwater discharge from Watersheds 200, 300, and 400 would decrease compared to pre-construction runoff. Because the site is located within two debris potential areas, the burned and bulked runoff rates were calculated by factoring the peak burned runoff rates by the appropriate bulking factor and incorporated into this drainage analysis (Appendix H).

One way to maximize use of existing downstream flood control and drainage facilities is to limit the use of impermeable surface area on development sites. Design techniques available to increase infiltration and decrease runoff on development sites include using permeable paving materials, eliminating curbs and channeling stormwater away from natural or landscaped areas, using green roofs, and allowing greater building height to limit building footprints and maximize pervious site area. These and other similar techniques, collectively known as LID, were designed to enhance water quality by limiting soil erosion, sedimentation, and pollution from pavement into streams and rivers. LID principles also reduce impacts to drainage and flood control systems from increased flows generated by new development, and provide for recharge of local groundwater aquifers. Although flood protection devices and structures are necessary in some areas to preserve public safety, these features are typically combined with other available methods of reducing flooding by promoting infiltration of stormwater at the source through LID principles (City of Santa Clarita 2011a).

The Capital Flood is the runoff produced by a 50-year frequency design storm, falling on a saturated watershed (i.e., soil moisture at field capacity). A 50-year frequency storm has a probability of 2% of being equaled or exceeded in any year. The Capital Flood applies to all areas mapped as floodways. The Capital Flood level of protection applies to all facilities constructed to drain natural depressions or sumps. These facilities include channels, closed conduits, retention basins, detention basins, pump stations, and highway underpasses (LACDPW 2006).

All drainage facilities in developed areas not covered under the Capital Flood protection conditions must meet the Urban Flood level of protection. The Urban Flood is runoff from a 25-year frequency design storm falling on a saturated watershed. A 25-year frequency design storm has a probability of 4% of being equaled or exceeded in any year (LACDPW 2006).

In addition, canyons and mountainous areas within the County are subject to burning. Capital Flood protection, which requires adding the effects of fires and erosion, under certain conditions, applies to all areas likely to remain in a natural state, regardless of size. Burned canyons and mountainous areas add debris to the runoff. Debris production yields as much as 120,000 cubic yards/square mile of watershed for major storms. Boulders up to 8 feet in diameter have been deposited in valley areas at considerable distances from their source. Therefore, flow from burned areas must be bulked. Bulking reflects increases in runoff volumes and peak flows related to inclusion and transport of sediment and debris. Debris quantities equal in volume to the storm runoff are considered 100% bulking. Debris basins, such as the existing debris basin located along the western project boundary, as shown in Figure 4.9-2, remove the sediment so that downstream flows are equal to flows from the burned watershed (LACDPW 2006). In addition, debris control facilities would be located where natural terrain drains onto proposed development areas (Appendix H).

As previously discussed, water quality/detention basins would be constructed within Watershed 100, as shown in Figure 4.9-6 as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes. Water quality/detention basin No. 1, a 3.44 acre-feet basin located on an existing creek, would receive runoff from the water quality treatment area illustrated on Figure 4.9-5 and overflow into an existing

debris basin located in the downstream, western portion of the project site. Water quality/detention basin No. 2 would detain flow from a small oak tree preserve (1.6 acres) and would similarly overflow into the existing debris basin (Hunsaker 2018; Appendix H).

Table 4.9-1 provides a summary of proposed detention basin volumes based on the 50-year, 24-hour rainfall event. Based on these analyses, proposed detention basins would accommodate proposed project-related increases in stormwater flow such that off-site flooding would not occur. In addition, on-site drainage improvements would be designed to accommodate on-site stormwater flow, such that on- or off-site flooding would not occur. As a result, impacts would be **less than significant**, and no mitigation is required.

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

As previously discussed, Table 4.9-1 provides a summary of proposed detention basin volumes based on the 50-year, 24-hour rainfall event. Based on these analyses, proposed detention basins would accommodate proposed project-related increases in stormwater flow such that the capacity of existing or planned stormwater drainage systems would not be exceeded. In addition, on-site drainage improvements would be designed to accommodate on-site stormwater flow. The relatively permeable sediments beneath the stormwater detention basins located within tributary canyons to Live Oak Springs Creek would enhance downward percolation of runoff and associated groundwater recharge, while naturally filtering out residual concentrations of pollutants in stormwater. As a result, impacts would be **less than significant**, and no mitigation is required.

iv. Impede or redirect flood flows?

Based on the FEMA Flood Insurance Rate Map for the project site, the far western portion of the project site is classified as Zone A, Special Flood Hazard Area (without base flood elevation), and Zone AE, Special Flood Hazard Area (with base flood elevations provided), as shown in Figure 4.9-4. Special Flood Hazard Areas, also referred to as the base flood or 100-year flood zone, are defined as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year. However, no structures would be placed within the on-site 100-year flood zone. As a result, **no impacts** would occur with respect to impeding or redirecting flood flows.

Threshold HYD-4. In a flood hazard, tsunami, or seiches zones, would the project risk release of pollutants due to project inundation?

As discussed in Threshold HYD-3, the far western portion of the project site is located in a Special Flood Hazard Area. This portion of the project area is susceptible to debris flows (or mudflows) as a result of high intensity rainfall events, especially following brush fires. Therefore, the burned and bulked stormwater runoff rates were calculated by factoring the peak burned runoff rates by the appropriate bulking factor and incorporated into the project-specific drainage analysis (Appendix H). Debris basins, such as the existing debris basin located along the western project boundary, as shown in Figure 4.9-2, remove the sediment so that downstream flows are equal to flows from the

burned watershed (LACDPW 2006). In addition, debris control facilities would be located where natural terrain drains onto proposed development areas.

Within the Santa Clarita Valley, the two major reservoirs that could have a significant impact on the Santa Clarita Valley in the event of a dam failure are Castaic Lake and Bouquet Creek Reservoir. The project site is not located within the potential inundation areas associated with dam failure of either of these dams. The project site is located in an inland area that would not be susceptible to tsunamis. Seiches are oscillations or waves in an enclosed body of water due to seismically induced shaking or submarine landslide. No reservoirs potentially subject to seiches are located on or upstream of the project site.

The proposed project is not industrial in nature and inundation by flood of the far western portion of the project site would not result in a release of pollutants, such as stored hazardous materials and/or waste. Therefore, impacts associated with potential release of pollutants in a flood zone would be **less than significant**, and no mitigation is required.

Threshold HYD-5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Water Quality Control Plan

In addition to surface water quality impacts, as previously described, groundwater quality could be potentially affected by infiltration of urban runoff from the project site. Identification of the groundwater pollutants of concern for the project was based on consideration of proposed land uses, as well as pollutants that have the potential to impair beneficial uses of groundwater beneath the site. The Basin Plan (RWQCB 2014) contains numerical objectives for designated groundwater basins, such as the Santa Clara River Valley East Groundwater Basin, for bacteria, mineral quality, nitrogen, and various toxic chemical compounds, and contains qualitative objectives for taste and odor. Beneficial uses of groundwater downstream of the project site include municipal and domestic water supply, industrial service and process supply, and agricultural supply. The southwest portion of the project site overlies the Sand Canyon Groundwater Subbasin of the larger Santa Clara River Valley East Groundwater Basin, as shown in Figure 4.9-3.

Proposed LID water quality/detention basins, in combination with an existing on-site debris basin, would infiltrate urban runoff into groundwater after receiving treatment in the basins. Incidental infiltration of potable irrigation water would also occur. Overall, stormwater infiltration poses few risks to underlying aquifers, as most pollutants carried by typical urban stormwater sorb to soils, accumulating in the upper layers. Metals, pathogens, petroleum hydrocarbons, and numerous organic compounds would either (1) sorb to soil particles, (2) volatilize at the surface, or (3) degrade by microbial processes in surface and subsurface soil layers.

More mobile constituents, such as nitrate, would have a greater potential for groundwater impacts due to infiltration. The Santa Clara River Valley East Groundwater Basin has a designated beneficial use of municipal water supply, and the water quality objective is the maximum contaminant level of 10 milligrams/liter nitrate and nitrite as nitrogen (RWQCB 2014). Urban runoff data collected in Los Angeles County indicate that the average nitrate concentration in stormwater runoff is 0.78 to 1.5 milligrams/liter from residential land use and 1.2 milligrams/liter from commercial land uses (Tebo Environmental Consulting Inc. 2017), which is well below the maximum contaminant level. Therefore, potential pollutants in stormwater runoff during construction and operation would not conflict with or obstruct implementation of a water quality control plan. Impacts would be **less than significant**, and no mitigation is required.

Groundwater Management Plan

Passage of SGMA in 2014 requires replacing the CLWA Groundwater Management Plan with a requirement that a GSP be prepared by 2022. The existing Groundwater Management Plan will be in effect until a GSP or alternative plan is submitted to the Department of Water Resources by 2022. As discussed for Threshold HYD-2, based on the CLWA 2015 Urban Water Management Plan, the groundwater component of overall water supply in the Upper Santa Clara River Valley was derived from the CLWA Groundwater Management Plan. This plan was developed and analyzed to meet water requirements (municipal, agricultural, small domestic) while maintaining the Santa Clara River Valley East Groundwater Basin in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water).

In terms of adequacy and availability, the combined active Alluvial Aquifer groundwater source capacity of municipal wells (approximately 67,000 AFY) is more than sufficient to meet the current and potential future (i.e., through 2050) municipal, or urban, component of groundwater supply from the alluvium, while remaining within the 30,000 to 40,000 AFY basin yield. Therefore, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be **less than significant**, and no mitigation is required.

4.9.5 Mitigation Measures

Impacts related to hydrology and water quality would be less than significant. As such, no mitigation is required.

4.9.6 Level of Significance After Mitigation

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

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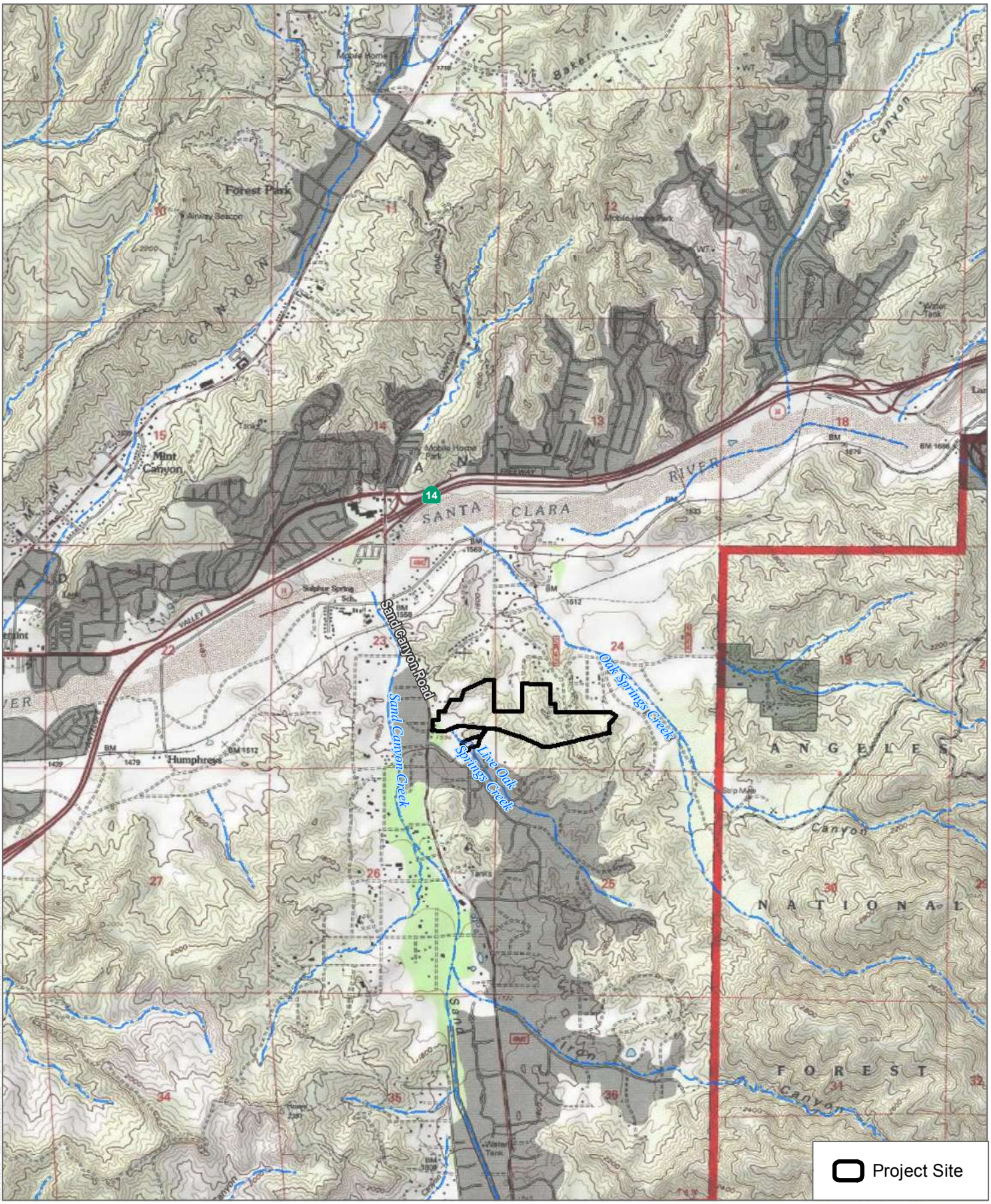

SOURCE: USGS Mint Canyon 7.5' Quadrangle

DUDEK

0 1,500 3,000 Feet

FIGURE 4.9-1

Regional Topography and Hydrology

Sand Canyon Resort Project

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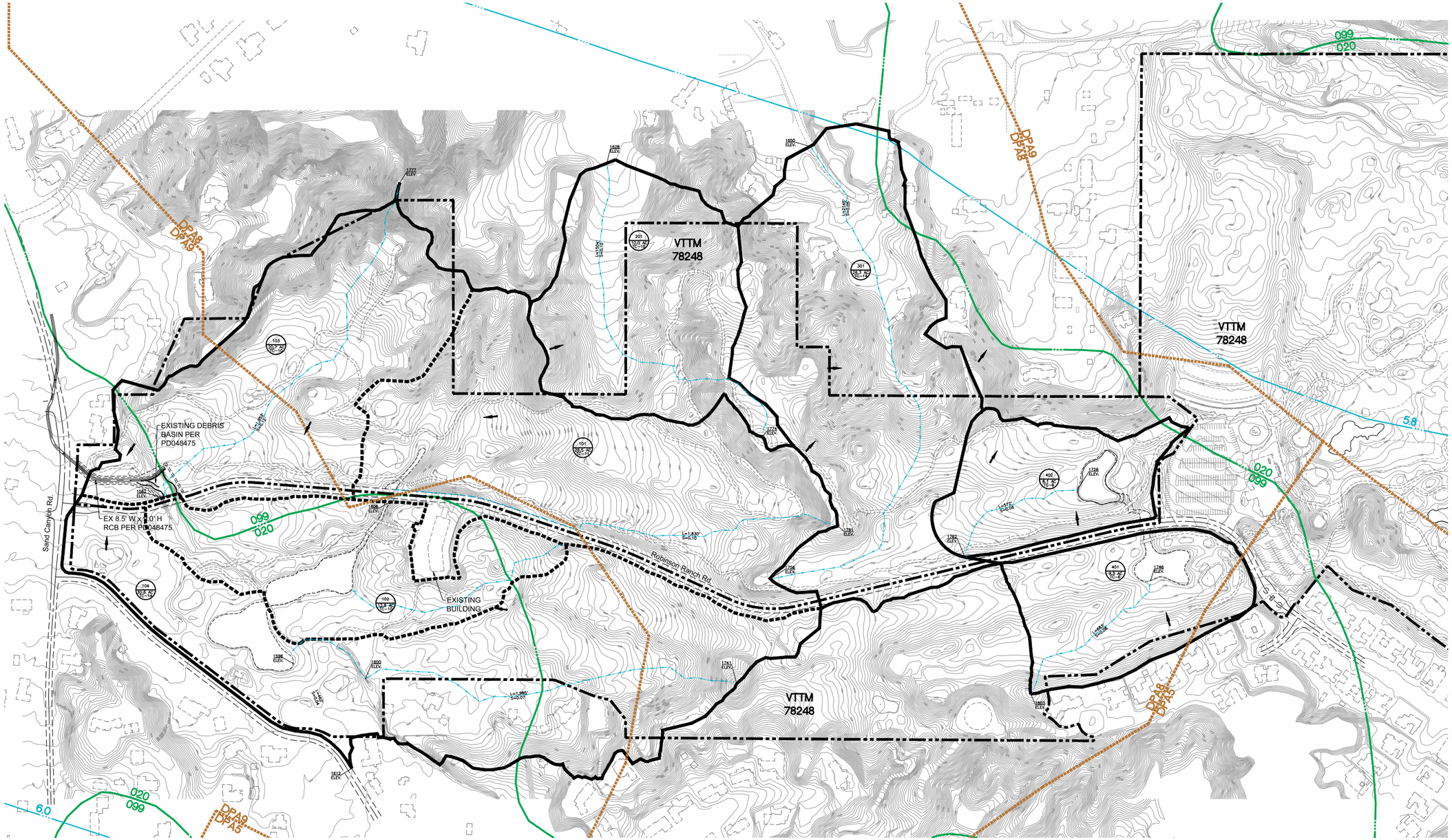

DRAINAGE DESIGN CRITERIA:

1. 50-YR, 24-HR ISOHYETS: 5.8 & 6.0
2. SOIL TYPES: 20 & 99
3. DESIGN STORMS: 50-YR, 24-HR
4. PERCENT IMPERVIOUS VALUES:
   GOLF COURSE - 3%
   DUPLEXES, TRIPLEXES AND 2-OR 3-UNIT CONDOMINIUMS AND TOWNHOUSES - 55%
5. DPA = 8, 35,000 CY PER SQ MI
6. BULK FACTOR = 1.36
7. DPA = 9, 16,500 CY PER SQ MI
8. BULK FACTOR = 1.27

SOURCE: Hunsaker 2018

FIGURE 4.9-2

Existing Hydrology

Sand Canyon Resort Project

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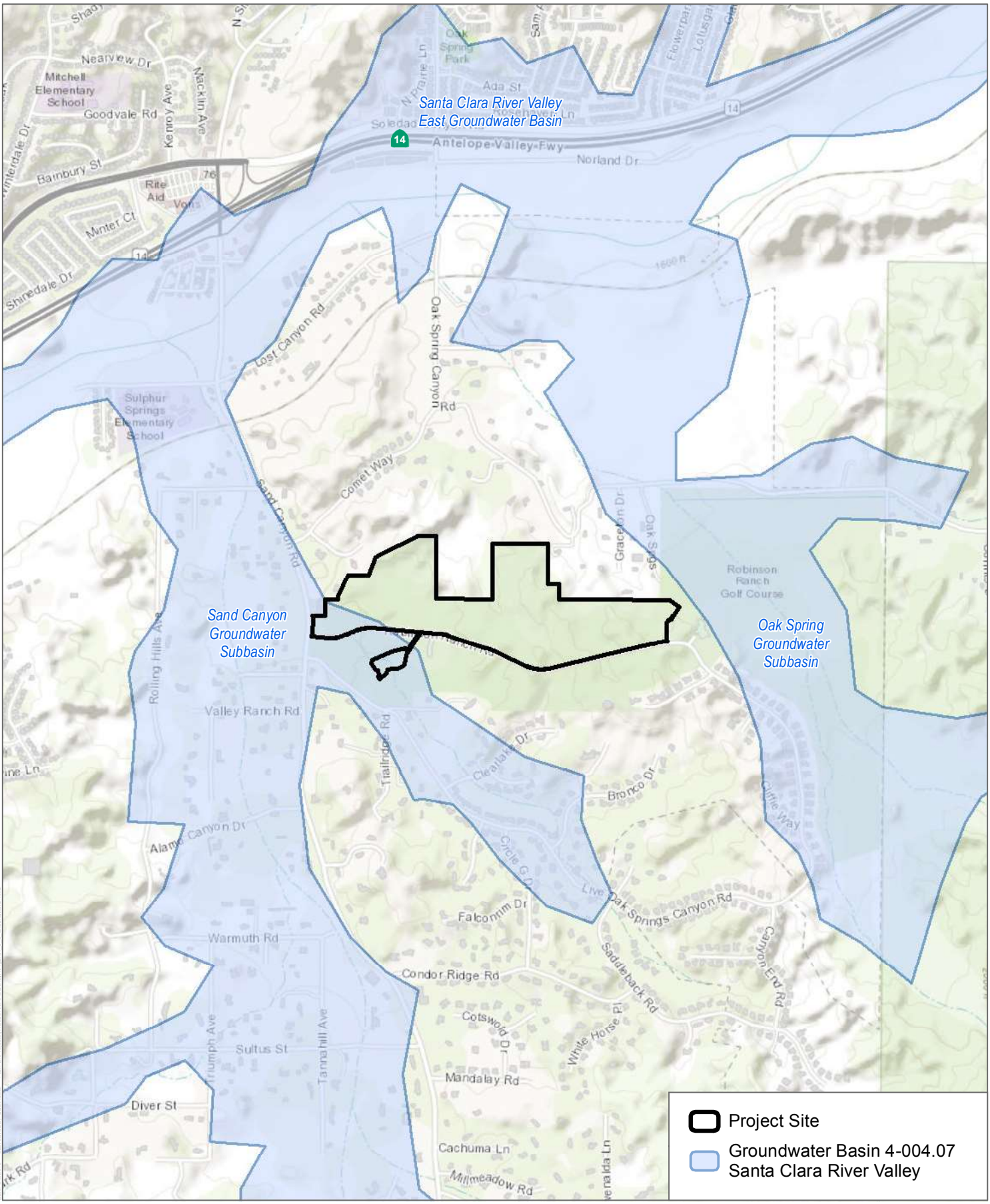

SOURCE: California Department of Water Resources 2019

DUDEK

0 750 1,500 Feet

FIGURE 4.9-3

Groundwater Basin

Sand Canyon Resort Project

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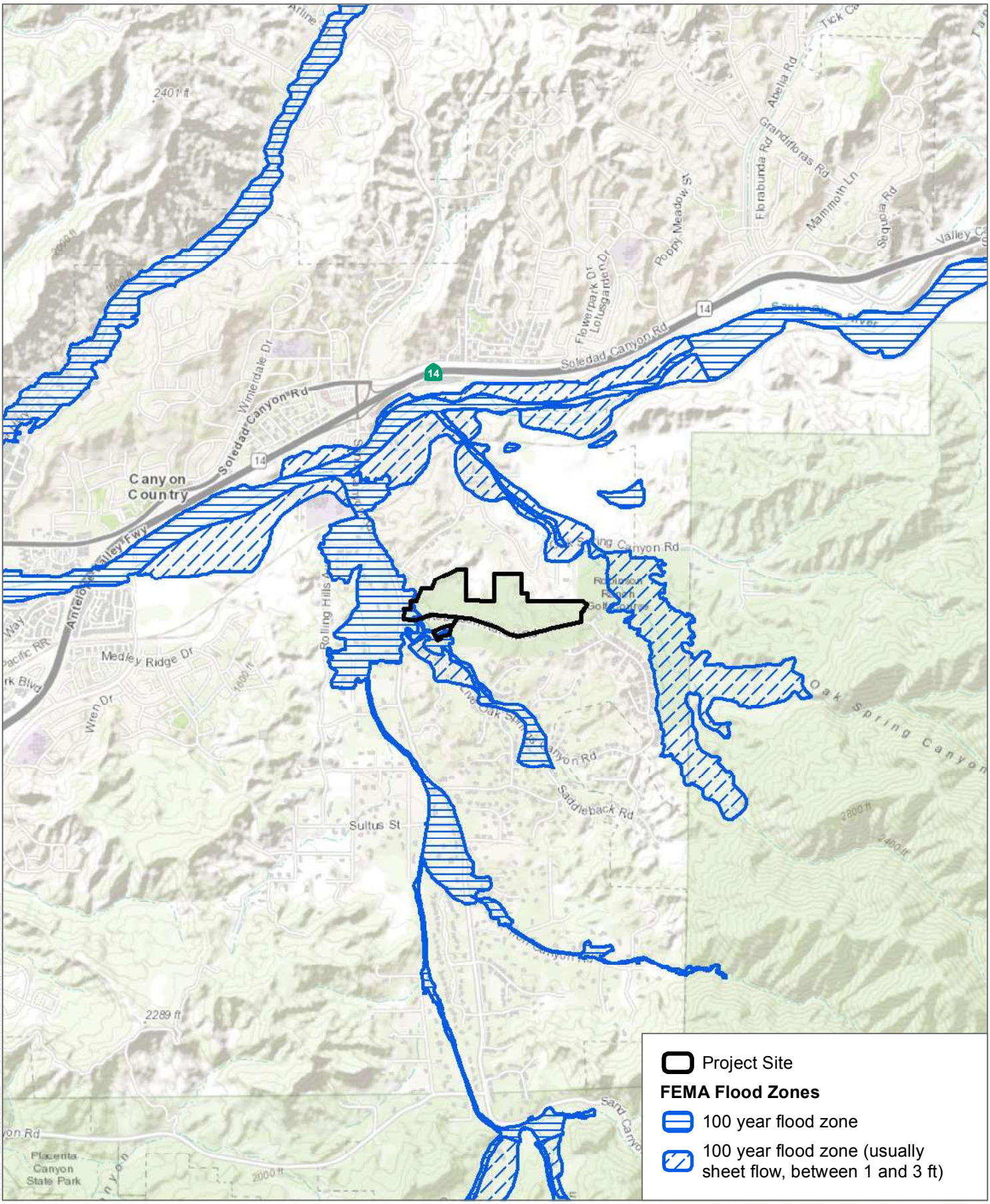

SOURCE: FEMA 2018

DUDEK

0 1,500 3,000 Feet

FIGURE 4.9-4

Floodways

Sand Canyon Resort Project

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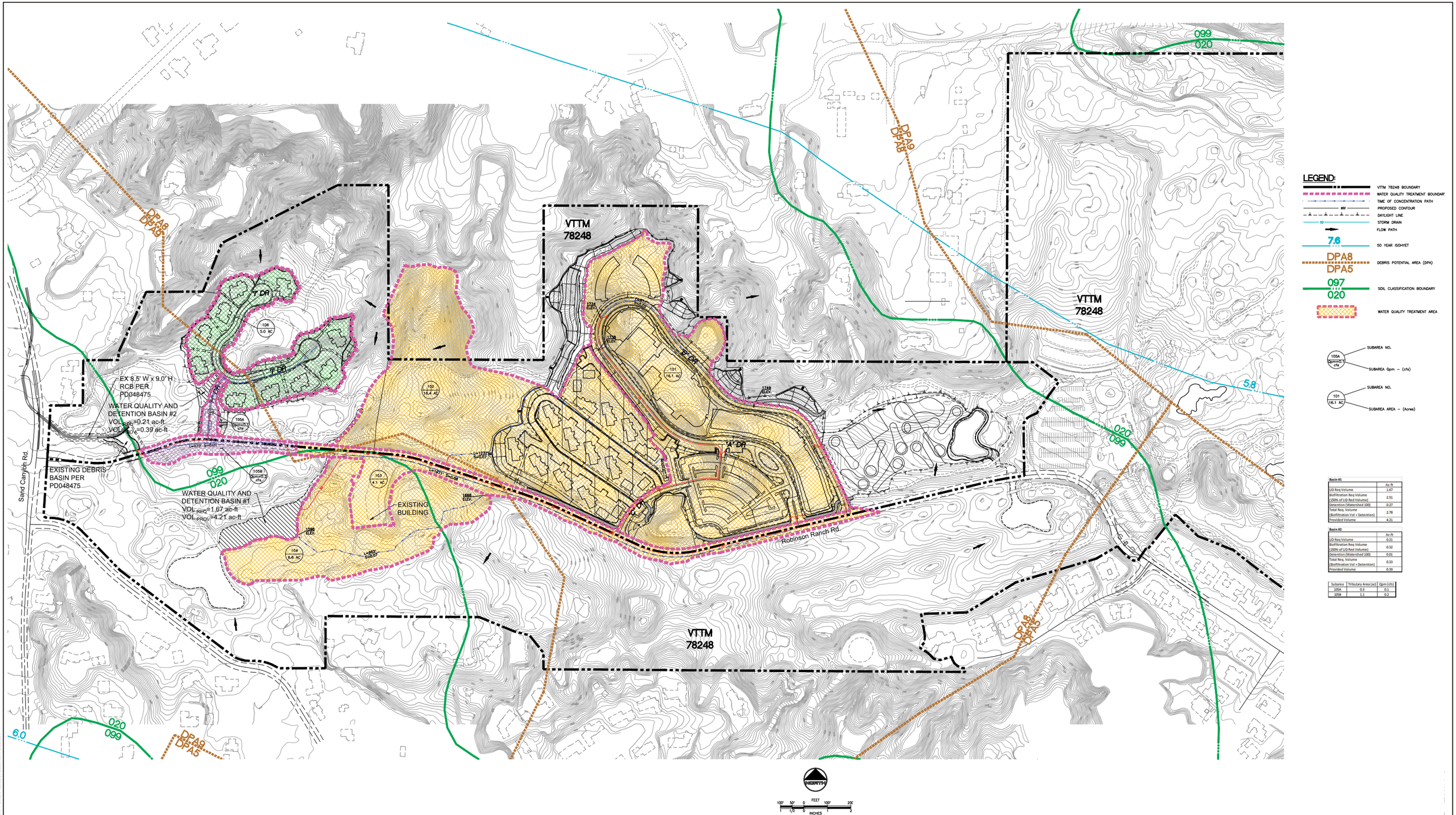

SOURCE: Hunsaker 2018

FIGURE 4.9-5

Water Quality LID Features

Sand Canyon Resort Project

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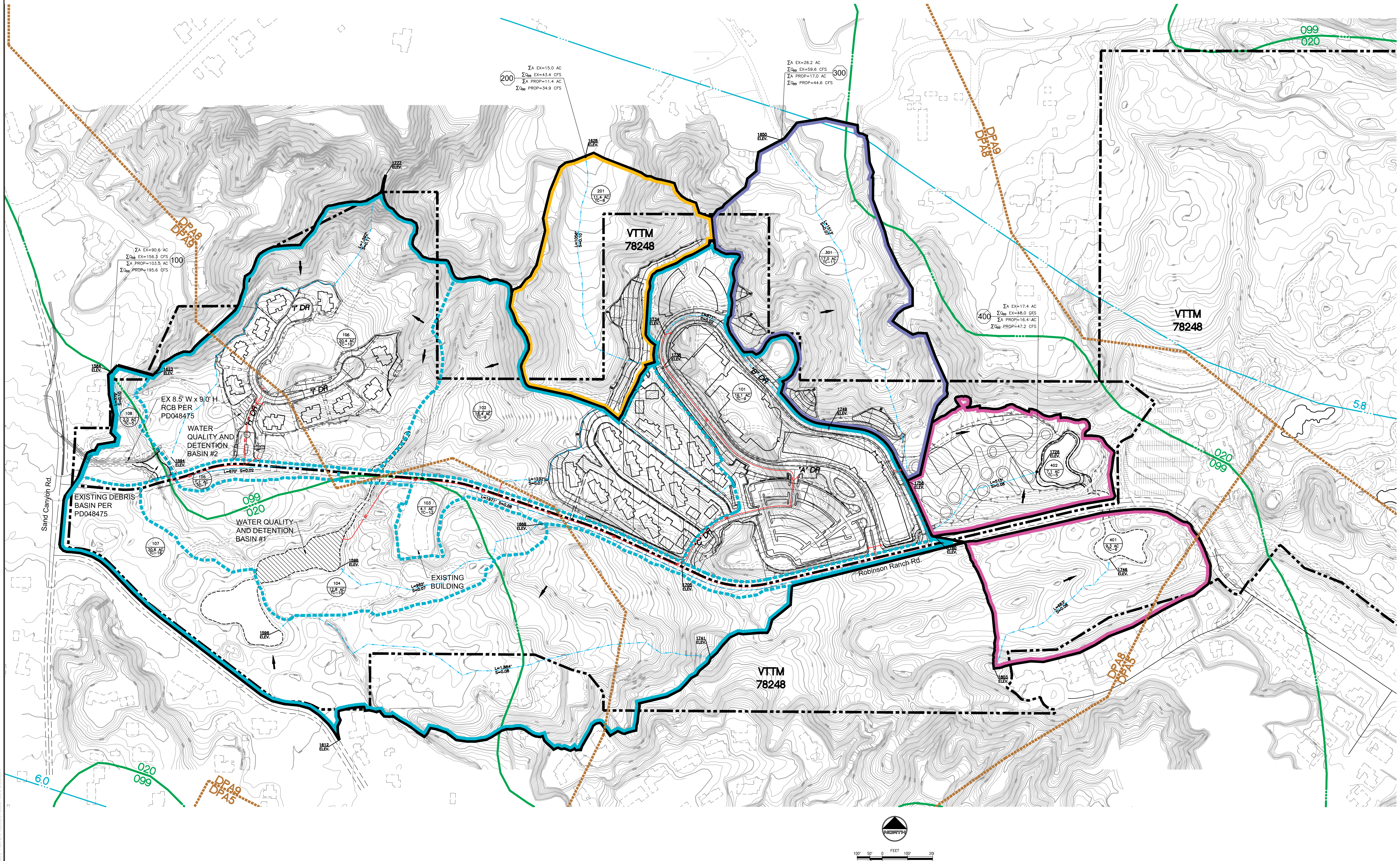

LEGEND:

- VTTM 78248 BOUNDARY
- PROPOSED DRAINAGE AREA BOUNDARY
- WATERSHED BOUNDARY
- PROPOSED DRAINAGE SUB-AREA BOUNDARY
- TIME OF CONCENTRATION PATH
- 950 PROPOSED CONTOUR
- DAYLIGHT LINE
- SD STORM DRAIN
- FLOW PATH
- 7.6 50 YEAR ISOHYET
- DPA8 / DPA5 DEBRIS POTENTIAL AREA (DPA)
- 097 / 020 SOIL CLASSIFICATION BOUNDARY
- 408A 19.9 AC Tc-8: SUBAREA NO.; SUBAREA AREA – (Acres); SUBAREA TC
- 300 WATERSHED OUTLET NODE

Subarea	Soil Type	% Imp	Area (Ac)	ΣAREA (Ac)	50-Yr Isohyet (in)	50-Yr Tc (min)	Q50 (cfs)	ΣQBB (cfs)
101	99	0.55	16.1	16.1	5.9	9	37.1	195.6
102	99	0.55	16.4	32.5	5.9	9	37.8	
103	99	0.9	4.1	36.6	5.9	12	8.4	
104	20	0.03	12.8	49.4	5.9	10	18.7	
105	99	0.9	1.1	50.5	5.9	7	2.8	
106	99	0.55	20.4	70.9	5.9	10	44.6	
107	20	0.03	30.6	101.5	5.9	16	33.1	
108	20	0.03	2.0	103.5	5.9	5	4.5	
201	99	0.03	11.4	11.4	5.9	8	26.5	34.9
301	99	0.03	17.0	17.0	5.9	11	33.4	44.6
401	99	0.03	9.3	9.3	5.9	6	25.2	47.2
402	99	0.03	7.1	16.4	5.9	5	21.2	

DRAINAGE DESIGN CRITERIA:

1. 50-YR, 24-HR ISOHYETS: 5.8 & 6.0
2. SOIL TYPES: 20 & 99
3. DESIGN STORMS: 50-YR, 24-HR
4. PERCENT IMPERVIOUS VALUES:
   GOLF COURSE – 3%
   DUPLEXES, TRIPLEXES AND 2-OR 3-UNIT CONDOMINIUMS AND TOWNHOUSES – 55%
   ROADS – 99%
5. DPA = 8, 35,000 CY PER SQ MI
6. BULK FACTOR = 1.36
7. DPA = 9, 16,500 CY PER SQ MI
8. BULK FACTOR = 1.27

SOURCE: Hunsaker 2018

DUDEK

FIGURE 4.9-6

Proposed Hydrology

Sand Canyon Resort Project

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4.10 Land Use and Planning

This section describes the existing land use and planning setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures where necessary to address potentially significant adverse impacts related to implementation of the proposed project. The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines. The information presented in this section was collected from a number of publicly available sources, including the City of Santa Clarita General Plan (City of Santa Clarita 2011), the Santa Clarita Municipal and Unified Development Code, and the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2016).

4.10.1 Environmental Setting

Existing Project Site Land Uses

The approximately 77-acre project site (which collectively consists of the 75-acre resort site and the 1.9-acre detention basin site) is predominantly vacant and consists of an abandoned nine-hole golf course. An existing 1-acre detention basin is located south of the golf course and is part of the project site. The only building that currently exists on the project site is a small restroom structure, which is no longer in service. The project site is situated in and associated with the larger 230-acre Sand Canyon Country Club property (formerly Robinson Ranch Golf Club), which consists of a 27-hole golf course, a driving range, a maintenance building, and clubhouse; however, all of the aforementioned features of the larger Sand Canyon Country Club property are outside of the project site boundaries.

Prior to 2016, the project site was utilized as a nine-hole golf course, known as the Mountain Course, at the overall Robinson Ranch Golf Club. In April 2016, the Mountain Course of the Golf Club was closed, and in July 2016, the Sand Fire burned the project site. Following the wildfire, in 2016, flooding from record rainfall covered the project site. As such, since the closing of the course in April 2016, the project site has remained in its current abandoned state. The project site is located within a Planned Development (PD) overlay zone and within the City of Santa Clarita (City) Sand Canyon Special Standards District, which was established in 1992 for the purpose of maintaining, preserving, and enhancing the rural and equestrian character of Sand Canyon. The site is designated and zoned Open Space (OS) in the City's General Plan and on its zoning map, as shown in Figure 4.10-1, Land Use and Zoning Designations. According to the City's General Plan Land Use Element, the OS designation is intended to preserve land for natural and recreational uses, including public and private parks, conservancy lands, wildlife habitats, cemeteries, golf courses, and other open space areas dedicated for public and private use (City of Santa Clarita 2011).

Surrounding Land Uses

The project site is located within the Sand Canyon community in the City of Santa Clarita, which is generally located in the southeastern portion of the City limits at the base of the San Gabriel Mountains and Angeles National Forest, which are located further south and southeast of the City and Sand Canyon. Land uses immediately surrounding the project site include residential ranch uses to the north; the Sycamore Bar and Grill and Sand Canyon Clubhouse and Golf Course to the east; and single-family residential uses to the south, southeast, and west. Surrounding land use and zoning designations are shown in Figure 4.10-1. The project site is approximately 0.5 miles southeast of the Sulphur Springs Community Elementary School and the Gorman Learning Center. Jumpstart Daycare and Preschool Center is located approximately 1 mile west of the project site.

Sand Canyon

Sand Canyon is a semi-rural community located southeast of the larger Canyon Country Community within the City. The community is bordered by the Angeles National Forest on the south and east and is accessible via Sand Canyon Road and Placerita Canyon Road. Sand Canyon's community character is largely comprised of low-density, single-family residential and equestrian land uses. The community is specifically known for its large, upscale homes and lots (City of Santa Clarita 2009).

According to the Santa Clarita Community Character and Design Guidelines, the broader architectural character of Sand Canyon and the larger Canyon Country Community is rustic and natural with building materials such as heavy timber and natural rock taking preference in forming the community aesthetic (City of Santa Clarita 2009). New development in the Sand Canyon community is required to conform to the provisions of the Sand Canyon Special Standards District (Unified Development Code [UDC] Section 17.39.030), adopted by the City in 1992, to ensure the preservation of the rural, equestrian character of Sand Canyon (UDC Section 17.39.030).

Land Use History and Previous Land Use Approvals

The project site was originally developed as a nine-hole golf course as part of the Hunters Green Residential Development and Golf Course Project (Hunters Green Project), which was approved by the City Council in 1996. The Hunters Green Project was approximately 401 acres in size and included areas that are now the Sand Canyon Country Club, as well as a residential development located to the southeast.

Prior to development of the Hunters Green Project, the project site was undeveloped and designated for low-density residential land uses (Residential Very Low [RVL]). The Hunters Green Project entailed the construction of two 18-hole golf courses, a clubhouse, a lighted driving range, and a parking lot, as well as pad grading for 76 single-family homes on the 401-acre site. The Hunters Green Project involved adding a PD overlay zone to the Hunters Green Project site to allow for the transferal of residential density to the planned residential area. The Environmental Impact Report (EIR) prepared for the Hunters Green Project found that the project would have significant unavoidable impacts to air quality, biology, aesthetics, and noise. Those significant and unavoidable impacts were deemed acceptable by City decision makers when balanced against the benefits of the project, and the Hunters Green Project was approved in 1996 (City of Santa Clarita 1996). The two golf courses within the Hunters Green Project were subsequently re-zoned and designated as OS during the General Plan update in 2011 to make the land use designation and zoning consistent with the use of the site pursuant to the Hunters Green Project approval, which required the land to remain as open space as a condition of that project's approval.

In summary, the project site has been subject to a variety of land use designations. It was originally designated and zoned for residential land use, then re-zoned as OS approximately 10 years ago after the Hunters Green Project was approved and upon update of the City's General Plan and zoning ordinance. As explained above, the City's OS land use designation includes recreational areas and golf courses.

4.10.2 Regulatory Framework

State

California Planning and Zoning Law

The California Planning and Zoning Law (Government Code Sections 65000–66499.58) provides the legal framework for California cities' and counties' local planning and land use. Under state planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties freedom in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of mandatory general plan elements described in the Government Code, which are land use, circulation, housing, conservation, open space, noise, and safety. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. The process of adopting or amending a general plan requires public participation. The City of Santa Clarita adopted the City of Santa Clarita General Plan in 2011.

Regional

Southern California Association of Governments

Founded in 1965, the Southern California Association of Governments (SCAG) is a Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. Los Angeles County and the City are within the SCAG region.

Southern California Association of Governments Regional Comprehensive Plan

The Regional Comprehensive Plan (RCP) is an advisory plan prepared by SCAG. The RCP addresses important regional issues like housing, traffic/transportation, water, and air quality. In 2008, SCAG adopted its most recent RCP, which serves as an advisory document to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. The RCP presents a vision of how Southern California can balance resource conservation, economic vitality, and quality of life. The document identifies voluntary best practices to approach growth and infrastructure challenges in an integrated and comprehensive way. It also includes goals and outcomes to measure progress toward a more sustainable region (SCAG 2008).

Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy

In addition to the RCP, SCAG has prepared and adopted the 2016 RTP/SCS. The 2016 RTP/SCS aims to plan, build, and connect communities within Southern California by providing expanded and environmentally sustainable transit options, including bus and rail service, in close proximity to residential and business land uses (SCAG 2016). The RTP/SCS contains overarching goals that are applicable to the project, including, but not limited to, the following:

- Identify regional strategic areas for infill and investment.
- Identify strategic centers based on a three-tiered system of existing, planned, and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment.

- Develop "Complete Communities."
- Plan for additional housing and jobs near transit.
- Continue to protect stable, existing single-family areas.
- Ensure adequate access to open space and preservation of habitat.
- Incorporate local input and feedback on future growth.

South Coast Air Quality Management District Air Quality Management Plan

The City of Santa Clarita is located within the South Coast Air Basin, which falls under the South Coast Air Quality Management District's jurisdiction. The South Coast Air Quality Management District's Air Quality Management Plan was implemented to ensure that air quality goals would be met while continuing to foster growth in the regional economy. The plan aims to eliminate reliance on future technologies by providing specific control measures with quantifiable emissions reductions and associated costs, and to develop a strategy with fair-share emission reductions at the federal, state, and local levels (SCAQMD 2017).

Local

City of Santa Clarita General Plan

The City of Santa Clarita General Plan is the primary planning document for the incorporated areas of the City, including the Sand Canyon community. The General Plan outlines goals and policies that are intended to guide new planning and development efforts within the City in compliance with state requirements. The City's General Plan is part of a larger collaborative planning effort between the City and the County of Los Angeles (County) called the "One Valley One Vision" project. This project involves coordination between the City and County for a unified vision for a larger planning area made up of the incorporated and unincorporated areas of the Santa Clarita Valley. While the incorporated areas of the valley are regulated by the City's General Plan, the plan has been prepared to reflect the common goals and policies agreed to as part of the One Valley One Vision project. For unincorporated areas, the County prepared the Santa Clarita Valley Area Plan, which is consistent with the City's General Plan (County of Los Angeles 2012). As such, both plans reflect the common goals and policies agreed to as part of the One Valley One Vision project (City of Santa Clarita 2011). The theme of the City's General Plan and Santa Clarita Valley Area Plan is "Valley of Villages," in recognition of the various communities and neighborhoods within the Santa Clarita Valley that wish to maintain a distinctive character, while at the same time recognizing their place in the big picture plan for development within the entire planning area.

Each element of the City's General Plan contains goals and policies that are applicable to the project (City of Santa Clarita 2011). Table 4.10-1 analyzes the consistency of the project with goals, objectives, and policies contained in the Land Use Element. The Economic Development, Circulation, Noise, Conservation and Open Space, and Safety Elements of the General Plan have goals, objectives, and policies that are applicable to the proposed project; however, because these elements are considered in Sections 4.1 through 4.17 of this EIR, only the goals from these elements (as opposed to each individual policy) are analyzed in Table 4.10-1.

Land Use Element

The Land Use Element is the City's long-term guide to development that, when used in coordination with the Santa Clarita Valley Area Plan, outlines the City and County's framework for future growth within the Santa Clarita Valley. The Land Use Element contains goals and policies that outline the City's development standards for new housing,

retail, office, industrial, parks, open space, and other uses and ensures that new development is consistent with existing and intended land use patterns (City of Santa Clarita 2011).

Economic Development Element

The Economic Development Element of the General Plan addresses key goals and policies as they pertain to the economic advancement and success of the Santa Clarita Valley. The Economic Development Element focuses on three primary goals: (1) establishing a jobs/housing balance through quality employment opportunities, (2) building an economic base for all communities through increased sales tax generation, and (3) developing economic wealth in the planning area by attracting external monies to the local economy (City of Santa Clarita 2011).

Circulation Element

The Circulation Element of the General Plan provides the framework for the continued development of sustainable and efficient transportation within the City and surrounding areas. The Circulation Element plans for increased transportation efficiency through the coordination of land use planning with transportation planning by promoting concentrated development within the City near transit facilities. The Circulation Element includes the following primary goals applicable to the proposed project: (1) a unified and well-maintained network of streets and highways that provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character (Policies C 2.1.1 through C 2.2.15); (2) reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking (Policies C 3.1.1 through C 3.3.8); (3) rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns; (4) transit impact fee rates that are based on the actual impacts of new development on the transit system and that are regularly monitored and adjusted as needed to ensure adequate mitigation; (5) a unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use, and utilitarian travel, connecting communities and the region (Policies C 6.1.1 and C 6.2.3); and (6) walkable communities, in which interconnected walkways provide a safe, comfortable, and viable alternative to driving for local destinations (Policies C 7.1.1 through C 7.1.10).

Noise Element

The General Plan's Noise Element considers the historical, existing, and future development in the City as it applies to noise-generating construction and operation activities. The Noise Element includes the following primary goals applicable to the proposed project: (1) a healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors (Policies N 1.1.1 through N 1.1.6); (2) protection for residents and sensitive receptors from traffic-generated noise (Policies N 2.1.1 through N 2.1.7); (3) protection for residential neighborhoods from excessive noise (Policies N 3.1.1 through N 3.1.9); and (4) protection of sensitive uses from commercial and industrial noise generators (Policies N 4.1.1 through N 4.1.3).

Conservation and Open Space Element

The Conservation and Open Space Element manages the impacts of development on natural resources and recreational amenities within the City by ensuring that goals and policies are in place to regulate the preservation of existing natural and recreational resources while continuing to foster economic growth and development. The goals and policies within the Conservation and Open Space Element outline the City's long-term vision of

maintaining and providing open space for the residents of Santa Clarita Valley while also ensuring that new open space and recreational resources contribute to the community character of the region (City of Santa Clarita 2011).

The California Legislature added the requirement for an Open Space Element to state law in 1970. Along with the housing element, the open space element has a clear statutory intent and, next to land use, is broadest in scope. Because of this breadth, open space issues overlap those of several other elements. For example, the Land Use Element's issues of agriculture, natural resources, recreation, enjoyment of scenic beauty, and public lands are covered by open space provisions. "Open space for the preservation of natural resources" and "open space used for the managed production of resources" encompass the concerns of the Conservation Element. "Open space for public health and safety" covers issues similar to those found in the Safety Element.

The state-mandated open space and conservation elements have been combined into a single element in the Santa Clarita Valley General Plan update, because of the close relationship between the needs to conserve natural resources and open space. In various sections of this element dealing with biological, historical, scenic, water, and other resources, the need to establish adequate open space to meet conservation goals has been discussed. Therefore, it was determined to be beneficial to plan open space protection in a coordinated manner with resource conservation and to include goals and policies for each of these issues into a single document.

Government Code Section 65560(h) defines “open-space land” as any parcel or area of land or water that is essentially unimproved and devoted to specified open-space uses and that is designated on a local or regional open space plan. Within the Santa Clarita Valley, per the General Plan’s Conservation Element, the following types of areas have been designated for open space preservation pursuant to state law:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, lake shores, banks of rivers and streams, and watershed lands.

(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lake shores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, area required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality. State law also requires that every local open-space plan shall contain an action program consisting of specific programs which the legislative body intends to pursue in implementing its open-space plan. Within the planning area, both the City and County have taken numerous actions to preserve open space land for preservation of historic and cultural resources, biological resources, park and recreation use,

> visual and aesthetic resources, aggregate resources, flood control and watershed protection, and protection of the public from hazardous conditions.

The project site is identified in the inventory of park and open space lands in Table CO-2 within the Conservation and Open Space Element of the City's General Plan (City of Santa Clarita 2011). As identified in the Conservation and Open Space Element, state law includes provisions directing preservation of open space by local jurisdictions.[1] In enacting these statutes, the Legislature made the following findings:

> (1) the preservation of open-space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation, and for the use of natural resources; (2) discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns that unnecessarily increase the costs of community services to community residents; (3) the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules, and regulations as authorized by this chapter or by other appropriate methods; (4) in order to assure that the interest of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development of statewide coordinated plans for the conservation and preservation of open-space lands; and (5) cities and counties must recognize that open-space land is a limited and valuable resource that must be conserved wherever possible.

Safety Element

The Safety Element identifies present hazardous conditions and public concerns and establishes goals and policies designed to minimize hazards to acceptable levels. The Safety Element also serves to inform residents, policy makers and developers about hazardous conditions in specific areas and to guide land use patterns and development within the City in ways and locations that will minimize hazards (City of Santa Clarita 2011).

Unified Development Code

The City adopted the UDC in 1992. The UDC consists of two titles of the City's Municipal Code: Title 16 (Subdivisions) and Title 17 (Zoning). The UDC outlines the City's standards for development, including, but not limited to, specifications relating to land use classifications, grading, development within Special Standards Districts, highways, subdivision lot requirements, and mapping specifications. Additionally, the City has adopted many land use control ordinances such as an oak tree ordinance, a hillside and ridgeline preservation ordinance, and a density bonus ordinance that are included as part of the UDC.

[1] The California Legislature added the requirement for an Open Space Element to state law in 1970. Government Code Section 65302(e) states: "[The general plan shall include] an Open Space Element as provided in Article 10.5 (commencing with [Government Code] Section 65560)."

Municipal Code Title 17

The City established the Municipal Code to provide organization for the classification and grouping of ordinances adopted by the City Council. The proposed project must comply with all applicable ordinances in the City's Municipal Code. The following sections from Title 17, Zoning, are specifically applicable to the proposed project:

- Section 17.34.010 – Community Commercial (CC) Zone. The CC zoning designation is intended for businesses providing retail and service uses that primarily serve the local market. Representative uses include restaurants, clothing stores, hardware and auto parts stores, grocery markets, pharmacies, banks and financial services, specialty retail, theaters and nightclubs, day care centers, and medical services.
- Section 17.36.010 – Open Space (OS) Zone. The OS zoning designation is intended to identify and reserve land for passive, natural, and active open space uses, including public and private parks, conservancy lands, nature preserves, wildlife habitats, water bodies and adjacent riparian habitat, wetlands areas dedicated to open space use, drainage easements, cemeteries, golf courses, and other open space areas dedicated for public or private use. Typical uses include recreation, trails, trailheads, paseos, horticulture, limited agriculture, animal grazing, and habitat preservation.
- Section 17.39.030 – Sand Canyon Special Standards District. The Sand Canyon Special Standards District is intended to maintain, preserve, and enhance the rural and equestrian character of Sand Canyon. Section 17.39.030 outlines property development standards for Sand Canyon, including but not limited to animal keeping requirements, trail development standards, street lighting, and paving standards (City of Santa Clarita 2013a).
- Section 17.38.060 – Planned Development (PD) Overlay Zone. The PD overlay zone regulations are intended to provide additional discretion for previously vacant, or underutilized parcels, as identified on the City's zoning map. All new development or redevelopment in excess of 50% valuation of the existing structures, as determined by the Building Official, whether permitted, minor, or conditionally permitted, shall be subject to the approval of a conditional use permit (City of Santa Clarita 2013b).
- Section 17.51.020 – Hillside Development. The proposed project would be subject to Section 17.51.020 of the City's Municipal Code, which establishes regulations for hillside development within the City, including maximum densities, architectural standards, building style, setbacks, and grading plans for development proposed on slopes greater than 10% (City of Santa Clarita 2013c).

4.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to land use and planning are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the project would:

1. Physically divide an established community.
2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

4.10.4 Impacts Analysis

Threshold LU-1. Would the project physically divide an established community?

The project site collectively consists of the proposed resort site, which is currently an abandoned nine-hole golf course, and an existing detention basin. The proposed project would redevelop approximately 32.4 acres of the existing golf course as a resort with associated amenities, leaving the remainder of the site as open space, as shown in Figure 4.10-2, Proposed Land Use and Zoning. The project would also include the expansion of the existing 1-acre water quality detention basin located south of the resort site and south of Robinson Ranch Road to a total of 1.9 acres. The proposed resort site would be connected to the detention basin via a new storm drain pipe. Uses immediately surrounding the project site include vacant hillside areas and residential ranch uses to the north; the Sycamore Bar and Grill and Sand Canyon Clubhouse and Golf Course to the east and south; and single-family residential uses to the south, southeast, and west. The proposed project would not inhibit access to any surrounding land uses during construction or operation. New pedestrian and open space facilities associated with the resort would provide some connectivity between the project and the surrounding land uses, as shown in Figure 3-4, Proposed Project, and Figure 3-10, Pedestrian Pathways.

The proposed three-story resort buildings would be taller than nearby single-family homes. However, while the proposed buildings would extend above nearby structures, buildings of three stories in height would not divide the surrounding community.

The project water quality detention basin expansion located south of the resort site and south of Robinson Ranch Road similarly would not divide an established community as it would be located within the existing developed golf course. The detention basin currently exists on the site and is surrounded by an existing golf course. Expansion of the detention basin would occur within the boundaries of the existing course.

As the project would not include the construction of any physical features such as new roads or easements that would run through, and thereby divide, the existing neighborhood, this impact would be **less than significant**.

Threshold LU-2. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is part of the Sand Canyon Country Club and was previously operated as a nine-hole golf course prior to its closure and then damage from wildfires and flooding in 2016. The proposed project would redevelop the site with a new resort and spa consisting of a hotel with a three-story building; a spa garden inn within three three-story buildings, villas associated with the hotel (23 buildings); three restaurants; a spa/gym/salon; conference/ballroom space; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site publicly accessible pedestrian pathways, a nine-hole "chip and putt" golf course; and a total of 400 new parking stalls, including 18 parking spaces in villa garages. In addition to the resort components, the project would also include the expansion of the existing approximately 1-acre water quality detention basin located south of the resort site and south of Robinson Ranch Road to a total of 1.9 acres. The proposed resort site would be connected to the detention basin via a new storm drain pipe.

Zoning Consistency

The site is zoned Open Space (OS). The OS designation is intended to identify and reserve land for passive, natural, and active open space uses. Development of the proposed resort buildings is not permitted within the OS land use and zoning designation. As described in Chapter 3, Project Description, of this EIR, upon approval of the project, the project site would be divided into four lots, two of which would be changed from the OS land use and zoning designation to Community Commercial (CC) through a Zone Change and General Plan Amendment, thereby resulting in the permanent loss of 32.4 acres of existing open space in the City. These approvals would allow for the resort and associated buildings to be constructed on the two lots that would be re-zoned and re-designated as CC (see Figure 4.10-2). The remaining two lots would retain an OS designation.

A PD overlay zone was applied to the project site under City Resolution 96-120, when the Hunters Green Project was approved in 1996. According to Section 17.38.060 of the UDC, the PD overlay zone is intended to provide additional discretion for previously vacant or underutilized parcels and is subject to a Conditional Use Permit (CUP) if more than 50% of the existing structures would be redeveloped (City of Santa Clarita 2013b). Pursuant to the regulations for development in PD overlay zones, the project would require approval of a CUP in order to permit development within the overlay zone. A CUP would also be required to allow for the proposed buildings to exceed 35 feet in height. The maximum height of the proposed structures would be 37 feet. A CUP is also required because the proposed project would involve grading in excess of 100,000 cubic yards of earth. The project would be subject to all requirements of the CUP as set forth by the City.

Portions of the proposed project are inconsistent with the existing OS zoning designations and regulations for the project site. If approved, the project would result in the change of the current land use and zoning designation for a portion of the project site through a General Plan Amendment and a Zone Change. As part of the project, a Tract Map Approval would be required that would subdivide the project site into four separate lots. Lot 1 (29.5 acres) and Lot 4 (13 acres) would remain as OS, for a total of 42.5 acres of OS, and Lot 2 (5.4 acres) and Lot 3 (27 acres) would be re-designated from OS to CC, for a total of 32.4 new acres of CC.

Upon approval of these changes, the project would be consistent with the new zoning for the site. However, changing the zoning on 32.4 acres of the project site from OS to CC would involve an intensification of land use that would result in a variety of environmental impacts, including impacts associated with biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, noise and vibration, transportation and traffic, and wildfire, as described throughout this EIR, as well as the permanent loss of open space. Mitigation measures have been set forth to reduce the impacts associated with the intensification of land uses and impacts specifically associated with biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, noise and vibration, transportation and traffic, and wildfire. However, the loss of permanent open space has the potential to result in land use inconsistency impacts, as discussed below.

General Plan Consistency

The proposed project would be subject to the City's General Plan policies. Table 4.10-1 outlines the applicable land use goals, objectives, and policies identified in the General Plan Land Use Element and the proposed project's consistency with each of these goals, objectives, and policies. Table 4.10-1 also lists applicable goals from other elements of the General Plan and the project's consistency with those goals. As shown in Table 4.10-1, the proposed project would be consistent with most, but not all, applicable General Plan policies. Noise impacts during construction, operational transportation impacts, and impacts associated with the permanent loss of open space would remain potentially significant impacts.

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Land Use Element	
Goal LU 1: An interconnected Valley of Villages providing diverse lifestyles, surrounded by a greenbelt of natural open space.	**Consistent**. The proposed project would replace an existing, currently unused golf course with a new resort hotel and spa. The proposed project would retain a portion of the site as open space, including 2 miles of on-site publicly accessible walkways. The proposed project would serve as a hospitality and gathering center providing additional meeting and conference space within the City.
Policy LU 1.1.1: Where appropriate, protect mountains and foothills surrounding the Valley floor from urban development by designating these areas as Open Space or Non-Urban uses on the Land Use Map.	**Inconsistent**. The project would not entail the development of previously undisturbed mountainous or foothill lands; however, the project would result in the conversion of 32.4 acres of designated open space to a resort hotel.
Policy LU 1.1.3: Discourage urban sprawl into rural areas by limiting non-contiguous, "leap-frog" development outside of areas designated for urban use.	**Consistent**. The project site is not designated for urban use. However, residential and recreational developments are located to the north, east, south, and west of the project site, and the site has been developed as golf course since 2000. As such, the project would not constitute leap-frog development, as the site has already been developed and is surrounded by development.
Policy LU 1.1.4: Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.	**Partially Consistent**. The proposed project entails the redevelopment of an existing, currently unused golf course. A golf course is a human-made recreational resource and is not a natural feature; however, the golf course does serve as open space and includes natural features such as oak trees. The project would not damage or demolish natural features that act as natural boundaries between developed areas but would result in the permanent loss of designated open space and natural features, including oak trees.
Policy LU 1.1.5: Increase infill development and re-use of underutilized sites within and adjacent to developed urban areas to achieve maximum benefit from existing infrastructure and minimize loss of open space, through redesignation of vacant sites for higher density and mixed use, where appropriate.	**Partially Consistent**. The proposed project would replace an existing, currently unused golf course with a resort hotel, spa, and commercial recreational facilities. The project site has not been in use since the property was damaged by wildfire and flooding in 2016. As such, the project would improve an underutilized site that is surrounded by residential development to the west and golf course/country club development to the east and south. The project would require re-designating approximately 32.4 acres of open space for commercial uses, thereby resulting in a permanent loss of this open space land.
Policy LU 1.1.6: Preserve the rural lifestyle in canyons and low-density, outlying areas of the Santa Clarita Valley, through designating these areas as Non-Urban on the Land Use Map, where appropriate.	**Consistent**. The project site is not designated as Non-Urban. It has been developed with a golf course since 2000 as part of a larger golf course and residential development project. Although the proposed project would result in an increase in land use intensity when compared to existing conditions, the proposed project would be required to comply with the regulations of the Sand Canyon Special Standards District, which outlines

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	development requirements to maintain, preserve, and enhance the rural, equestrian character of Sand Canyon. Additionally, the proposed project would retain over half of the project site within the open space land use designation.
Objective LU 1.2: Maintain the distinctive community character of villages and neighborhoods throughout the planning area by establishing uses, densities, and design guidelines appropriate to the particular needs and goals of each area.	**Consistent**. The project design would be consistent with the design standards in the Sand Canyon Special Standards District and would blend the commercial aspect of the project with the existing community aesthetic. The City would review the project for consistency with all applicable standards during the development review process.
Policy LU 1.2.5: In Sand Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; provide additional recreational trail links; minimize impacts to the Santa Clara River from incompatible development; and maintain community character in accordance with the City's Sand Canyon Special Standards District.	**Consistent**. The project design would be consistent with the design standards in the Sand Canyon Special Standards District and would blend the commercial portion of the project with the existing community aesthetic. The project site is not adjacent to National Forest land; rather, it is separated from the western boundary of the National Forest by the Sand Canyon Country Club uses that lie to the east of the project site (the Sycamore Bar and Grill and a golf course). The proposed project would include 2 miles of publicly accessible walkways, as shown in Figure 3-10. The proposed project is approximately 3,500 feet south of the Santa Clara River and would not impact the river, its basin, or its associated habitats.
Objective LU 1.3: Plan for density and intensity of development that respects and is reflective of the natural terrain.	**Consistent**. Although the proposed project would represent an increase in the density and intensity of development relative to existing conditions, the project site is located on a previously disturbed site (an abandoned golf course). The project design would be focused on reflecting aesthetic elements of the natural terrain and surrounding land uses. For example, the proposed resort development would be generally focused on the existing golf greens, thereby avoiding some of the more naturalized and topographically diverse areas of the site. By focusing the new development on areas that have already been substantially altered from their natural state, the project would respect and reflect the existing site terrain to the extent practicable. However, the project would result in the permanent loss of 32.4 acres of open space.
Policy LU 1.3.1: Encourage subdivision design techniques that reflect underlying physical topography or other unique physical features of the natural terrain.	**Consistent**. See response to Objective LU 1.3.
Policy LU 1.3.6: Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.	**Consistent**. Section 4.9, Hydrology and Water Quality, contains a description of the existing site drainage and hydrology. As stated in that section, the proposed drainage for the site would generally mimic the existing natural drainage. As described in Section 4.3, Biological Resources, the project site supports riparian habitat. However, much of this riparian habitat is associated with human-made ditches, drainages, a debris basin, and

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	an ornamental pond. Furthermore, mitigation has been set forth in Section 4.3 to reduce potential impacts to riparian habitat to below a level of significance. However, the project would result in the permanent loss of 32.4 acres of open space.
Goal LU 2: A mix of land uses to accommodate growth, supported by adequate resources and maintaining community assets.	**Partially Consistent**. The proposed project would provide hospitality and recreational opportunities to the community and to the City at large, while retaining some open space land uses; however, the project would result in the permanent loss of 32.4 acres of open space. The proposed resort hotel and recreational opportunities would increase the mix of land uses in the project vicinity and in the City as a whole. As demonstrated in Section 4.13, Public Services; Section 4.14, Recreation; and Section 4.16, Utilities and Service Systems, the public facilities and services in the project area would sufficiently serve the proposed project. The proposed project would also be subject to a Development Impact Fee (DIF) as outlined in the City's UDC Section 17.51.010, which would ensure fair-share contribution to public resources. However, the permanent loss of 32.4 acres of open space would result in the loss of a community asset.
Objective LU 2.1: Provide adequate, suitable sites for housing, employment, business, shopping, public facilities, public utility facilities, and community services to meet current needs and the anticipated needs of future growth.	**Consistent**. See response to Goal LU 2.
Policy LU 2.1.2: On the Land Use Map, integrate land use designations in a manner that promotes healthy, walkable communities, by providing an appropriate mix of residential and service uses in proximity to one another.	**Consistent**. The proposed project would promote healthy, walkable communities, by providing pedestrian facilities, recreational amenities, restaurants, a resort/spa, and a network of publicly accessible walkway in close proximity to nearby residences.
Policy LU 2.1.3: Provide a range of land use types and densities to reflect the special characteristics, lifestyles, and opportunities that differentiate various communities and villages in the Santa Clarita Valley, including urban, suburban, and rural living environments.	**Consistent**. The proposed project would provide hospitality and recreational land uses to the surrounding residential community and to the City at large. The project design would be consistent with the design standards in the Sand Canyon Special Standards District and would blend the commercial portion of the project with the existing community aesthetic. The City would review the project for consistency with all applicable standards during the development review process.
Objective LU 2.2: Protect significant community resources from encroachment by incompatible uses, where feasible and appropriate.	**Inconsistent**. The project entails the redevelopment of an existing, currently unused golf course within the larger Sand Canyon Country Club property. The project site is currently underutilized; however, the open space in and of itself is a notable community resource. While a portion of the site would be retained as open space for continued recreational use, 32.4 acres of open space would be permanently lost. While the proposed resort hotel uses would differ from the surrounding land uses, the site would be generally screened from most surrounding areas. However, as described throughout this EIR,

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	environmental effects would result from placing these uses within the context of the Sand Canyon community. These effects are addressed throughout this EIR, and mitigation measures have been provided to address and reduce the effects of the project to the extent feasible. Nonetheless, the project would result in significant and unavoidable impacts associated with noise during construction and operational traffic impacts. Additionally, the project would result in the permanent loss of 32.4 acres of open space, which is considered a valuable community resource per the Conservation and Open Space Element of the City's General Plan.
Policy LU 2.2.1: Identify areas of scenic or aesthetic value to the community, and minimize the designation of uses in these areas that would diminish their aesthetic quality.	**Consistent**. The proposed project would alter the appearance of the project site relative to existing conditions. However, as explained in Section 4.1, Aesthetics, the project site would not be visible from most public vantage points in the community, due to the existing terrain and vegetation. Most views to the project site would be available from Robinson Ranch Road, which is gated and extends through the Sand Canyon Country Club property. Therefore, the project site is not an area of particular scenic or aesthetic value to the community, as views of the project site from public vantage points are limited, and the project site is developed with an unused golf course.
Policy LU 2.2.3: Consistent with adopted plans, ensure that adequate open space is set aside and protected from development throughout the planning area in order to provide the benefits of watershed management, habitat preservation and connectivity, and recreational opportunities.	**Inconsistent**. The project site is designated as open space and has been developed as a private golf course since 2000. The proposed project would require re-designation of approximately 32.4 acres of the site as community commercial, retaining the remainder as open space, thereby resulting in the permanent loss of 32.4 acres of open space. The permanent loss of 32.4 acres of open space would result in direct conflicts with the Conservation and Open Space Element of the City's General Plan, which outlines the importance of maintaining and preserving open space in the City.
Goal LU 3: Healthy and safe neighborhoods for all residents.	**Partially Consistent**. The proposed project would consist of a resort hotel, spa, and associated amenities, including wedding grounds, ballrooms, meeting rooms, and outdoor recreational facilities. The proposed project would incorporate a number of design features and mitigation measures that would preserve and promote health and safety on the project site and in the project vicinity. The proposed project would include 2 miles of publicly accessible walkways, as well as natural and active open space areas. These features of the project would promote health and an active lifestyle in the project area. In coordination with the County of Los Angeles Sheriff's Department, the proposed project would incorporate operational practices and design elements to increase on-site safety and to reduce the potential for crime to occur. Building entries, parking areas, and walkways would be sufficiently lit, which would facilitate safe pedestrian movement within the project site. The project also would be subject to Section 1117.2.1 of the Los

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	Angeles County Fire Code, which contains requirements to reduce hazards from the threat of fire. As described in Section 4.17, Wildfires, mitigation measures have been set forth that would reduce the potential effects of the project related to wildfire hazards (MM-FIRE-1 through MM-FIRE-11). While the proposed project would result in air quality and noise impacts that could effect surrounding sensitive receptors, mitigation measures would be applied to the project to reduce those effects to the extent feasible (see Section 4.2, Air Quality, and Section 4.11, Noise, for details). As explained in Section 4.15, Transportation, the proposed project could affect traffic in the surrounding neighborhoods, and the project would exceed the City's established vehicle miles travelled (VMT) threshold. As such, while the proposed project would have some impacts on the surrounding neighborhoods, as discussed throughout this EIR, impacts would be addressed and reduced to the extent feasible through mitigation. Nonetheless, significant and unavoidable impacts noise impacts would occur during construction, and traffic impacts would remain significant and unavoidable during operation.
Policy LU 3.3.2: In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.	**Consistent**. As described in Section 4.17, the proposed project is located in a Very High Fire Hazard Severity Zone and, therefore, is subject to wildland fire danger. However, the proposed project would be designed and constructed to the latest fire hazard zone construction requirements outlined in California Building Code, Chapter 7A, and the California Code of Regulations Section 337 (CAL FIRE 2011). The proposed project would provide safe and fire-resistant facilities and would serve as an evacuation shelter for the Sand Canyon community. Additionally, project operations would not impede the nearest emergency evacuation route, Sand Canyon Road, which bounds the project's western perimeter and is one of the City's primary emergency evacuation routes (PW 2010). While the project site is within an area subject to wildland fire danger, MM-FIRE-1 through MM-FIRE-11 would reduce potential wildfire-related effects to a less-than-significant level.
Objective LU 3.4: Encourage creation of pleasant neighborhoods that provide a high quality of life for residents.	**Consistent**. The project site is an existing, currently unused golf course. While the project site is located within the vicinity of residential neighborhoods, the site is not developed with neighborhood uses, nor does the project involve development of a new neighborhood. However, the proposed project would promote a high quality of life for existing City residents by providing numerous hospitality and recreational amenities for the local community and for the City at large, including a resort hotel, spa, restaurants, wedding grounds, and event spaces. Additionally, a portion of the project site would be retained as open space and would provide publicly accessible walkways and a variety of commercial recreational activities. The project would be designed consistent with the

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	provisions of the Sand Canyon Special Standards District and would blend the commercial development with the community aesthetic.
Policy LU 3.4.1: Promote the inclusion of green spaces, neighborhood parks, and other gathering places that allow neighbors to meet one another and encourage "eyes on the street" for safety purposes.	**Consistent**. The project site is an existing, currently unused golf course. While the project site is located within the vicinity of residential neighborhoods, the site is not developed with neighborhood uses, nor does the project involve development of a new neighborhood. However, the project would provide a number of amenities and gathering places that would be available for use by residents within the vicinity of the project site. Additionally, the project would incorporate a number of safety features that would reduce the potential for safety hazards and crime on the site and within the vicinity of the site. The proposed project would provide open space and commercial recreational amenities, including 2 miles of publicly accessible walkways. Additionally, in coordination with the County of Los Angeles Sheriff's Department, the proposed project would incorporate operational practices and design elements to increase on-site safety and to reduce the potential for crime to occur. For example, building entries, parking areas, and walkways would be sufficiently lit, which would facilitate safe pedestrian movement within the project site and would encourage visibility of otherwise secluded places. However, the project would result in the permanent loss of 32.4 acres of open space. Also see response to Goal LU 1.
Goal LU 4: A diverse and healthy economy.	**Consistent**. The proposed project would provide extensive hospitality and recreational amenities, all of which would serve to attract monies from Los Angeles County and the surrounding region. Additionally, upon operation, the proposed project is expected to provide an additional 500 local employment opportunities. Given this, the project would support the City's goal of providing a diverse and healthy economy.
Objective LU 4.1: Promote creation of strong regional and local economies.	**Consistent**. See response to Goal LU 4.
Policy LU 4.1.3: Direct business creation and expansion for larger companies within and adjacent to existing and planned business centers and major transportation corridors.	**Consistent**. The proposed project is planned on an existing, currently unused golf course within the Sand Canyon Country Club property and would be compatible with the existing Sand Canyon Country Club and associated amenities. The project site lies adjacent to the existing Sand Canyon Road, which is an important transportation route within the City with direct connection to State Route 14.
Policy LU 4.1.4: Promote economic opportunity for all segments of the community, including small businesses and new businesses.	**Consistent**. The proposed project would provide extensive hospitality and commercial recreational amenities, all of which would serve to attract monies from Los Angeles County and the surrounding region. Additionally, upon operation, the proposed project is expected to provide an additional 500 local employment opportunities. With the associated increase in external monies and employment opportunities, the proposed

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Goals, Objectives, and Policies	Discussion
	project would indirectly promote economic opportunity for all segments of the community, including small businesses and new businesses. Additionally, the project would include ballrooms and meeting rooms, which would provide a place for local businesses (including small businesses and new businesses) to hold meetings or host events. The hotel facilities would also provide a place for traveling or visiting businesspeople to stay in the area.
Objective LU 4.2: Promote job creation, focusing on employment generators in the technical and professional sectors.	**Consistent**. The proposed project is expected to generate approximately 500 jobs. While these opportunities would not be focused on the technical and professional sectors, the project would include ballrooms and meeting rooms that would provide meeting places for any business sector, thereby supporting business activity and growth in the area. The hotel facilities would also provide a place for traveling or visiting businesspeople to stay in the area.
Policy LU 4.2.2: Achieve a balanced ratio of jobs to housing through business expansion and economic development programs, with a goal of at least 1.5 jobs per household.	**Consistent**. See response to Goal LU 4. As shown in Section 4.12, Population and Housing, the City's current jobs-to-household ratio is slightly under the goal of 1.5 jobs per household. Table 4.12-1 demonstrates that the current jobs-to-household ratio is approximately 1.11 jobs per household. In the future (by 2035) this ratio is projected to decrease to 1.06 jobs per household. By providing 500 jobs to the City, the proposed project would help support the City's goal of having at least 1.5 jobs per household.
Policy LU 4.2.3: Encourage businesses to locate in all appropriate areas of the community to encourage job creation in closer proximity to workforce housing.	**Consistent**. The area surrounding the project site is largely developed with residential land uses, and the proposed resort would introduce job opportunities that would be easily accessible to nearby residents. Also see response to Goal LU 4.
Objective LU 4.4: Expand infrastructure to attract and sustain new business.	**Consistent**. The proposed project would improve and expand the existing on-site public utility infrastructure to accommodate the resort, spa, ancillary buildings, and landscaping.
Policy LU 4.4.4: Protect and enhance public utility facilities as necessary to maintain the safety, reliability, integrity, and security of essential public service systems for all Valley residents.	**Consistent**. See response to Objective LU 4.4. As described in Section 4.13, development of the proposed project would not have a significant impact relative to public services. As described in Section 4.16, the proposed project would be served by existing utilities and would not result in a significant impact relative to utilities and service systems.
Policy LU 4.5.1: Promote inclusion of employee amenities in the workplace, including but not limited to outdoor seating and break areas, child care services, wellness facilities, and facilities for bicycle commuters, including bike lockers and showers where appropriate.	**Consistent**. The proposed project would include a variety of amenities and services for employees, including provision of rideshare information, preferential parking, rideshare vehicle loading, bicycle storage facilities, shower facilities, and a central lunch area for employees. Additionally, the City of Santa Clarita Transit bus service's nearest stop (on Route 6) is located 2 miles from the project site. The proposed project is located in close proximity to surrounding residential land uses and could therefore attract employees within a walkable distance to the project site. The project would also provide shuttle

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Goals, Objectives, and Policies	Discussion
	connection between the resort and the nearby train station at Vista Canyon (which is under construction at the time of this writing). Additionally, the employees would be able to use the on-site pedestrian pathways and open spaces areas for recreation, social gathering, and/or breaks.
Policy LU 4.5.2: Encourage the provision of usable open space that is accessible to employees and visitors, and discourage the provision of large areas of water-consuming landscaping that are not usable or accessible.	**Partially Consistent**. Approximately 32.4 acres of the 77-acre project site would be re-designated as Community Commercial and developed with the resort hotel and associated amenities. The remainder of the site would be retained as open space. The proposed recreational amenities would include a publicly accessible pathway network and commercial recreational activities, including a "chip and putt' golf course. The proposed project would include landscaping, which would require watering. Per Chapter 17.51 of the City's Unified Development Code (UDC), the project's landscape design would be required to emphasize drought-tolerant and/or native species. However, the project would result in the permanent loss of 32.4 acres of open space.
Goal LU 5: Enhanced mobility through alternative transportation choices and land use patterns.	**Consistent**. See response to Policy LU 4.5.1.
Goal LU 5.1: Provide for alternative travel modes linking neighborhoods, commercial districts, and job centers.	**Consistent**. See response to Goal LU 4.5.1.
Policy LU 5.1.1: Require safe, secure, clearly-delineated, adequately illuminated walkways and bicycle facilities in all commercial and business centers.	**Consistent**. The proposed project would be designed consistent with the City's Outdoor Lighting Standards (UDC Section 17.51.050) and would thus provide safe, secure, clearly delineated, and adequately illuminated walkways and bicycle facilities.
Policy LU 5.1.2: Require connectivity between walkways and bikeways serving neighborhoods and nearby commercial areas, schools, parks, and other supporting services and facilities.	**Consistent**. The proposed project is not in close proximity to other commercial and business centers. However, 2 miles of on-site publicly accessible walkways would ensure that connectivity is prioritized between different aspects of the project and that sufficient accessibility is provided throughout the larger Sand Canyon Country Club. The proposed pedestrian pathway network through the site is shown in Figure 3-10.
Objective LU 5.2: Coordinate land use designations with support services and public transit in order to encourage vehicle trip reduction.	**Consistent**. See response to Goal LU 4.5.1.
Policy LU 5.2.3: Promote location of non-polluting businesses providing employment opportunities in proximity to neighborhoods, to encourage walking to work.	**Consistent**. See response to Goal LU 4.5.1.
Goal LU 6: A scenic and beautiful urban environment that builds on the community's history and natural setting.	**Consistent**. See response to Objective LU 1.2.

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Goals, Objectives, and Policies	Discussion
Objective LU 6.1: Maintain the natural beauty of the Santa Clarita Valley's hillsides, significant ridgelines, canyons, oak woodlands, rivers and streams.	**Consistent**. The proposed project would be predominantly developed on unused golf greens within the existing Sand Canyon Country Club, which would minimize the extent to which natural features are disturbed or removed. As described in Section 4.3, the project site contains oak woodlands. However, the project would be required to comply with the City's Oak Tree Ordinance, and 115 on-site oak trees would be protected in-place during project construction and operation. Although 21 oak trees would be removed to accommodate project implementation, compliance with the required Oak Tree Permit would ensure that the trees are replaced on site or that funding is provided for the City's Oak Tree Fund. The Santa Clara River and associated streams would not be affected by project implementation. Water features on the project site are generally human made, and impacts to these water features would be reduced to a less-than-significant level with implementation of MM-BIO-4. Additionally, the proposed project would adhere to Section 17.51.020 of the City's UDC, which establishes regulations for hillside development within the City, including maximum densities, architectural standards, building style, setbacks, and grading plans for development proposed on slopes of 10% or more. There are no significant ridgelines on the project site, and the project would not adversely affect or remove a significant ridgeline. However, the project would result in the permanent loss of 32.4 acres of open space.
Policy LU 6.1.3: Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to clustering of development; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.	**Consistent**. The proposed project is located on a previously disturbed and graded site that is an existing, unused golf course. The project would be subject to Section 17.51.020 of the City's UDC, which establishes regulations for hillside development within the City, including maximum densities, architectural standards, building style, setbacks, and grading plans for development proposed on slopes of 10% or more. Compliance with Section 17.51.020 would ensure that compatible hillside management techniques are incorporated into the project design to the extent practicable. Furthermore, the proposed project does not constitute new development, as the project is being developed on an unused golf course. Additionally, views to the project site from public vantage points are limited; as such, the project site does not serve as a scenic backdrop.
Objective LU 6.2: Provide attractive public and open spaces in places visited by residents and visitors, where feasible and appropriate.	**Partially Consistent**. The proposed project would provide for a variety of open spaces, including natural and active open space areas within the resort and publicly accessible walkways. While a portion of the project would maintain some open space, the project would result in the permanent loss of 32.4 acres of open space.
Policy LU 6.2.1: Promote the inclusion of plazas, courtyards, seating areas, public art, and similar features within	**Partially Consistent**. See response to Objective LU 6.2.

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Goals, Objectives, and Policies	Discussion
commercial centers, business parks, and civic facilities visited by the general public.	
Policy LU 6.2.2: Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.	**Partially Consistent**. See response to Objective LU 6.2.
Policy LU 6.3.4: Require undergrounding of utility lines for new development where feasible, and plan for undergrounding of existing utility lines in conjunction with street improvement projects where economically feasible.	**Consistent**. The proposed project would place any new or expanded utility lines underground.
Policy LU 6.4.6: Through the environmental review and development review processes, evaluate impacts on historic and cultural sites from proposed development and require appropriate mitigation.	**Consistent**. The proposed project would comply with the regulations outlined in CEQA pertaining to the evaluation of historic and cultural resources (see Section 4.4, Cultural and Tribal Cultural Resources, of the EIR).
Objective LU 6.5: Promote high quality development that enhances the urban environment and builds long-term value.	**Consistent**. The proposed project would adhere to the development guidelines in the Sand Canyon Special Standards District and would blend the commercial portion of the project with the existing community aesthetic to provide a compatible, high-quality resort that would provide long-term value in the community.
Policy LU 6.5.1: Require use of high quality, durable, and natural-appearing building materials pursuant to applicable ordinances.	**Consistent**. The project site would be designed consistent with all applicable development standards set forth by the City and would have to be approved through the City's development review process. Additionally, project design would utilize materials that would be compatible with the surrounding, rural community aesthetic, such as clay roof tile, metal railing, and neutral-colored stucco consistent with the City's Design Guidelines.
Policy LU 6.5.2: Encourage the use of designs and architectural styles that incorporate classic and timeless architectural features.	**Consistent**. See response to Policy LU 6.5.1.
Policy LU 6.5.3: Require architectural enhancement and articulation on all sides of buildings (360 degree architecture), with special consideration at building entrances and corners, and along facades adjacent to major arterial streets.	**Consistent**. The proposed project would include architectural elements such as large entry arches with stone veneer, large windows, clay roof tiles, metal railings, and neutral-colored stucco, which would serve to create architecturally enhanced buildings that are compatible with the rural, rustic design of the surrounding area consistent with the City's Design Guidelines.
Policy LU 6.5.4: Evaluate new development in consideration of its context, to ensure that buildings create a coherent living environment, a cohesive urban fabric, and contribute	**Consistent**. See response to Policy LU 6.5.1 and Objective LU 6.5.

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Goals, Objectives, and Policies	Discussion
to a sense of place consistent with the surrounding neighborhoods.	
Goal LU 7: Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.	**Partially Consistent**. The proposed project would adhere to the California Green Building Standards Code (CALGreen), which would ensure environmentally responsible development. As described in Chapter 3, Project Description, of this EIR, the project would incorporate sustainability features, including installation of solar panels and provision of a shuttle connection between the resort and the nearby train station at Vista Canyon (which is currently under construction). The project has also been designed to retain the existing natural features on the project site to the extent feasible; however, project implementation would result in the permanent loss of 32.4 acres of open space.
Objective LU 7.1: Achieve greater energy efficiency in building and site design.	**Partially Consistent**. See response to Goal LU 7.
Policy LU 7.1.1: Require shade trees within parking lots and adjacent to buildings to reduce the heat island effect, in consideration of Fire Department fuel modification restrictions.	**Consistent**. The proposed project would include landscaping in and around surface parking areas. Additionally, the project's landscaping plans would be submitted to the City for approval prior to the issuance of any grading permits and would be subject to applicable fuel modification requirements (see Section 4.17 for details).
Policy LU 7.1.2: Promote the use of solar panels and renewable energy sources in all projects.	**Partially Consistent**. See response to Goal LU 7.
Policy LU 7.1.3: Encourage development of energy-efficient buildings, and discourage construction of new buildings for which energy efficiency cannot be demonstrated.	**Partially Consistent**. See response to Goal LU 7. While the project would result in the development of energy-efficient buildings, the project would result in the permanent loss of 32.4 acres of open space.
Objective LU 7.2: Ensure an adequate water supply to meet the demands of growth.	**Consistent**. The Santa Clarita Valley Water Agency has determined that the project's anticipated water demand would be adequately met by the agency (Santa Clarita Valley Water Agency 2019).
Policy LU 7.2.1: Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.	**Consistent**. See response to Objective LU 7.2.
Policy LU 7.2.3: Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.	**Consistent**. See response to Objective LU 7.2.
Objective LU 7.3: Protect surface and ground water quality through design of development sites and drainage improvements.	**Consistent**. As explained in Section 4.9, the proposed project would be subject to a Stormwater Pollution Prevention Plan (SWPPP), which would protect water quality during construction. Water quality/detention basins would be constructed as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	during operation. Required low impact development features would further ensure that surface and groundwater quality are protected with project implementation.
Policy LU 7.3.1: Promote the use of permeable paving materials to allow infiltration of surface water into the water table.	**Consistent**. The project would incorporate permeable paving materials where feasible. Additionally, as described in Section 4.9, large portions of the project site would remain unpaved, as a result of (1) construction of a small golf course in the east part of the project site, (2) large landscaped areas between proposed villas, (3) substantial open space areas, and (4) existing and proposed detention/infiltration basins.
Policy LU 7.3.2: Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.	**Consistent**. During operations, the project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. All stormwater flows would be directed to storm drain features and water quality/detention basins. Also see response to Objective LU 7.3.
Policy LU 7.3.3: Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.	**Consistent**. See responses to Policy LU 7.3.1 and Policy LU 7.3.2.
Policy LU 7.3.4: Implement best management practices for erosion control throughout the construction and development process.	**Consistent**. During construction of the project, a SWPPP and associated best management practices would be implemented. The SWPPP would include standard construction methods to control on-site and off-site erosion. Additionally, the proposed project would be designed in compliance with Section 402(p) of the Clean Water Act, which mandates that municipal separate stormwater sewer system discharges to surface waters be regulated by a National Pollution Discharge and Elimination System permit. Also see response to Objective LU 7.3 and Policy 7.3.2.
Policy LU 7.3.5: Limit development within flood-prone areas to minimize downstream impacts.	**Consistent**. As stated in Section 4.9, no structures would be placed within the on-site 100-year flood zone. As such, the proposed development would be focused on areas of the project site that have less risk for flooding.
Policy LU 7.3.6: Support emerging methods and technologies for the onsite capture, treatment, and infiltration of stormwater and greywater, and amend the City Code to allow these methods and technologies when they are proven to be safe and feasible.	**Consistent**. Water quality/detention basins for the project would enhance water quality and reduce stormwater runoff flow rates and volumes. See Section 4.9 in this EIR for more information.
Objective LU 7.4: Promote water conservation through building and site design.	**Consistent**. The proposed project would adhere to CALGreen, a statewide building code that lays out minimum requirements for development projects in California. CALGreen ensures that new development meets specific sustainability standards during

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Goals, Objectives, and Policies	Discussion
	construction and operation, including water conservation standards. The City's Green Building Standards Code adopts CALGreen by reference. Per Chapter 17.51 of the City's UDC, the project's landscape design would be required to emphasize drought-tolerant and/or native species.
Policy LU 7.4.1: Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.	**Consistent**. See response to Objective LU 7.4.
Policy LU 7.4.2: Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.	**Consistent**. See response to Objective LU 7.4. The proposed project would be designed in adherence to CALGreen, which includes requirements for water-conserving plumbing fixtures and fittings.
Objective LU 7.5: Promote waste reduction through site and building design.	**Consistent**. See response to Policy LU 7.4.2.
Policy LU 7.5.1: Ensure that all new development provides adequate space for recycling receptacles and bins on site.	**Consistent**. The proposed project would include sufficient recycling receptacles and bins on site.
Policy LU 7.5.2: Promote the use of recycled building materials.	**Consistent**. The project would incorporate recycled building materials into the design where feasible.
Objective LU 7.6: Protect natural habitats through site design where reasonable and feasible.	**Partially Consistent**. The proposed project includes the redevelopment of an existing, unused golf course. Impacts to natural habitats would be reduced to a less-than-significant level through implementation of MM-BIO-1 through MM-BIO-5 outlined in Section 4.3 in this EIR. The project has also been designed to retain the existing natural features on the project site to the extent feasible. For example, the project design would avoid 115 on-site oak trees, and proposed development would generally be concentrated on the existing golf greens, thereby avoiding the more naturalized areas of the site where practicable. However, project implementation would result in the permanent loss of 32.4 acres of open space.
Policy LU 7.6.1: Limit outdoor lighting levels to the minimum needed for safety and security, and encourage lower lighting levels when businesses are closed.	**Consistent**. The proposed project would be designed consistent with the City's Outdoor Lighting Standards (UDC Section 17.51.050), which establish requirements such as light shielding and automatic time switch controls to ensure that on-site lighting is sufficient but does not cast light and glare on surrounding land uses.

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Goals, Objectives, and Policies	Discussion
Policy LU 7.6.2: Preserve habitat connectivity in site planning where feasible, and discourage the creation of open space islands surrounded by paving.	**Partially Consistent**. As stated in Section 4.3, the project site is not within an area that has been identified as important to wildlife movement, such as a regional-scale habitat linkage or a wildlife movement corridor. However, the proposed project would affect sensitive plant communities and riparian habitat and result in the permanent loss of 32.4 acres of open space. The project would also involve development of resort and spa facilities within an unused golf course, thereby segmenting the existing open, parklike condition of the site. However, the undeveloped portions of the site would generally abut the vacant hillside areas to the north, thereby providing partial continued connections to undeveloped land. Additionally, as stated in Section 4.3, habitats within the project site are not of special or particular importance for wildlife movement at a local or regional scale. Mitigation measures have been provided to address impacts to biological resources, including sensitive plant communities and riparian habitat (MM-BIO-1 through MM-BIO-5).
Policy LU 7.6.3: Protect wildlife corridors through site design and appropriate land use designations, including mapped corridors and other corridors that may be identified through biological surveys.	**Partially Consistent**. See response to Policy LU 7.6.2.
Policy LU 7.6.4: Encourage site designs that protect oak trees, hillsides, and biological resources through creative solutions.	**Consistent**. The proposed project site contains 136 oak trees. The proposed project would comply with the City's Oak Tree Ordinance, and 115 on-site oak trees would be protected in place during project construction and operation. Although a total of 21 oak trees would be removed to accommodate project implementation, compliance with the required Oak Tree Permit would ensure that the trees are replaced on site or that funding is provided for the City's Oak Tree Fund. Additionally, see responses to Objective LU 6.1 and Objective LU 7.6.
Objective LU 7.8: Protect significant woodlands, heritage oak trees, and other biological resources from the impacts of development.	**Consistent**. See responses to Objective LU 7.6, Policy LU 7.6.2, and Policy LU 7.6.4.
Policy LU 7.8.1: Adopt and implement consistent policies for protection of oak woodlands and oak trees throughout the planning area.	**Consistent**. See response to Policy LU 7.6.4.
Policy LU 7.8.2: Protect all designated Significant Ecological Areas (SEA's) from incompatible development.	**Consistent**. The project site is not located within a Significant Ecological Area; see Section 4.3.
Policy LU 8.1.3: In meeting state law for mitigation, there may be times when additional resources are required in	**Consistent**. The proposed project would not include a housing component that would directly increase the number of school-age children attending nearby schools. The project is expected to generate approximately 500 new jobs, which could indirectly result in new

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Goals, Objectives, and Policies	Discussion
order for the district to fully provide necessary services. Accordingly, Developers are encouraged to reach full mitigation agreements with the appropriate school districts impacted by their proposed project. Mitigation may include, but might not be limited to, modifications to existing school sites.	students in the surrounding school districts (see Section 4.13 for details). However, as explained in Section 4.13, the project would be subject to a DIF that would be considered its fair-share contribution to any growth associated with the school districts.
Objective LU 8.3: Promote equitable development and utilization of land.	**Consistent**. The proposed project would develop an existing, underutilized golf course property to provide hospitality and recreational resources for all members of the local and regional community.
Policy LU 8.3.1: Require fair and equitable treatment in considering, adopting, implementing, and enforcing development regulations and policies, including but not limited to providing equal opportunity for public input and considering impacts from development approvals on all segments of the population.	**Consistent**. The project is subject to City developmental review, which includes opportunity for the public to attend hearings where they can submit verbal comments. Additionally, the CEQA review period allows for a 60-day comment period in which the public may review this EIR and submit written comments on it. Given this, opportunity for fair and equitable public input would be provided for the proposed project.
Goal LU 9: Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.	**Consistent**. The proposed project would not include a housing component that would directly increase the population that is reliant on public facilities and services. The project is expected to generate approximately 500 new jobs, which could indirectly result in increased demand for public services and expanded public facilities. However, as stated in Section 4.13, impacts would be less than significant. Additionally, the project would be subject to a DIF that would be considered its fair-share contribution to public services.
Objective LU 9.1: Coordinate land use planning with provision of adequate public services and facilities to support development.	**Consistent**. See response to Goal LU 9.
Policy LU 9.1.1: Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.	**Partially Consistent**. As demonstrated in Section 4.13, Section 4.14, and Section 4.16, the public facilities and infrastructure in the project area would sufficiently serve the proposed project. The proposed project would also be subject to a DIF as outlined in the City's UDC Section 17.51.010, which would ensure fair-share contribution to public resources. Additionally, project plans would be submitted to the City for approval prior to issuance of a grading permit, and the Los Angeles County Fire Department would also review the project plans. However, as discussed in Section 4.15, the project would exceed the City's established VMT threshold, thereby resulting in significant and unavoidable transportation impacts.

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Goals, Objectives, and Policies	Discussion
Policy LU 9.1.2: Coordinate review of development projects with other agencies and special districts providing utilities and other services.	**Consistent**. The City would coordinate project review with other applicable agencies as necessary, including the Los Angeles County Fire Department and the County of Los Angeles Sheriff's Department. See Sections 4.13 and 4.16 for details.
Policy LU 9.1.5: Work with the Los Angeles County Sheriff's Department to expand law enforcement facilities to meet the needs of the Santa Clarita Valley's growing population.	**Consistent**. See response to Goal LU 9 and Section 4.13.
Objective LU 9.2: Coordination of City and County sewer master planning and sewer mitigation to support future development and avoid fiscal impacts to local government or the existing community.	**Consistent**. The proposed project would be located within the service area for the Valencia Water Reclamation Plant (WRP) and the Saugus WRP. The Saugus WRP provides primary, secondary, and tertiary treatment for 6.5 million gallons of wastewater per day as part of the Santa Clarita Valley Sanitation District; however, the Saugus WRP does not process solid waste, which is treated at the Valencia WRP. According to the Sewer Area Study (Appendix K) compiled for the proposed project, the existing 8-inch vitrified clay pipe in Robinson Ranch Road and the existing 15-inch vitrified clay pipe in Sand Canyon Road have sufficient capacity to carry the added sewer demand from the proposed project. A minor upgrade to the larger 18-inch vitrified clay pipe in Lost Canyon Road would be needed to accommodate the project. The proposed project would be subject to a fair-share DIF to pay for its portion of the upgrades.
Policy LU 9.2.1: Ensure that the cost of extending new sewer infrastructure is fully borne by the new development that is served, and is not passed on to the existing community.	**Consistent**. See response to Objective LU 9.2.
Policy LU 9.2.2: Require that all new development mitigates its impact on existing sewer capacity by upgrading facilities when warranted or payment of a fee to allow construction of new facilities when needed.	**Consistent**. See response to Objective LU 9.2.
Policy LU 9.2.6: Coordinate to ensure that new development projects have agreed to mitigate both City and County sewer impacts prior to project approval.	**Consistent**. See response to Objective LU 9.2.
Policy LU 9.2.7: Ensure that properties which benefit from increased density or intensity of development resulting from a General Plan Amendments fully mitigate their increased sewer impact at the time that development or redevelopment occurs on their properties.	**Consistent**. See response to Objective LU 9.2.

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Goals, Objectives, and Policies	Discussion
Circulation Element	
Goal C 1: An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans (Policy C1.1.1 through C 1.3.10).	**Partially Consistent**. According to a Transportation Impact Assessment (Appendix J) prepared for the project, the proposed project at buildout would not significantly impact circulation on the intersections providing access to the project site. However, the project would exceed the City's established VMT threshold, thereby resulting in significant and unavoidable transportation impacts. The project would be subject to the City's Traffic Impact Fee, which is a one-time fee to cover the proposed project's fair contribution to city-wide infrastructural improvements. Although there are currently no bicycle lanes serving the project site, the City's Non-Motorized Transportation Plan includes a proposed Class III bike lane along Sand Canyon Road (City of Santa Clarita 2014). Additionally, as outlined in the Transportation Demand Management Plan that has been developed for the project, the proposed project would provide bicycle storage facilities and showers for those employees who choose to bike to work as well as pedestrian facilities that would encourage walking over single-occupancy vehicle transportation. Nonetheless, transportation impacts would remain significant and unavoidable.
Goal C 2: A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character (Policy C 2.1.1 through C 2.2.15).	**Partially Consistent**. See response to Goal C 1.
Goal C 3: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking (Policy C 3.1.1 through C 3.3.8).	**Inconsistent**. As discussed in Section 4.15, the project would exceed the City's established VMT threshold and would not result in the reduction of vehicle trips and emissions. This impact remains significant and unavoidable.
Goal C 4: Rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns.	**Consistent**. While the project would not involve development of rail service, it would provide shuttle connection between the resort and a nearby train station at Vista Canyon (currently under construction), which would help promote use of rail service by employees, guests, and visitors of the project.
Goal C 5: Establish transit impact fee rates that are based on the actual impacts of new development on the transit system, and regularly monitor and adjust these fees as needed to ensure adequate mitigation.	**Partially Consistent**. According to the Transportation Impact Assessment (Appendix J) prepared for the project, the proposed project would significantly impact traffic and circulation within the City by exceeding the City's established VMT threshold. The project would be subject to the City's Traffic Impact Fee, which is a one-time fee to cover the proposed project's fair contribution to city-wide infrastructural improvements; however, project impacts would remain significant and unavoidable relative to transportation.

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Goal C 6: A unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use and utilitarian travel, connecting communities and the region (Policy C 6.1.1 and C 6.2.3).	**Consistent**. See response to Policy LU 4.5.1 and Goal C 1. While the proposed project would not directly develop bike paths or bikeways, it would not preclude the City from doing so and would support employees' use of bicycles for commuting.
Goal C 7: Walkable communities, in which interconnected walkways provide a safe, comfortable and viable alternative to driving for local destinations (Policy C 7.1.1 through C 7.1.10).	**Consistent**. The proposed project would provide extensive pedestrian amenities, including 2 miles of on-site pedestrian pathways and paved, lighted walkways extending across the project site, as shown in Figure 3-10.
Noise Element	
Goal N 1: A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors (Policy N 1.1.1 through N 1.1.6).	**Inconsistent**. As determined through the analysis shown in Section 4.11, the proposed project would have a significant unavoidable impact in residential neighborhoods in relation to construction-related noise and groundborne vibration. However, such noise and vibration would be reduced to the extent feasible through mitigation measures. The noise and vibration impacts would be temporary and intermittent and would cease once construction is complete. While some noise would be associated with project operation, operational noise was determined to have a less-than-significant impact. However, cumulative operational traffic noise would remain significant and unavoidable, as discussed in Section 4.11. As such, the project would temporarily affect the noise environment in the vicinity due to construction activities, and the proposed project in combination with other identified cumulative projects, would result in permanent, significant impacts to the City's noise environment. (See Section 4.11 in this EIR for details.)
Goal N 2: Protect residents and sensitive receptors from traffic-generated noise (Policy N 2.1.1 through N 2.1.7).	**Inconsistent**. The increase in traffic to and from the project site, in combination with other planned and reasonably foreseeable future development, would result in a significant impacts, as demonstrated in Section 4.11.
Goal N 3: Protect residential neighborhoods from excessive noise (Policy N 3.1.1 through N 3.1.9).	**Inconsistent**. See response to Goal N 1 and Goal N 2.
Goal N 4: Protection of sensitive uses from commercial and industrial noise generators (Policy N 4.1.1 through N 4.1.3).	**Inconsistent**. See response to Goal N 1 and Goal N 2.
Conservation Element	
Goal CO.1: A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in	**Consistent**. The proposed project would provide hospitality and recreational amenities to the local and regional community and would generate increased revenue and create approximately 500 employment opportunities, which would benefit the local economy.

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
the present and in the future (Policy CO 1.1.1 through CO 1.6.3).	Additionally, a portion of the 77-acre project site would be retained as open space, and the project has been designed to protect a majority of the existing on-site oaks.
Goal CO 2: Conserve the Santa Clarita Valley's hillsides, canyons, ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments (Policy CO 2.1.1 through CO 2.3.5).	**Consistent**. See responses to Objective LU 2.2, Objective LU 6.1, and Policy LU 6.1.3.
Goal CO 3: Conservation of biological resources and ecosystems, including sensitive habitats and species (Policy CO 3.1.1 through CO 3.7.2).	**Consistent**. See responses to Objective LU 2.2, Policy LU 6.1.3, and Objective LU 7.6.
Goal CO 4: An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems (Policy CO 4.1.1 through CO 4.4.4).	**Consistent**. See responses to Objective LU 7.2.1 and Policy LU 7.3.6.
Goal CO 5: Protection of historical and culturally significant resources that contribute to community identity and a sense of history (Policy Co 5.1.1 through CO 5.3.3).	**Consistent**. The proposed project would be developed on an existing, unused golf course and would not include the destruction or demolition of any known historic or culturally significant resources, as demonstrated in Section 4.4. However, during grading activities, the proposed project has the potential to unearth cultural artifacts, including artifacts from Native American tribes. However, with adherence to mitigation measures outlined in Section 4.4, the project would not significantly impact any historical, cultural, or tribal cultural resources.
Goal CO 6: Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values (Policy CO 6.1.1 through CO 6.6.5).	**Consistent**. See responses to Objective LU 2.2 and Policy LU 6.1.3.
Goal CO 7: Clean air to protect human health and support healthy ecosystems (Policy CO 7.1.1 through CO 7.3.1).	**Consistent**. As discussed in Section 4.2, construction and operational air quality impacts would be less than significant with implementation of mitigation.
Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases (Policy CO 8.1.1 through Policy CO 8.4.8).	**Consistent**. See responses to Goal LU 7, Policy LU 7.1.2, and Policy LU 7.4.1.
Goal CO 9: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents (Policy CO 9.1.1 through CO 9.2.9).	**Consistent**. The proposed project would provide open space and commercial recreational amenities. Additionally, the project would be subject to a DIF, which would ensure the proposed project's fair-share contribution to any public services and recreational expansions undertaken by the City to accommodate local growth.

Table 4.10-1. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Goal CO 10: Preservation of open space to meet the community's multiple objectives for resource preservation (Policy CO 10.1.1 through CO 10.2.5).	**Inconsistent**. The proposed project would result in the permanent loss of 32.4 acres of open space and would therefore directly conflict with this goal of preserving open space.
Safety Element	
Goal S 1: Protection of public safety and property from hazardous geological conditions, including seismic rupture and ground shaking, soil instability, and related hazards (Policy S 1.1.1 through S 1.3.4).	**Consistent**. Upon implementation of MM-GEO-1, the project would not result in significant impacts related to geological hazards. See Section 4.6, Geology and Soils, in this EIR.
Goal S 2: Protection of public safety and property from unreasonable risks due to flooding (Policy S 2.1.1 through S 2.5.2).	**Consistent**. While a portion of the project site is mapped within a flood hazard area, no structures would be placed within the on-site 100-year flood zone. As such, the proposed development would be focused on areas of the project site that have less risk for flooding. See Section 4.9 for details.
Goal S 3: Protection of public safety and property from fires (Policy S 3.1.1 through S 3.3.3).	**Consistent**. The proposed project would have a less-than-significant impact to public safety in regard to fires with implementation of MM-FIRE-1 through MM-FIRE-11. See Section 4.17 for details.
Goal S 4: Protection of public safety and property from hazardous materials (Policy S 4.1.1 through S 4.2.4).	**Consistent**. The proposed project would be in compliance with regulations governing the storage, use, transport, and disposal of hazardous materials and would not pose a significant threat to public safety from hazardous materials. See Section 4.8, Hazards and Hazardous Materials, in this EIR.
Goal S 5: Protection of public safety through the provision of law enforcement services and crime prevention strategies (Policy S 5.1.1 through S 5.2.3).	**Consistent**. See response to Goal LU 9. Additionally, in coordination with the County of Los Angeles Sheriff's Department, the proposed project would incorporate operational practices and design elements to increase on-site safety and to reduce the potential for crime to occur. Building entries, parking areas, and walkways would be sufficiently lit, which would facilitate safe pedestrian movement within the project site.
Goal S 6: Reduced risk to public safety and property damage from accidental occurrences (Policy S 6.1.1 through S 6.4.1)	**Consistent**. See responses to Goal S 1 through Goal S 7.
Goal S 7: Protection of the public through planning for disaster response and recovery, in order to minimize damage from emergency incidents or terrorist activities (Policy S 7.1.1 through S 7.2.3).	**Consistent**. As described in Section 4.17, the project site is located adjacent to a secondary disaster route as identified by Los Angeles County. During project construction, potential road closures and slower traffic could interfere with emergency response activities, including evacuations. As explained in Section 4.17, implementation of MM-FIRE-1 would reduce potential impacts to below a level of significance. During project operation, impacts were determined to be less than significant.

Source: City of Santa Clarita 2011.

Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy

The RTP/SCS aims to address the region's growing population, as well as reduce traffic congestion and greenhouse gas emissions. The RTP/SCS contains land use policies that guide the implementation of proposed land use development strategies (SCAG 2016). The project would ensure consistency with these goals by implementing approximately 2 miles of on-site publicly accessible walkways and by maintaining more than 50% of the site within the Open Space land use and zoning designation. Table 4.10-2 lists the applicable RTP/SCS land use policies and analyzes the project's consistency with them.

Table 4.10-2. Project Consistency with RTP/SCS Goals

Policy	Discussion
Identify regional strategic areas for infill and investment.	**Consistent**. The proposed project would replace a previously developed, currently unused golf course with a new resort and spa. The proposed project would retain a large portion of the project site as open space and include 2 miles of publicly accessible walkways. The proposed project would serve as a hospitality and gathering center and provide additional conference and meeting room capacity within the City.
Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment.	**Inconsistent**. The proposed project would not involve development of transportation infrastructure. According to the Traffic Impact Analysis prepared for the project (see Appendix J of this EIR), the proposed project would result in significant impacts to traffic and circulation through the exceedance of the City's established vehicle miles traveled (VMT) threshold. In exceeding this threshold, the project would result in vehicle trips above and beyond the average of those within the region. While the project includes a Transportation Demand Management Plan, the VMT threshold would still be exceeded resulting in significant and unavoidable transportation impacts.
Develop "Complete Communities."	**Consistent**. The proposed project would provide hospitality and recreational amenities for the existing community.
Plan for additional housing and jobs near transit.	**Partially Consistent**. The proposed project, which would provide approximately 500 employment opportunities, would adhere to a Transportation Demand Management Plan, which outlines measures to reduce traffic to and from the site. Measures to reduce traffic include providing rideshare information, preferential parking, rideshare vehicle loading, bicycle storage facilities, shower facilities, and a central lunch area for employees to encourage sustainable modes of transportation such as public transit, bicycling, and carpooling. Additionally, the City of Santa Clarita Transit bus service's nearest stop (on Route 6) is located 2 miles from the project site and is easily accessible for those employees who choose to bike. The proposed project is located in close proximity to surrounding residential land uses and may attract employees within a walkable distance to the project site, thereby further reducing single-vehicle occupancy. Nonetheless, as discussed above, the project would exceed the City's established VMT threshold and would result in significant and unavoidable transportation impacts.
Continue to protect stable, existing single-family areas.	**Consistent**. The proposed project would not damage or divide the existing single-family residential communities surrounding the project site. The proposed project would provide hospitality and recreational amenities to residents in the project vicinity and would also generate approximately 500 employment opportunities within the local economy.
Ensure adequate access to open space and preservation of habitat.	**Partially Consistent**. Under the proposed project, 44.6 acres of the project site would remain designated open space; however, 32.4 acres of existing open space would be permanently converted to community commercial uses.

Table 4.10-2. Project Consistency with RTP/SCS Goals

Policy	Discussion
	Various recreational amenities would be provided to replace the existing golf course use. These amenities would be accessible for patrons of the resort and for the public via new pedestrian walkways, as shown in Figure 3-10. Additionally, the proposed project would have a less-than-significant impact to biological resources, with implementation of MM-BIO-1 through MM-BIO-5, as described in Section 4.3, Biological Resources. Nonetheless, the project would result in the permanent loss of 32.4 acres of open space.
Incorporate local input and feedback on future growth.	**Consistent**. The proposed project would be subject to standard environmental review, which includes public review periods and public hearings. Additionally, the project would be subject to City Council approval.

Source: SCAG 2016.

As demonstrated in Table 4.10-2, the project is partially consistent with the applicable 2016–2040 RTP/SCS goals after implementation of Mitigation Measure (MM) BIO-1 through MM-BIO-5, resulting in a less-than-significant impact with mitigation incorporated. However, the project would result in significant and unavoidable transportation impacts due to exceedance of the City's established VMT threshold and would also result in the permanent loss of 32.4 acres of open space.

Special Standards District Consistency

Development within the Sand Canyon Special Standards District is regulated by Section 17.39.030 of the City's Municipal Code (City of Santa Clarita 2013a). The property development standards that are outlined by the Municipal Code and applicable to the project are listed and analyzed below in Table 4.10-3.

Table 4.10-3. Project Consistency with the Sand Canyon Special Standards District

Policy	Discussion
Trails: i. Riding and hiking trails shall be provided as depicted on the latest Sand Canyon Backbone Trails exhibit on file with Parks, Recreation and Community Services to the satisfaction of the Director of Parks, Recreation and Community Services; ii. Trails shall be fenced to the satisfaction of the Director of Parks, Recreation and Community Services, with fences of a rustic wood appearance; iii. Trail access shall be provided at all river crossings; iv. There shall be no obstruction including, but not limited to, on-street parking, landscaping, trash receptacles, or other similar structures within a designated trail; v. Fencing shall not be permitted to cross riverbeds, in such a manner as to deny trail access;	**Consistent**. The proposed project would retain 44.6 acres of open space, which would include 2 miles of publicly accessible walkways, as shown in Figure 3-10. The proposed pathways would be constructed according to the guidelines outlined in the Special Standards District. However, the project would result in the permanent loss of 32.4 acres of open space.

Table 4.10-3. Project Consistency with the Sand Canyon Special Standards District

Policy	Discussion
vi. Private access routes to the Backbone Trails are encouraged to be incorporated into new subdivisions to the satisfaction of the Director of Parks, Recreation and Community Services and the concurrence of the property owner.	
Street lights, in accordance with City standards, shall be installed only at road-to-road intersections.	**Consistent**. The proposed project would not add any streetlights to a public roadway, unless they are positioned at road-to-road intersections.
Sewer. All new residential projects of greater than four dwelling units and density greater than one-half unit per acre shall connect to public sewer systems. Utilities shall be undergrounded to the nearest off-site connection.	**Consistent**. The proposed project would not result in residential development. However, the project would include a hotel, which would lead to overnight guests and would increase sewage generation on the site. According to the Sewer Area Study compiled for the proposed project (Appendix K), the existing 8-inch vitrified clay pipe in Robinson Ranch Road and the existing 15-inch vitrified clay pipe in Sand Canyon Road have sufficient capacity to carry the added sewer demand from the proposed project, and only minor upgrades to larger, ancillary pipelines would be needed to accommodate the project. The proposed project would be subject to a fair-share development impact fee to pay for its portion of the upgrades.
Street paving, curbs, gutters and sidewalks shall not be required of new development. Minimum City standards for all weather access shall be provided. An engineering analysis shall be required to determine how all weather access will be provided for emergency vehicles. Surface material may consist of graded dirt, gravel or asphaltic concrete to achieve the required standards.	**Consistent**. The proposed project would be designed to provide adequate emergency access. Additionally, per standard development practice, the proposed resort, spa, and ancillary structures would be required to pass a building inspection with the Los Angeles County Fire Department prior to occupancy and operation.
Drainage. Existing and future drainage shall be accommodated to provide adequate carrying capacity and erosion protection.	**Consistent**. During construction of the project, a Stormwater Pollution Prevention Plan and associated best management practices would be implemented. The Stormwater Pollution Prevention Plan, which would include standard construction methods to control on-site and off-site erosion, would be required during plan review and approval of project plans. Additionally, as previously discussed, water quality/detention basins would enhance water quality and reduce stormwater runoff flow rates and volumes.
Street trees shall not be required; however, the planting of oaks and other mature trees shall be encouraged.	**Consistent**. The proposed project would comply with the City's Oak Tree Ordinance, and 115 oak trees would be protected in place during project construction and operation. Although 21 oak trees would be removed to accommodate project implementation, compliance with the required Oak Tree Permit would ensure that the trees are replaced on site or that funding is provided for the City's Oak Tree Fund. Additionally, see response to Objective LU 7.6 in Table 4.10-1.

Table 4.10-3. Project Consistency with the Sand Canyon Special Standards District

Policy	Discussion
Fences. Non-view-obscuring fences, not to exceed five (5) feet in height, shall be permitted to be located within the twenty (20) foot front yard setback. Where a non-view-obscuring fence is constructed within the twenty (20) foot front yard setback, and is five (5) feet in height, the applicant shall be required to landscape the frontage of their property along the property line that abuts the adjacent right-of-way. View-obscuring walls or fences that are higher than three (3) feet six (6) inches shall not be permitted to be located within the twenty (20) foot front yard setback;	**Consistent**. The proposed project would not include any view-obstructing fences taller than 5 feet.

Source: City of Santa Clarita 2013a.

Consistency with Previous Land Use Approvals for the Project Site

The project site, located within what is now known as Sand Canyon Resort, was once known as the 9-hole Mountain Course within the broader Robinson Ranch Golf Course. The Robinson Ranch Golf Course was one component of the overall Hunters Green Project, for which an EIR was certified and the project was approved in 1996. According to the environmental analysis in the EIR prepared for the Hunters Green Project, significant and unavoidable impacts were identified related to air quality during construction and operations, biological resources associated with the substantial decrease in locally and regionally significant sensitive communities and to sensitive wildlife species, aesthetics associated with irreversibly altering a City-identified secondary ridgeline, and noise during construction (City of Santa Clarita 1996a). Resolution 96-120, outlining the conditions of approval for the Hunter Greens Residential Development and Golf Course, included the following requirements of the project related to significant biological resources impacts and aesthetic impacts (City of Santa Clarita 1996b):

- Biological Resources: "The creation of 300 acres of recreational open space and establishment of this permanent habitat would offset the biological loss due to site development."
- Aesthetics: "Design elements of the project with the preservation of approximately 300 acres of the site as recreation/open space would offset this impact."

Additionally, included within the resolution is the following language (City of Santa Clarita 1996):

> The City Council finds that the unavoidable environmental impacts of the project are acceptable when based upon the following factors and public benefits. The factors and public benefits are as follows:
>
> a. The project provides a significant recreational facility in the Canyon Country area of the City. Significant economic benefits to the City and local business are anticipated with this project.
> b. The project includes the dedication of land for the construction of the Live Oak Springs Canyon debris basin and appurtenant facilities.
> c. The project would preserve approximately 300 acres of land into perpetuity as recreational/open space.
> d. The annexation of a portion of the site will benefit the City of Santa Clarita by extending local government and control.

e. The widening of Sand Canyon Road, over the Santa Clara River, and the installation of a traffic signal at Lost Canyon Road and Sand Canyon Road are requirements of the project, and substantial benefits to the Sand Canyon area.
f. The project includes the realignment improvement and maintenance of Oak Spring Canyon Road on the project site.
g. The project includes the dedication and construction of multi-purpose trails for use by resort guests through the project site.
h. The project includes the extension of a water mainline, including fire hydrants, from the project site west to Comet Way and east to the Angeles National Forest Boundary.

As stated in Section 4.10.1, Environmental Setting, the original land use designation for the project site (prior to approval of the Hunters Green Project) was RVL; however, the Hunters Green Project involved adding a PD overlay zone to allow for a transfer of density within the Hunters Green Project site, to allow for additional density in the Hunters Green residential area. The two golf courses within the Hunters Green Project were also re-zoned and designated as OS by the City Council during the General Plan and zoning code updates in 2011 to make the land use and zoning designations consistent with the on-site uses pursuant to the Hunters Green Project approval.

The approvals for the proposed project would include a Zone Change and a General Plan Amendment for a portion of the project site. Upon project approval, the site would be subdivided into four lots and the zoning and land use designation of two lots would change from OS to CC. The Zone Change and General Plan Amendment would allow the resort and associated buildings to be constructed on the two lots that would be re-zoned and re-designated as CC (see Figure 4.10-2). The remaining two lots would retain the current OS designation.

The partial development of the project site with community commercial uses would be inconsistent with the OS zoning and land use designation on the project site. Upon approval of the proposed land use and zoning changes for the site, the project would be consistent with the new zoning and land use designations and would no longer be subject to the land use and zoning designations for the site that were established in the past. However, removing the OS designation on a portion of the project site would allow for an intensification of land use that would result in the permanent loss of 32.4 acres of open space and in a variety of environmental impacts, including impacts associated with biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, noise and vibration, and transportation and traffic. Mitigation measures have been set forth to reduce these impacts to the extent feasible. After mitigation, the environmental impacts of the project are determined to be less than significant, with the exception of construction noise and vibration impacts, cumulative operational traffic noise, and operational transportation impacts. Construction noise and vibration would result in temporary significant and unavoidable noise impacts, and during operation, the project would exceed the City's established VMT threshold, thereby resulting in significant and unavoidable transportation impacts.

Additionally, the proposed project would result in the permanent loss of 32.4 acres of open space, which is in direct conflict with the Conservation and Open Space Element of the City's General Plan, which outlines the importance of maintaining and preserving open space and the natural resources therein throughout the City. As such, the project would result in **potentially significant** land use inconsistency impacts.

4.10.5 Mitigation Measures

As described in Section 4.10.4, Impacts Analysis, the mitigation measures outlined throughout this EIR would ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have

been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible. In order to reduce potentially significant impacts associated with the permanent loss of 32.4 acres of open space, MM-LU-1, requiring that the project applicant acquire and dedicate to the City an equivalent 32.4 acres of land to remain as permanent open space, is required.

MM-LU-1 In order to address the permanent loss of 32.4 acres of open space within the Sand Canyon Resort area, prior to the issuance of building permits, the project applicant shall acquire and dedicate to the City of Santa Clarita at least 32.4 acres of open space land in a location deemed acceptable to the City Manager.

4.10.6 Level of Significance After Mitigation

Threshold LU-2 ***Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

With adherence to the mitigation measures outlined throughout this EIR as well as implementation of MM-LU-1, impacts in the category of land use and planning as a result of the proposed project would be **less than significant**.

4.10.7 References Cited

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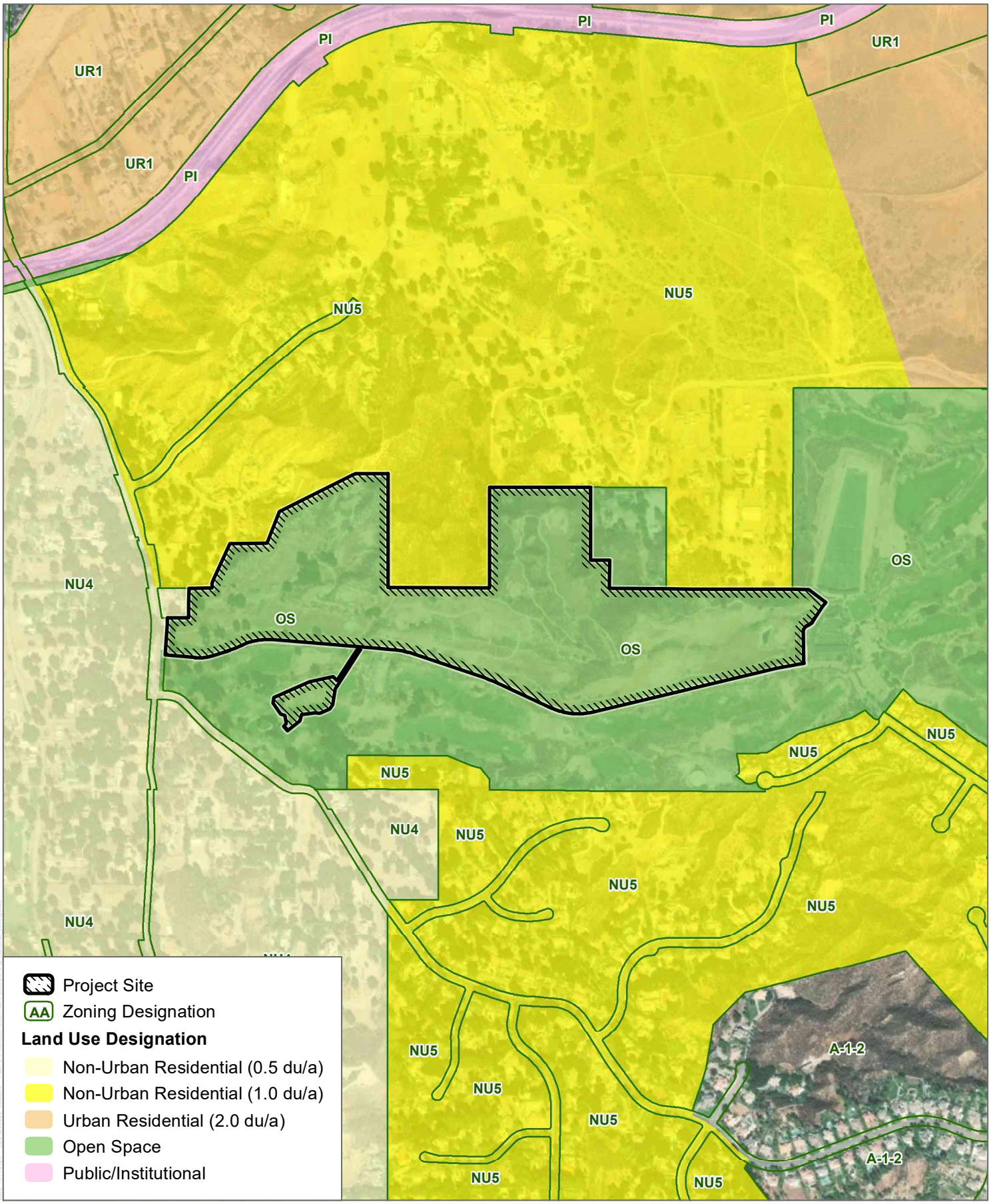

SOURCE: City of Santa Clarita, SCAG 2016

DUDEK

0 420 840 Feet

FIGURE 4.10-1

Land Use and Zoning Designations

Sand Canyon Resort Project

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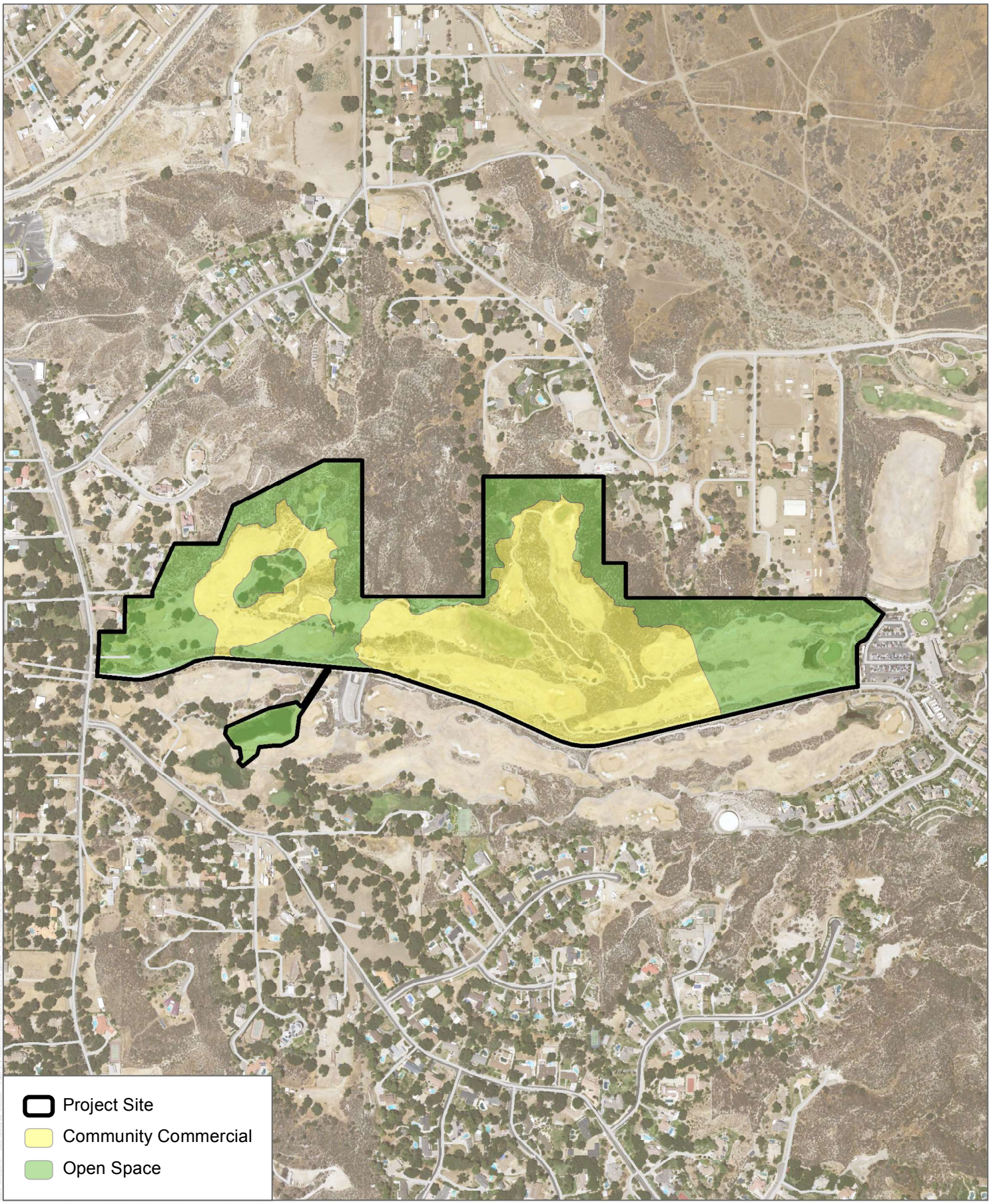

SOURCE: USDA 2016, City of Santa Clarita 2019

DUDEK

0 355 710 Feet

FIGURE 4.10-2

Proposed Land Use and Zoning

Sand Canyon Resort Project

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4.11 Noise

This section of the Draft Environmental Impact Report presents potential noise and vibration impacts of the proposed Sand Canyon Resort Project (project), which includes the environmental setting and existing ambient noise conditions, regulatory framework, potential short-term and long-term noise and vibration impacts, and proposed measures to mitigate any identified significant impacts. Information in this section is based on the Noise Technical Report for the Sand Canyon Resort Project City of Santa Clarita, California, prepared for the applicant by Pomeroy Environmental Services in June 2019 (included as Appendix I).

The Noise Technical Report describes the ambient noise on the basis of 15-minute measurements completed in vicinity of the project site; analysis and findings are based on noise and vibration modeling, which can be found in Appendix A within Appendix I of this Environmental Impact Report (EIR).

The Noise Technical Report evaluates the proposed tentative map; the Federal Highway Administration (FHWA) Roadway Construction Noise Model (FHWA 2008) and the FHWA Highway Traffic Noise Model (FHWA-RD-77-108) were used to estimate project noise emissions, with consideration of the California Department of Transportation (Caltrans) Technical Noise Supplement to the Traffic Noise Analysis Protocol (Caltrans 2013) and Federal Transit Authority (FTA) Transit Noise And Vibration Impact Assessment (FTA 2006). Other sources consulted are listed in Section 4.11.7, References Cited.

4.11.1 Environmental Setting

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz. The normal frequency range of hearing for most people extends from about 20 to 20,000 hertz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting, called A-weighting, is typically used for quieter noise levels, which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the noise level and is referenced in units of A-weighted decibels (dBA). Table 4.11-1 illustrates representative noise levels in the environment.

Table 4.11-1. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Fly-over at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		

Table 4.11-1. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial areas		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast, recording studio
	10	
	0	

Source: Caltrans 2013.
Note: dBA = A-weighted decibels.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (Caltrans 2013). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at

acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance for hard and soft sites, respectively. Sound levels can also be attenuated by human-made or natural barriers. For the purpose of sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. The response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration. It is also common for groundborne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

When evaluating human response, groundborne vibration is usually expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels defined as follows:

$$L_v = 20 \log \left(\frac{v_{rms}}{v_{ref}} \right)$$

Where v_{rms} is the RMS vibration velocity amplitude in inches per second (in/sec) and v_{ref} is the decibel reference of 1×10^{-6} in/sec.

To avoid confusion with sound decibels, the abbreviation VdB is used for vibration decibels. The vibration threshold of perception for most people is around 65 VdB (which is equivalent to 0.0018 in/sec RMS). Vibration levels in the 70 to 75 VdB range are often noticeable, but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable (FTA 2006). This analysis uses a somewhat conservative threshold of 72 VdB as the threshold of vibration annoyance for persons in residences where sleeping occurs.

Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass, expressed as in/sec). Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving and soil compacting, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used. A conservative maximum vibration level standard is 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings, while the damage threshold for sensitive, historical buildings is 0.12 in/sec PPV (Caltrans 2013).

Existing Noise Conditions

Project Site Noise Levels

The project site is situated on an abandoned nine-hole golf course at Sand Canyon Country Club in the City of Santa Clarita (City). The project site is zoned Open Space (OS) and is located within the Planned Development (PD) overlay

zone. The area surrounding the project site is a mix of Urban Residential (UR1), Non-Urban (NU4, NU5), and Open Space (OS). Residential properties are located adjacent to the north and west of the project site, as well as approximately 300 feet to the south.

Existing noise levels were measured at the project site boundaries in order to establish baseline noise conditions against which to compare project operational noise levels, as shown in Figure 4.11-1, Noise Monitoring and Sensitive Receptor Location Map. A total of five short-term noise measurements were performed, one apiece near the residential receptors to the west, east, north, and south, as well as one measurement performed along the closed Mountain Course. Sound-level measurements were performed using the 3M SoundPro SP DL-1 sound-level meter (American National Standards Institute [ANSI] Type I). ANSI Type I sound-level meters have sufficient accuracy to be used for environmental noise evaluation. The sound-level meters were calibrated according to the manufacturer's written specifications.

In addition to the proposed resort component of the project, a water quality/detention basin would be expanded in size prior to the proposed project and would be situated near the existing water feature south of Robinson Ranch Road. Figure 4.11-2, Detention Basin Sensitive Receptor Location Map, illustrates noise-sensitive land uses in the immediate vicinity of the project. As depicted in Figure 4.11-2, residential receptors are located immediately to the west, east, north, and south of the main project site, while residential properties are located approximately 380 feet to the south of the existing detention basin to be expanded in size as part of the proposed project.

Table 4.11-2 summarizes the noise measurement locations and the calculated noise equivalent level (L_{eq}), minimum noise level, and maximum noise level.

Table 4.11-2. Existing Noise Levels in the Vicinity of the Project Site

Site No.	Measurement Location	Noise Levels (dBA)		
		L_{eq}	L_{min}	L_{max}
Daytime Measurement (between 7:00 a.m. and 7:00 p.m.)				
1	Western area of the project site along Sand Canyon Road, near residential receptors	63.3	44.8	75.3
2	Northern area of the project site along closed Mountain Course	39.8	32.6	53.3
3	Eastern area of the project site along closed Mountain Course, near residential receptors	41.4	36.3	51
4	North of the project site along Oak Springs Road, near residential receptors	53.3	36.3	75.6
5	South of the project site along Robinson Ranch Road, near residential receptors	44.4	38.3	58.8
Evening Measurement (between 7:00 p.m. and 10:00 p.m.)				
1	Western area of the project site along Sand Canyon Road, near residential receptors	60.7	51.9	69.9
4	North of the project site along Oak Springs Road, near residential receptors	47.8	37.5	61.3
Nighttime Measurement (between 10:00 p.m. and 7:00 a.m.)				
1	Western area of the project site along Sand Canyon Road, near residential receptors	59.6	49.6	74.1

Table 4.11-2. Existing Noise Levels in the Vicinity of the Project Site

Site No.	Measurement Location	Noise Levels (dBA)		
		L_{eq}	L_{min}	L_{max}
4	North of the project site along Oak Springs Road, near residential receptors	44.1	39.7	58.4

Source: Appendix I.
Notes: dBA = A-weighted decibels; L_{eq} = noise equivalent level; L_{min} = minimum noise level; L_{max} = maximum noise level.
Noise measurements were conducted in September 2018.

Modeled Existing Roadway Noise Levels

Existing roadway noise levels were calculated for primary roadway segments located in proximity to the project site. The roadway segments selected for analysis are those that are expected to be most directly impacted by project-related traffic, which, for the purpose of this analysis, include the roadways that are nearest to the project site and had the most project-generated trips. These roadways, when compared to roadways located further away from the project site, would experience the greatest percentage increase in traffic generated by the project.

Calculation of the existing roadway noise levels was accomplished using the FHWA Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the project transportation analysis. The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Noise Prediction Model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along study area roadway segments are presented in Table 4.11-3.

Table 4.11-3. Existing (2018) Roadway Noise Levels

Roadway	Roadway Segment	Predominant Existing Land Use Along Segment	dBA CNEL
Sand Canyon Road	North of Lost Canyon Road	Residential	68.2
	Between Lost Canyon Road and Robinson Ranch Road	Residential	66.9
	South of Robinson Ranch Road	Residential	65.4

Sources: Appendix J. Calculations provided in Appendix B to Appendix I.
Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level.
Noise levels calculated from the nearest receptor location to the roadway centerline.

Existing noise levels along the roadways indicated in Table 4.11-3 would fall within the normally acceptable and conditionally acceptable ranges.

Existing Groundborne Vibration Levels

The main sources of groundborne vibration near the project site are heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on local roadways. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB at 50 feet, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road. In terms of PPV levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 in/sec.

4.11.2 Regulatory Framework

Federal

Federal Highway Administration Standards

Title 23, Part 772, of the Code of Federal Regulations sets procedures for the abatement of highway traffic noise and construction noise. Title 23 is implemented by the FHWA. The purpose of this regulation is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. All highway projects that are developed in conformance with this regulation shall be deemed to be in conformance with the U.S. Department of Transportation-FHWA Noise Standards. Title 23 establishes a 67 dBA $L_{eq}(h)$ standard applicable to federal highway projects for evaluating impacts to land uses including residences, recreational uses, hotels, hospitals, and libraries (Title 23 Code of Federal Regulations Chapter 1, Part 772, Section 772.19).

Federal Transit Administration and Federal Railroad Administration Standards

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2006) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration have published guidelines for assessing the impacts of groundborne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 in/sec PPV.

State

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declare that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (24 CCR 2). Title 24 of the California Code of Regulations establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multifamily residential building or structure is proposed to be located in an area with CNEL (or day-night average sound level) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or day-night average sound level) of at least 45 dBA (24 CCR 2-35).

Local

Santa Clarita Municipal Code

The Chapter 11.44 of the Santa Clarita Municipal Code, the Noise Limits Code, specifies the City shall prohibit unnecessary, excessive, and annoying noises from all sources subject to its police power. At certain levels noises are detrimental to the health and welfare of the citizenry, and, in the public interests, such noise levels shall be systematically proscribed (Section 11.44.010 of the Municipal Code).

Residential zones are subject to a daytime (7:00 a.m. to 9:00 p.m.) noise limit of 65 dBA and a nighttime (9:00 p.m. to 7:00 a.m.) noise limit of 55 dBA. Commercial and manufacturing zones are subject to a noise limit of 80 dBA for daytime operations and 70 dBA for nighttime operations. Where a boundary line between a commercial and manufacturing property and a residential property exists, the noise level of the quieter zone shall be used.

Construction activities are limited to the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. Construction is not allowed on Sundays or on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day.

City of Santa Clarita General Plan Noise Element

The Noise Element of the City of Santa Clarita General Plan (City of Santa Clarita 2011) provides guiding and implementing policies regarding noise management, including the following:

Goal N 1: A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.

Objective N 1.1: Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.

Policy N 1.1.1: Use the Noise and Land Use Compatibility Guidelines contained on Exhibit N-8 [replicated herein as Table 4.11-4], which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.

Policy N 1.1.2: Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with state and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.

Policy N 1.1.3: Include consideration of potential noise impacts in land use planning and development review decisions.

Policy N 1.1.4: Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.

Goal N 2: Protect residents and sensitive receptors from traffic-generated noise.

Objective N 2.1: Prevent and mitigate adverse effects of noise generated from traffic on arterial streets and highways through implementing noise reduction standards and programs.

Policy N 2.1.1: Encourage owners of existing noise-sensitive uses, and require owners of proposed noise sensitive land uses, to construct sound barriers to protect users from significant noise levels, where feasible and appropriate.

Policy N 2.1.2: Encourage the use of noise absorbing barriers, where appropriate.

Goal N 3: Protect residential neighborhoods from excessive noise.

Objective N 3.1: Prevent and mitigate significant noise levels in residential neighborhoods.

Policy N 3.1.1: Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.

Policy N 3.1.2: Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.

Policy N 3.1.3: Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.

Policy N 3.1.4: Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences, and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

Policy N 3.1.5: Require that developers of private schools, childcare centers, senior housing, and other noise sensitive uses in areas where the ambient noise level exceeds 65 dBA (day), provide mitigation measures for these uses to reduce interior noise to acceptable levels.

Policy N 3.1.7: Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.

Policy N 3.1.9: Implement a buyer and renter notification program for new residential developments where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that

may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas:

c. Within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time, and the associated noise levels and frequency of noise events may change along with the use.

As mentioned in Policy N 1.1.1, Exhibit N-8 of the Noise Element prescribes recommended maximum exterior noise exposure levels for each land use; Exhibit N-8 from the Noise Element is replicated below as Table 4.11-4.

Table 4.11-4. Noise and Land Use Compatibility Guidelines

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Residential – Low Density Single-Family, Duplex, Mobile Homes	< 60	60 to 70	70 to 75	75 <
Residential – Multi. Family	< 60	60 to 70	70 to 75	75 <
Transient Lodging – Motels, Hotels	< 60	60 to 70	70 to 80	80 <
Schools, Libraries, Churches, Hospitals, Nursing Homes	< 60	60 to 70	70 to 80	80 <
Auditoriums, Concert Halls, Amphitheaters	—	< 65	—	65 <
Sports Arena, Outdoor Spectator Sports	—	< 75	—	75 <
Playgrounds, Neighborhood Parks	< 65	—	65 to 75	75 <
Golf Courses, Riding Stables, Water Recreation, Cemeteries	< 75	—	75 to 80	80 <
Office Buildings, Business Commercial and Professional	< 70	70 to 75	75 to 80	—
Industrial, Manufacturing, Utilities, Agriculture	< 75	75 to 80	80 <	—

Source: City of Santa Clarita 2011.

Notes:

All units shown in the table above are in dBA.

[a] Normally Acceptable: Specified land us is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements

[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice

[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction is development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Sound walls, window upgrades, and site design modifications may be needed in order to achieve City standards

[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

4.11.3 Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines and the City's General Plan and Municipal Code, a significant impact would occur if development of the proposed project would result in any of the following:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
2. Generation of excessive groundborne vibration or groundborne noise levels.
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, where the project would expose people residing or working in the project area to excessive noise levels.

Noise Significance Criteria Applicable to the Proposed Project

Based on the City's 2011 General Plan Noise Element and Municipal Code (noise ordinance), as well as standards adopted by other agencies that are customarily applied to the assessment of short-term noise generation, the proposed project would have a significant impact on noise if it would result in:

NOI-1 During construction, between the hours 7:00 p.m. and 7:00 a.m. weekdays, between 6:00 p.m. and 8:00 a.m. Saturdays, construction noise levels greater than 90 dBA Leq at any vicinity residence (FTA 2006). Also, any noise generating construction activities occurring between 7:00 p.m. and 7:00 a.m. weekdays, between 6:00 p.m. and 8:00 a.m. Saturdays, or any time on Sundays or holidays

NOI-2 For stationary noise sources located on the project site, the generation of noise levels at any vicinity residential property boundary greater than greater than 65 dBA L_{eq} during the daytime (7:00 a.m. to 9:00 p.m.) or greater than 55 dBA L_{eq} during the nighttime (9:00 p.m.to 7:00 a.m.).

NOI-3 From project operation, an increase of 3 dBA CNEL or more in existing roadway traffic noise levels, as a result of the addition of project generated traffic on vicinity roadways

NOI-4 During project construction or operation, the exposure of existing structures in the project vicinity to vibration levels exceeding 0.12 inches per second PPV, or exposure of residents to vibration levels of 72 VdB in residences where people normally sleep, for frequent events

Criteria Not Applicable to the Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Airports/Airport Land Use Plan

The project site is not located within an airport land use plan, is not located within 2 miles of a public or public-use airport, and is not located within the vicinity of a private airstrip. The closest airports are Whitman Airport approximately 10 miles south of the project site and Van Nuys Airport approximately 14.5 miles southwest of the

project site. Agua Dulce Airpark is located approximately 8.5 miles northeast of the project site. Therefore, future residents would not be exposed to elevated noise levels from aircraft operation, and airport noise issues (CEQA Guidelines threshold 3 above) are not addressed further in this analysis.

4.11.4 Impact Analysis

Methods of Analysis

The analysis of existing and future noise environments is based on observations, noise level measurements, and computer modeling. Existing noise levels were monitored at selected on-site and off-site locations using ANSI Type I sound level meters for general environmental noise measurement instrumentation. Traffic noise modeling involved the calculation of existing and future traffic noise levels along roadway sections where the proposed project would contribute additional vehicle trips, as provided by the project traffic consultant, using the FHWA model. Vibration from transportation sources was not evaluated in detail because it is not common for vibration from motor vehicles traveling on paved roads to cause disturbance or substantial annoyance in these areas.

Construction Noise and Vibration

Construction noise levels were determined using the FHWA Roadway Construction Noise Model. For construction noise, this analysis assumed compliance with conditions specified in the City's Noise Ordinance. Specifically, limiting construction to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and prohibiting construction activities on Sunday and holidays. For construction vibration, this analysis uses the Caltrans thresholds for damage to particularly sensitive structures (vibration peak particle velocities greater than 0.12 in/sec) and FTA's threshold for human annoyance within residences (72 VdB at residences where people normally sleep, for frequent events).

Threshold NOI-1. Would project construction occur outside of allowable hours or result in temporary noise levels above 90 dBA at existing vicinity residences?

Construction of the proposed project would generate noise that could expose nearby receptors (residences) to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. Noise from construction equipment generally exhibits point source acoustical characteristics. A point source sound is attenuated (or reduced) at a rate of 6 dB per doubling of distance from the source for hard site conditions and at 7.5 dB per doubling of distance for soft site conditions. These rules apply to the propagation of sound waves with no obstacles between source and receivers, such as topography (ridges or berms) or structures. The range of maximum noise levels for various types of construction equipment is provided in Table 4.11-5. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower levels.

Table 4.11-5. Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dB) - 50 feet from source
Air Compressor	81
Backhoe	80
Compactor	82

Table 4.11-5. Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dB) - 50 feet from source
Concrete Mixer	85
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

Source: FTA 2006.
Note: dB = decibel.

Whereas Table 4.11-5 shows the noise level of individual pieces of equipment, the noise levels shown in Table 4.11-6 take into account multiple pieces of construction equipment operating simultaneously, and list the typical noise levels that would be expected for the exterior construction noise at noise-sensitive receptors. These noise levels are based on surveys conducted by the U.S. Environmental Protection Agency in 1971. In the time since 1971, regulations have been enforced to improve noise generated by certain types of construction equipment to meet worker noise exposure standards. Also, because of stringent air quality emissions standards, newer, cleaner, and quieter heavy equipment is used on most construction projects in California. Thus, exterior construction noise levels indicated in Table 4.11-6 represent worst-case conditions. As shown in Table 4.11-6, the highest noise levels are expected to occur during peak construction activity hours.

Table 4.11- 6. Estimated Exterior Construction Noise at Sensitive Receptor

Sensitive Land Uses[a]	Distance to Project Site (feet)	Existing Monitored Daytime Ambient Noise Levels (dBA L_{eq})	Estimated Peak Construction Noise Levels (dBA)	Noise Level Increase (dBA)
Detention Basin Prior to Project Construction				
1. Residential uses to the south	380	44.4	68.5	24.1
Project Construction Noise				
1. Residential uses to the north	Adjacent[b]	53.3	99.5	46.2
2. Residential uses to the west	Adjacent[b]	63.3	99.5	36.2
3. Residential uses to the south	300	44.4	73.5	29.1

Source: Appendix I.
Notes: dBA = A-weighted decibels; L_{eq} = noise equivalent level.
[a] See Figure 4.11-1
[b] While the project includes construction activity up to the property lines of adjacent buildings, this analysis assumes that not all equipment would operate closer than 15 feet from the residential uses during peak activities

As shown in Table 4.11-6, expansion of the detention basin and construction-related noise levels from constructing the resort could reach up to 99.5 dBA at the adjacent northern and western residential property lines. The City exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific limited daytime hours. The City's Noise Code (Chapter 11.44 of the Municipal Code) requires noise generating construction activities be restricted to the hours between 7:00 a.m. to 7:00 p.m. Monday through Friday, 8:00 a.m. to 6:00 p.m. on Saturday, and prohibited on Sunday and holidays. This ensures that sensitive receptors are not disturbed by early morning or late night activities. However, due to the proximity of residences to the project site, predicted worst-case construction noise levels would range from 24 to 46 dBA over ambient levels; given that a 10 dB increase is perceived as a doubling of the noise level, construction noise would be both very noticeable and also very likely annoying. In addition, the noise levels at some residences would reach 99 dBA L_{eq}, which would exceed the FTA threshold of 90 dBA L_{eq}. Therefore, construction noise is considered a **potentially significant impact**.

Cumulative Construction Noise Impacts

This cumulative impact analysis considers development of the project in combination with ambient growth and other development projects within the vicinity. As noise is a localized phenomenon and decreases in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the project to result in cumulatively considerable noise impacts.

Construction of the project in combination with the construction of other potential projects could result in an increase in construction-related noise and vibration levels in this urbanized area of the City. However, all of the projects would be subject to the Municipal Code, which limits the hours of allowable construction activities. In addition, each potential construction project could be subject to additional project-specific mitigation measures aimed at the reduction of construction noise and vibration levels. Furthermore, as noise is a localized phenomenon and decreases in magnitude as distance from the source increases, it is unlikely that project-related construction activities would combine with construction activities associated with other construction efforts to generate a cumulatively considerable noise and vibration impact during construction. As such, cumulative impacts with respect to construction noise and vibration would be **less than significant**.

Threshold NOI-2. Would on-site operational noise from the proposed project result in noise exposure levels at adjacent residences that exceed allowable limits?

Operational noise sources include off-site noise such as noise associated with increased traffic and vehicles and on-site stationary noise associated with project operations. New mechanical equipment; heating, ventilation, and air conditioning units; and exhaust fans would be installed on the roof or near the proposed new resort structures as part of the project. Although the operation of the equipment would generate noise, the design of these on-site heating, ventilation, and air conditioning units and exhaust fans would be required to comply with the regulations of the City's Noise Code (Section 11.44.070 of the Municipal Code). Compliance with the City's Noise Code, specifically Section 11.44.070, would ensure noise from stationary sources would be less than significant.

Various noise events would occur periodically from the resort parking uses. Such periodic events would include activation of car alarms, sounding of car horns, slamming of car doors, engine revs, and tire squeals. Automobile movements would comprise the most continuous noise source and would generate a noise level of approximately 65 dBA at a distance of 25 feet (Appendix I). Car alarm and horn noise events generate sound levels as high as 75 dBA at a reference distance of 25 feet; however, these noise sources would be sporadic. Noise types associated with parking uses currently occur at the existing Sand Canyon Country Club and, although the project would increase the number of vehicles, these activities are not continuous or consistent over a 24-hour period and thus would not have the potential to increase ambient noise levels significantly. Therefore, noise impacts from the parking lot would be less than significant.

The project includes outdoor open spaces that would have the potential to generate outdoor noise that could impact nearby receptors. The north area of the project site would feature several outdoor amenities such as a pool courtyard, a family pool area, and a wedding garden. The pool courtyard would be located between the Functions Building and Spa Building, and the family pool area would be located east of the Functions Building and Spa Building. The wedding garden would be located between the three proposed buildings for the Spa Garden Inn. Additionally, one tennis court, two pickleball courts, a playground, and a nine-hole "chip and putt" golf course are proposed for the east area of the project site, adjacent to the existing Sand Canyon Country Club parking lot. The project also includes 2 miles of multi-purpose pedestrian pathways and private balconies for the villas and hotel. The nearest receptor to the wedding garden is approximately 300 feet away.

The wedding garden could be used to host events that may utilize amplified music or live performances; however, the project is subject Section 11.44.060 of the Municipal Code, which would make it unlawful for generated noise (i.e., from the wedding garden) to disturb the peace, quiet, and comfort of neighboring residents. With respect to potential swimming pool noise, the nearest receptor to the pool courtyard is approximately 600 feet, while the nearest receptor to the family pool is approximately 300 feet. While no structures would block the line-of-sight to receptors for the family pool, structures would block line-of-sight to receptors for the pool courtyard. Noise levels generated at both locations would diminish at the nearest receptors to approximately 46 dBA due to distance attenuation. This would not exceed the residential noise limits set forth in the City's Noise Code, Section 11.44.040 (65 dBA during daytime and 55 dBA during nighttime).

The east area of the project site would include one tennis court and two pickleball courts, which could generate elevated noise levels at nearby sensitive receptors. The nearest sensitive receptor to these uses is approximately 200 feet from this area. A previous noise study shows that typical noise levels for pickleball courts range from approximately 57 L_{eq} dBA to 67 L_{eq} dBA at a distance of 10 feet from the court (Appendix I). Due to distance attenuation, noise from pickleball play would be reduced to approximately 35 dBA at the nearest receptors. As such, these outdoor space activities would not exceed the residential noise limits set forth in the City's Noise Code, Section 11.44.040. Based on the above discussion, operational noise impacts from both mobile and stationary sources would be **less than significant**. No mitigation is required.

Threshold NOI-3. Would proposed project vehicle trips result in substantial increases in off-site roadway noise levels for noise sensitive land uses located along such roadways?

The increase in traffic resulting from implementation of the project would increase ambient noise levels at off-site locations in the project vicinity. These concerns were addressed using the FHWA Traffic Noise Model, which calculates the CNEL noise level for a particular reference set of input conditions, based on site-specific traffic volumes, distances, speeds, and/or noise barriers. Based on the traffic analysis prepared for the project, and in combination with an analysis of the surrounding land uses, roadway noise levels were forecasted to determine if the project's vehicular traffic would result in a significant impact at off-site locations.

The project-related increases in noise levels at the primary roadway segments located in proximity to the project site are identified in Table 4.11-7. As shown in Table 4.11-7, the project would increase local noise levels by a maximum of 1.1 dBA CNEL during the 2023 With Project scenario for Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road. All other roadway segments would not experience noise level increases of more than 0.9 dBA CNEL. These increases would be less than the 3 dBA and 5 dBA CNEL thresholds identified previously. As such, the project's traffic-related noise level increases would not exceed thresholds of significance, and off-site traffic noise levels associated with the project would be **less than significant**. No mitigation is required.

Table 4.11-7. Project Roadway Noise Levels

Roadway	Roadway Segment	dBA CNEL					
		2023 Without Project	*2023 With Project*	*Project Net Increase*	*2028 Without Project*	*2028 With Project*	*Project Net Increase*
Sand Canyon Road	North of Lost Canyon Road	68.7	69.6	*0.9*	71.1	71.7	*0.6*
	Between Lost Canyon Road and Robinson Ranch Road	67.9	69.0	*1.1*	69.0	69.9	*0.9*
	South of Robinson Ranch Road	65.8	65.9	*0.1*	67.5	67.6	*0.1*

Source: Appendix I.
Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level.
Traffic data: Appendix J. Noise levels calculated from the nearest receptor location to the roadway centerline.

Cumulative Traffic Noise Impacts

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the project, ambient growth, and related projects/cumulative development within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the project to the Future With Project (2040) volumes on the roadway segments in the project vicinity. As shown in Table 4.11-8, column [3] minus column [1] would yield an increase in cumulative roadway noise levels with the project for future year 2040 compared to existing conditions (i.e., existing conditions, plus project, plus ambient growth, plus related projects/cumulative development). As shown in Table 4.11-8, cumulative traffic noise levels for the year 2040 would increase by a maximum of 3.8 dBA CNEL for the roadway segment of Sand Canyon Road north of Lost Canyon Road and 3.0 dBA CNEL at Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road.

Table 4.11-8. Future Roadway Noise Levels

Roadway	Roadway Segment	dBA CNEL				
		Existing (2018) [1]	*2040 Without Project [2]*	*2040 With Project [3]*	*Project Net Increase [3]-[2]*	*Cumulative Net Increase [3]-[1]*
Sand Canyon Road	North of Lost Canyon Rd.	68.2	71.5	72.0	***0.5***	***3.8***
	Between Lost Canyon and Robinson Ranch	66.9	69.0	69.9	***0.9***	***3.0***
	South of Robinson Ranch	65.4	67.6	67.6	***0.0***	***2.2***

Source: Appendix J.
Notes: *dBA = A-weighted decibel; CNEL = community noise equivalent level.*
Noise levels calculated from the nearest receptor location to the roadway centerline.

As described previously, a significant impact would occur when noise levels increase by more than 3 dBA CNEL where future noise levels exceed acceptable levels (i.e., 70 dBA CNEL for residential areas). Although the project would only contribute a maximum increase of 0.9 dBA CNEL for future 2040 traffic noise levels, cumulative impacts would be considered **potentially significant** for the following roadway segments along Sand Canyon because cumulative increases exceed 3 dBA: Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Rand Road.

Threshold NOI-4. *Would project construction or operation expose existing structures in the project vicinity to vibration levels exceeding 0.12 inches per second PPV, or expose residents to vibration levels of 72 VdB in residences where people normally sleep?*

Construction-Related Vibration

During construction activities for the proposed project, groundborne vibration would be produced by heavy-duty construction equipment. The most important equipment relative to generation of vibration, and the levels produced by such equipment, is illustrated in Table 4.11-9.

Table 4.11-9. Vibration Source Levels for Construction Equipment

Equipment	Approximate PPV (in/sec)				Approximate RMS (VdB)			
	25 Feet	*50 Feet*	*75 Feet*	*100 Feet*	*25 Feet*	*50 Feet*	*75 Feet*	*100 Feet*
Large Bulldozer	0.089	0.031	0.017	0.011	87	78	73	69
Caisson Drilling	0.089	0.031	0.017	0.011	87	78	73	69
Loaded Trucks	0.076	0.027	0.015	0.010	86	77	72	68
Jackhammer	0.035	0.012	0.007	0.004	79	70	65	61
Small Bulldozer	0.003	0.001	0.0006	0.0004	58	49	44	40

Source: FTA 2006.
Note: PPV = peak particle velocity; in/sec = inches per second; RMS = root mean square; VdB = vibration decibels.

As shown in Table 4.11-9, use of heavy equipment (i.e., large bulldozer) generates vibration levels of 0.089 in/sec PPV at a distance of 25 feet. The adjacent residences to the north and west the project site could experience vibration levels of 0.089 in/sec PPV. Vibration levels at these receptors would not exceed the FTA building damage threshold of 0.12 in/sec PPV. With respect to human annoyance, residential sensitive receptors located within 75 feet of the project site boundaries could experience construction related vibration levels of up to approximately 73 VdB to 87 VdB. These levels would exceed the FTA's vibration impact threshold of 72 VdB for residences where people normally sleep. Due to the proximity of residences to the project site and the potential for construction vibration to be an annoyance, construction-related vibration is considered a **potentially significant impact**.

With regard to the proposed detention basin expansion, noise sensitive receptors are located approximately 380 feet from the detention basin boundaries. Based on this distance and the fact that vibration values diminish as receptors are located farther away from the source of the vibration, vibration threshold exceedances would not occur. Therefore, residents would not experience significant construction vibration levels during development of the detention basin and impacts would be less than significant.

As there are no known off-site historical buildings or buildings that are extremely susceptible to vibration damage within 25 feet of heavy project construction activities or detention basin boundaries, there is no potential for the project to generate groundborne vibration levels that exceed the threshold of 0.12 in/sec PPV at a historical building. Therefore, impacts with respect to building damage would be less than significant.

Operations-Related Vibration

The project would not include any stationary equipment that would generate or result in excessive vibration levels. Groundborne vibration at the project site and in the immediate vicinity would result from heavy-duty vehicular travel

(e.g., refuse trucks and transit buses) on the nearby local roadways, and the proposed land uses at the project site would not result in substantial increased use of these heavy-duty vehicles. While refuse trucks would be used for the disposal of solid waste at the project site, these trips are already occurring at the Sand Canyon Country Club and within the neighborhood and only occur once a week. The number of transit buses that travel along adjacent roadways would also not substantially increase due to the project. Thus, vibration impacts associated with operation of the project would be **less than significant**, and no mitigation is required.

4.11.5 Mitigation Measures

Implementation of Mitigation Measure (MM) NOI-1 and MM-NOI-2 would help decrease potentially significant short-term construction-related noise impacts to the extent feasible.

MM NOI-1 Construction Noise

(a) Noise construction activities whose specific location on the project site may be flexible (e.g., operation of compressors and generators) shall be conducted as far as possible from the nearest off-site land uses.

(b) When possible, construction activities shall be scheduled so as to avoid operating several pieces of equipment simultaneously, which causes high noise levels.

(c) Flexible sound control curtains shall be placed around all drilling apparatuses, drill rigs, and jackhammers when in use.

(d) The project contractor shall use power construction equipment with state-of-the-art noise shielding and muffling devices.

(e) Barriers such as flexible sound control curtains shall be erected around heavy equipment to minimize the amount of noise on the surrounding land uses to the maximum extent feasible during construction.

(f) All construction truck traffic shall be restricted to truck routes approved by the City of Santa Clarita (City), which shall avoid residential areas and other sensitive receptors to the extent feasible.

(g) A construction notice shall be prepared and shall include the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public and approved by the City.

MM NOI-2 Construction Vibration

(a) Vibration producing construction activities whose specific location on the project site may be flexible (e.g., materials stockpiling, cement mixing, compressor equipment) shall be conducted as far as possible from the nearest off-site land uses.

(b) On-site loaded trucks shall be routed as far as practicable from adjacent residences.

(c) The City of Santa Clarita's construction schedule limitations of 7:00 p.m. to 7:00 a.m. weekdays and 6:00 p.m. to 8:00 a.m. Saturdays shall be strictly adhered to.

4.11.6 Level of Significance After Mitigation

Threshold NOI-1 ***Would project construction occur outside of allowable hours or result in temporary noise levels above 90 dBA at existing vicinity residences?***

The project's temporary construction noise levels would exceed exterior daytime noise standards at the identified sensitive receptors. As noted previously, the project would be consistent with the City's Noise Code, specifically Section 11.44.080. In addition, MM-NOI-1 would serve to reduce construction noise levels to the maximum extent feasible by requiring construction equipment be in good working order to minimize noise, and locating noisy pieces of construction equipment away from residences. However, implementation of MM-NOI-1 would not reduce impacts to less than significant. The project's impacts due to temporary construction noise levels would be **significant and unavoidable**.

Threshold NOI-3. ***Would proposed project vehicle trips result in substantial increases in off-site roadway noise levels for noise sensitive land uses located along such roadways?***

Cumulative Traffic Noise Impacts

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the project, ambient growth, and related projects/cumulative development within the study area; cumulative traffic noise level increases would be considered significant on Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road. Although the Project would only contribute a maximum increase of 0.9 dBA CNEL to future 2040 traffic noise levels, cumulative traffic noise level increases would be considered significant along Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road. As no feasible mitigation is available to reduce this impact, cumulative traffic noise impacts would be considered **significant and unavoidable.**

Threshold NOI-4 ***Would project construction or operation expose existing structures in the project vicinity to vibration levels exceeding 0.12 inches per second PPV, or expose residents to vibration levels of 72 VdB in residences where people normally sleep?***

The project's temporary construction vibration levels would exceed human annoyance thresholds at the identified sensitive receptors. MM-NOI-2 would serve to reduce construction vibration levels to the maximum extent feasible by requiring construction equipment be in good working order to minimize vibration, locating heavy pieces of construction equipment away from residences, and adhering strictly to the daytime only construction schedule to avoid sleep disturbance. Implementation of these mitigation measures would reduce impacts; however, they would not reduce impacts to less than significant. The project's temporary construction vibration impacts (human annoyance) would be **significant and unavoidable**.

4.11.7 References Cited

Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement – A Technical Supplement to the Traffic Noise Analysis Protocol.* California Department of Transportation; Environmental Program; Environmental Engineering; Noise, Air Quality, and Hazardous Waste Management Office. October 2013. http://www.dot.ca.gov/hq/env/noise/pub/Technical%20Noise%20Supplement.pdf.

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FHWA (Federal Highway Administration). 2008. *Roadway Construction Noise Model (RCNM), Software Version 1.1.* U.S. Department of Transportation, Research and Innovative Technology Administration, John A. Volpe National Transportation Systems Center, Environmental Measurement and Modeling Division. Washington, D.C.

FTA (Federal Transit Administration). 2006. *Transit Noise & Vibration Impact Assessment.* Federal Transit Administration, Office of Planning and Environment. May 2006.

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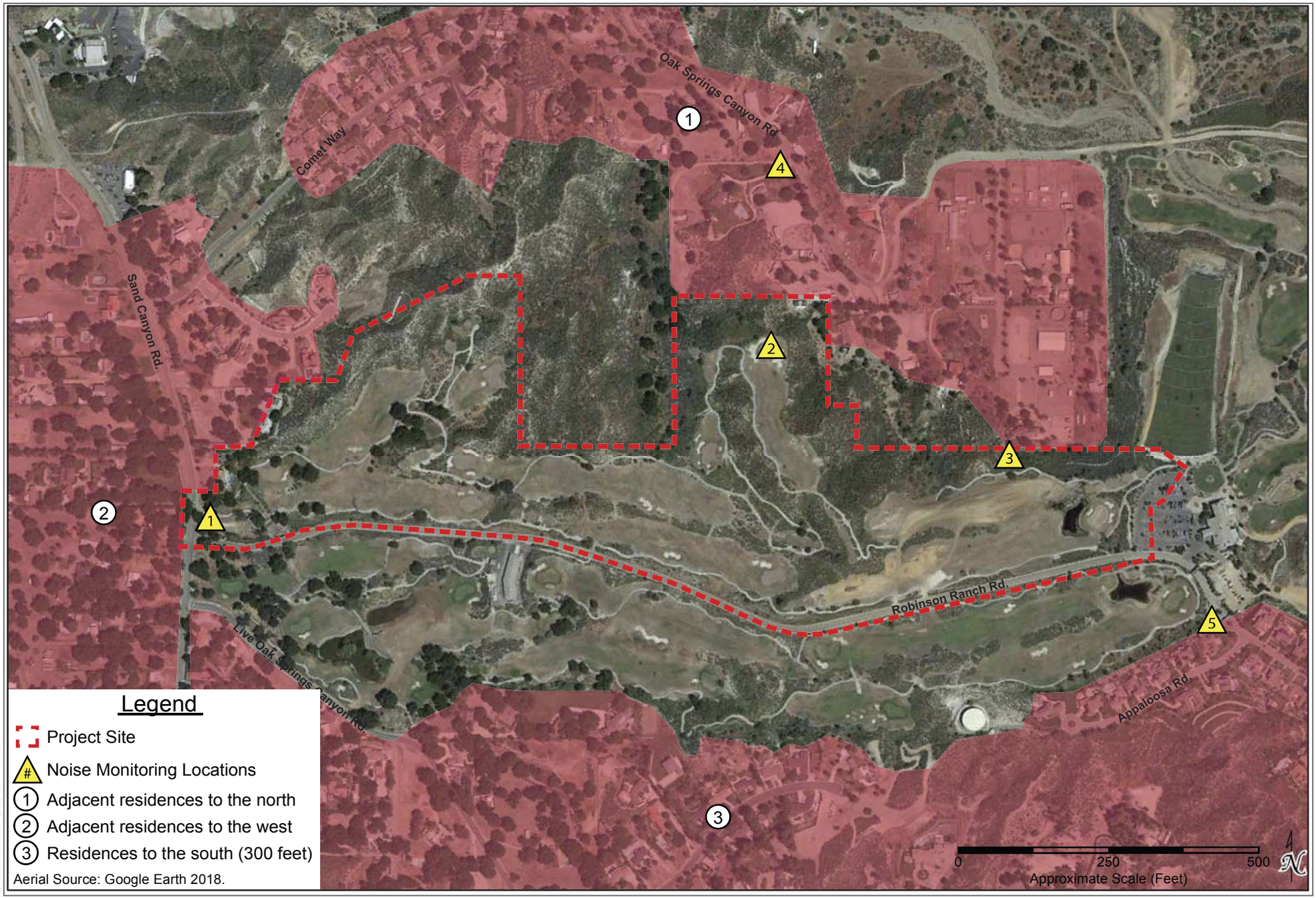

SOURCE: Google Earth, 2018

DUDEK

FIGURE 4.11-1

Noise Monitoring and Sensitive Receptor Location Map

Sand Canyon Resort Project

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SOURCE: Google Earth, 2018

FIGURE 4.11-2

Detention Basin Sensitive Receptor Location Map

Sand Canyon Resort Project

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4.12 Population and Housing

This section describes the existing population and housing characteristics of the City of Santa Clarita (City), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed Sand Canyon Resort Project (project). The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines.

4.12.1 Environmental Setting

The proposed project site is currently undeveloped and, until 1016, was used as a golf course. Under existing conditions, no residential or employment population occupies the project site.

The following subsections provide an overview of existing conditions related to population, housing, and employment in the City.

Southern California Association of Governments Growth Projections

The Southern California Association of Governments (SCAG) produces a Regional Growth Forecast, which is a key guide for developing regional plans and strategies mandated by federal and state governments such as the Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), the Program Environmental Impact Report (EIR) for the RTP/SCS, the Air Quality Management Plan, the Federal Transportation Improvement Program, and the Regional Housing Needs Assessment (RHNA). The growth forecasts are appended to the RTP/SCS, most recently adopted in April 2016. The Growth Forecast Appendix describes the forecasting process; trends in population, housing, and employment; forecasting methodology; and assumptions. The current RTP/SCS planning horizon is 2012–2040. The SCAG region, which is made up of six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura), is expected to add 3.8 million residents, 1.5 million households, and 2.4 million jobs between 2012 and 2040. Slow growth patterns experienced after the Great Recession are expected to continue into the future. Over the course of the RTP/SCS planning horizon, the SCAG region is expected to grow primarily through natural increase, with nearly 90% of population growth the result of births rather than net migration (SCAG 2016a). Table 4.12-1 shows population, household, and employment projections for Los Angeles County as a whole and for the City, as calculated by SCAG during its 2026 RTP/SCS planning process.

Table 4.12-1. Population, Housing, and Employment (Southern California Association of Governments)

	City of Santa Clarita			County of Los Angeles		
Year	*Population*	*Households*	*Employment*	*Population*	*Households*	*Employment*
2012	202,000	67,300	73,500	9,922,600	3,257,600	4,246,600
2020	220,600	75,600	83,700	10,326,200	3,493,700	4,662,500
2035	250,900	86,300	91,300	11,145,100	3,809,300	5,062,100
2040	262,000	90,300	95,900	11,514,800	3,946,600	5,225,800

Source: SCAG 2016a, 2016b, 2017a, 2017b.

City of Santa Clarita Growth Projections

The Housing Element of the City's General Plan contains population and housing projections for the year 2021. The City is located within the planning area of SCAG, who regularly calculates the RHNA, assigning a portion of future housing units at four income levels to each city and county in the six-county planning region. According to SCAG, the anticipated population within the City is expected to be 220,600, and the estimated number of new housing units needed in the City by 2021 is a total of 8,322 housing units.

County of Los Angeles Growth Projections

The County of Los Angeles (County) General Plan EIR shows population projections for Los Angeles County for year 2020. When the General Plan EIR was produced in 2014, Los Angeles County was anticipated to have a population of 10,404,000 people and 3,513,000 housing units in 2020 (County of Los Angeles 2015). These numbers are slightly higher than those shown in SCAG's growth projections in Table 4.12-1. Because SCAG's projections were produced more recently than those shown in the County General Plan EIR, the analysis in this section will rely on the SCAG projections.

U.S. Census Data

The U.S. Census Bureau publishes population estimates that are updated annually. The latest population estimates to date for the City are for July 2017. The City's population as of 2017 is estimated by the U.S. Census Bureau to be 210,888 people. Number of households and persons per household are also reported by the U.S. Census Bureau. (Those data are reported for 2013–2017.) Number of households is estimated by the U.S. Census Bureau to be 67,914 households for the period of 2013–2017, and persons per household is estimated to be 3.06 (U.S. Census Bureau 2019a).

The latest population estimates to date for Los Angeles County are for July 2018. The county's population as of 2018 is estimated by the U.S. Census Bureau to be 10,163,507 people. Number of households and persons per household are also reported by the U.S. Census Bureau. (Those data are reported for 2013–2017.) Number of households is estimated by the U.S. Census Bureau to be 3,295,198 households for the period of 2013–2017, and persons per household is estimated to be 3.01 (U.S. Census Bureau 2018b).

The U.S. Census Bureau's population estimates for the City and Los Angeles County in 2017 are lower than the population as reported by SCAG for 2016. For the purposes of this analysis, the 2016 SCAG data will be used to represent the most recent population estimates to ensure a more conservative analysis.

4.12.2 Regulatory Framework

State

California Department of Housing and Community Development

State housing law (California Government Code Section 65580 et seq.) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their Housing Elements. The Housing Element is one of seven state-mandated elements that every General Plan must contain, and it is required to be updated every 8 years and determined legally adequate by the state. The purpose of the Housing Element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs. In addition, the Housing Element defines the related

policies and programs that the community will be implemented to achieve the stated goals and objectives. This would be accomplished through the allocation of regional housing needs consistent with the SCS.

Regional

Southern California Association of Governments

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local governments from Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The City is located within the North Los Angeles County Subregion, 1 of 15 Subregional Organizations in the SCAG Region. SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. SCAG adopted its 2012 RTP/SCS, which presents the transportation and land use vision for the SCAG region through the year 2035 and provides a long-term investment framework for addressing the region's transportation and related challenges. Growth forecasts contained in the RTP/SCS for Los Angeles County and the City of Santa Clarita are utilized as the basis of analysis for housing and population forecasts in this section.

Regional Housing Needs Assessment

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. In cooperation with HCD, local governments and councils of governments are charged with determining the existing and projected housing need as a share of the statewide housing need of their city or region. The RHNA is an assessment process performed periodically as part of Housing Element and General Plan updates at the local level. The RHNA quantifies the housing need by income group within each jurisdiction during specific planning periods. The 5th cycle RHNA Allocation Plan, which covers the planning period from October 2013 to October 2021, was adopted by the Regional Council on October 4, 2012. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

SCAG determined the RHNA growth needs for the North Los Angeles County Subregion, which includes the City of Santa Clarita. The total housing growth need for the City during the 2013–2021 planning period is 8,322 units. This total is distributed by income category as shown in Table 4.12-2.

Table 4.12-2. City of Santa Clarita Population, Housing, and Employment: Census Data and Forecast

Income Group	RHNA Allocation	Percent of City's RHNA Allocation
Very Low (50% or less of median)	2,208	26.5%
Low (51% to 80% of median)	1,315	15.8%
Moderate (80% to 120% of median)	1,410	16.9%
Above Moderate (above 120% of median)	2,389	40.7%
Total	**7,322**	**100%***

Sources: SCAG 2016a; City of Santa Clarita 2013.
Notes: RHNA = Regional Housing Needs Assessment.
* Totals may not sum due to rounding

Regional Comprehensive Plan

The 2008 Regional Comprehensive Plan (RCP) was prepared in response to SCAG's Regional Council directive in its 2002 Strategic Plan to define solutions to housing, traffic, water, air quality, and other regional challenges. The 2008 RCP is an advisory document that describes future conditions under current trends, defines a vision for a healthier region, and recommends an Action Plan with a target year of 2035. The RCP addresses land use and housing, transportation, air quality, energy, open space and habitat, water, solid waste, economy, security, and emergency preparedness. The RCP provides a series of recommended near-term policies that developers and stakeholders can consider for implementation, as well as potential policies for consideration by local jurisdictions and agencies when conducting project review.

The Land Use and Housing chapter of the RCP promotes sustainable planning for land use and housing in Southern California through maximizing the efficiency of the existing and planned transportation network, providing the necessary amount and mix of housing for a growing population, and enabling a diverse and growing economy and protecting important natural resources.

Regional Growth Forecast

As part of its RTP/SCS document, SCAG develops population and housing forecasts for the SCAG region and for the jurisdictions that make up the SCAG region. Population and housing forecasts for the City and Los Angeles County are shown in Table 4.12-1, Population, Housing, and Employment (SCAG).

Local

General Plan Housing Element

The City's Housing Element is provided in the City of Santa Clarita General Plan. This element sets forth the City's goals and policies with respect to housing and establishes a comprehensive 8-year program strategy for the October 15, 2013, to October 15, 2021, planning period. The Housing Element identifies strategies and programs that focus on (1) preserving and improving housing and neighborhoods, (2) providing adequate housing sites, (3) assisting in the provision of affordable housing, (4) removing governmental and other constraints to housing investment, and (5) promoting fair and equal housing opportunities.

The following goals and policies from the 2013–2021 Housing Element are applicable to the project:

Goal H 1: Provide adequate sites to accommodate 8,322 new housing units between 2013 and 2021.

- **Policy H 1.1.1:** Encourage a variety of housing types such as single-family attached (townhouses), multi-family units, planned unit developments mixed use housing and other housing types that make housing more affordable.
- **Policy H 1.1.2:** Encourage the development of new affordable units through the provision of incentives.

Goal H 2: Assist in the development of adequate housing to meet the needs of extremely low, very low, low and moderate income households (California Government Code §65583(c)(2)).

Policy H 2.1.3: Encourage the development of housing affordable to lower income groups in areas well served by public transportation, schools, retail, and other services.

Goal H 4: Preserve affordability of existing homes that are at risk of converting to market-rate rents during the planning period.

Objective H 4.1.1: Preserve 232 units at risk of losing their subsidies and converting to market rents between 2013 and 2021.

Goal H 6: Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status or disability. (California Government Code §65583(c)(5).

Policy H 6.1.1: Ensure compliance with fair housing laws by adopting development guidelines that encourage the development of mixed-income housing in every zone district and in every area of the community

4.12.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to population and housing are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to geology and soils would occur if the project would:

1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.
3. For the purposes of the impact analysis, substantial population growth is defined as population growth that exceeds adopted population growth forecasts for the City. Regional growth forecasts prepared by SCAG for the adopted 2016–2040 RTP/SCS and the City of Santa Clarita General Plan were used to analyze the potential impact of housing and population growth under the project.

4.12.4 Impact Analysis

Threshold POP-1. ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

The proposed project does not include the displacement of any people, housing, or businesses, nor does it include the development of residential dwelling units that would induce population growth. The proposed project includes the development of a resort hotel and associated amenities on a currently undeveloped site. The proposed project would not involve construction of new homes or the extension of roads or other infrastructure that would induce population growth. Any infrastructure improvements associated with the proposed project would generally occur within the project site and in the immediate area and would be implemented for the purposes of supporting the proposed project. The proposed project would not involve the extension of utilities to areas that are not currently served. As such, the proposed project would not directly induce substantial population growth through developing new housing, nor would it indirectly induce substantial population growth through the extension of roads or other

infrastructure to new areas. However, the proposed project would increase the number of jobs available at the project site relative to the number of jobs that are currently available at the site. The potential for the project to induce population growth through provision of new employment is discussed further in the following subsections.

Construction

During proposed construction activities, construction personnel would be required, which would generate a temporary increase in employment at the project site. However, construction employment at the project site is not anticipated to generate population growth in the City. The need for construction workers would be accommodated within the existing and future labor market in the Los Angeles metropolitan area, which is highly dense and supports a diversity of construction firms and personnel. If construction workers live outside of the City or Los Angeles County, these workers would likely commute during the relatively short and finite construction period, which is anticipated to be approximately 24 months. For these reasons, construction employment would not induce substantial population growth in the area, and construction impacts would be **less than significant**.

Operation

Under existing conditions, the project site is undeveloped and was formerly used as a golf course until 2016. Upon project implementation, employment opportunities at the project site would increase. Based on project-specific information provided by the applicant, total employment is estimated to be approximately 500 employees. The expected number of new jobs that would be generated by the proposed project is within employment growth projections for the City and Los Angeles County, as calculated by SCAG. The City is expected to undergo an increase in 10,200 jobs between 2012 and 2020 (the City had approximately 73,500 jobs in 2012 and is expected to have approximately 83,700 jobs in 2020). By 2035, SCAG estimates that the City will have an additional 7,600 jobs for a total of 91,300 jobs within the City. As such, an additional 500 jobs in the City resulting from the proposed project is well within these projections. The number of new jobs that is expected to be associated with the proposed project also falls well within employment projections for Los Angeles County as a whole. The county is expected to undergo an increase in approximately 200,000 jobs between 2015 and 2020; the county had approximately 4,424,056 jobs in 2015 and is expected to have approximately 4,662,500 jobs in 2020 (SCAG 2016b, 2017a, 2017b).

While increases in employment opportunities at the project site fall well within employment growth projections for the City and the region, increased permanent employment has the potential to attract additional residents to the City or surrounding areas, if new employees were to relocate to the City or nearby areas upon obtaining a job at the project site. However, population growth due to employee relocation is unlikely. Because the proposed project would be located in the densely populated Los Angeles metropolitan area, it is anticipated that the jobs at the project site would be filled by City residents or by residents of neighboring cities and communities. In the unlikely event that new employees were to relocate to the City or Los Angeles County upon obtaining a job at the project site, the potential population growth would be minor and would not exceed population projections for the City or Los Angeles County.

In summary, the proposed project is not expected to draw substantial numbers of new residents to the City or to Los Angeles County, if at all. The proposed project is commercial with a recreational component and is located in a populated metropolitan area that typically provides a robust and diverse employment pool, such that the increases in employment at the project site during construction and operation are not expected to cause people to move into the City or Los Angeles County from outside the area. Furthermore, the employment growth that may be caused by the project falls well within current projections for employment growth in the City and Los Angeles County. For these reasons, the proposed project would not induce substantial population growth, and impacts would be **less than significant**.

Threshold POP-2. ***Would the project displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?***

The proposed project would not displace any existing housing, because the project site is currently vacant and previously operated as a golf course. Therefore, because no housing would be displaced, the project would result in **no impacts** with regard to displacement of housing.

4.12.5 Mitigation Measures

Impacts associated with population and housing would be less than significant, and no mitigation is required.

4.12.6 Level of Significance After Mitigation

Impacts associated with population and housing would be less than significant, and no mitigation is required.

4.12.7 References Cited

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4.13 Public Services

This section describes the existing setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, and evaluates potential public services impacts related to implementation of the project. The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines. The information presented in this section was collected from a number of publicly available sources, including the City of Santa Clarita General Plan, the Santa Clarita Municipal Code, and personal communications with fire and police service providers. Additionally, correspondence was provided by the Los Angeles County Fire Department (Takeshita 2019) and the Los Angeles County Sheriff's Office (Jue 2019).

4.13.1 Environmental Setting

Fire Protection

The City of Santa Clarita (City) contracts with the Los Angeles County Fire Department (LACFD) for fire services. The LACFD currently serves 58 cities and unincorporated communities. LACFD provides urban and wildland fire protection services, fire prevention services, emergency medical services, hazardous materials services, and urban search and rescue services throughout the City. The LACFD is divided into nine divisions, managed by the Consolidated Fire Protection District of Los Angeles County, which has a governing board made up of six participating city representatives on a rotating basis and one County Supervisor. Santa Clarita Valley is currently served by 15 fire stations. Fire Station 104, located at 26901 Golden Valley Road, is currently under construction. The apparatus assigned to Fire Station 104 is temporarily housed at a nearby fire station while Fire Station 104 is under construction. LACFD's 5-Year Developer Fee Detailed Fire Station Plan identified the need for one additional fire station within the City and six additional fire stations in Santa Clarita Valley based on growth projections and proposed development (LACFD 2019).

Aside from the personnel and equipment listed above, the LACFD has additional resources available to provide back-up services to the City as needed, including additional engine companies, truck companies, paramedic squads, hazardous material squads, firefighting helicopters, other fire camps, and a variety of specialty equipment.

The LACFD station closest to the project site is Fire Station 123, located at 26321 Sand Canyon Road, which is approximately 1.9 miles south of the project site. Additional fire services are provided by Station 132 and 107. Fire Station 132, located at 29310 Sand Canyon Road, is approximately 1.95 miles north of the project site. Fire Station 107, located at 18239 West Soledad Canyon Road, is approximately 1.8 miles northwest of the project site. If a significant incident occurs, the project site would be served by the full resources of the LACFD, not just the stations located closest to the site or that have primary jurisdiction within the Santa Clarita Valley.

A description of the operational characteristics of the stations closest to the project site and, therefore, most likely to respond to incidents at the project site, is provided below (LACFD 2019).

- Los Angeles County Fire Station 123 maintains three-person engine company (one fire captain, one fire fighter specialist, and one fire fighter). The emergency response time from the station to the project site (approximately 1.9 miles) would be approximately 6 minutes. Typically, Fire Station 123 has a response time goal of 8 minutes for the first arriving unit and 12 minutes for advanced life support (paramedic) units in suburban areas.

Property taxes are the main revenue source for the LACFD, but the Developer Fee Program, established in 1990, generates revenue to fund the acquisition, construction, improvements, and equipping of fire station facilities in high-growth, urban-expansion areas (LACFD 2019).

The level of service provided to areas within the City is determined by the LACFD, and the LACFD does not calculate service-to-population ratios. Such ratios do not properly reflect the need for fire protection or emergency medical services because they do not account for demand caused by non-residential structures, vacant land with combustible vegetation, vehicular incidents, and transient populations. Indicators of need for additional units or fire stations is based on a combination of response times, incident loads, resident and transient populations, and square footage of improvements. Nationally recognized response time targets for urban areas is 5 minutes for a basic life support unit (engine company) and 8 minutes for an advanced life support unit (paramedic squad). The LACFD uses the following response guidelines (LACFD 2019):

- in urban areas, a 5-minute or less response time for the first arriving unit for fire and emergency medical service responses, and an 8-minute or less response for the advanced life support (paramedic) unit, or
- in suburban areas, an 8-minute response time for the first arriving unit, and 12 minutes for the advanced life support (paramedic unit), such as the project site.

The LACFD is currently meeting these guidelines.

The LACFD annually updates its Five-Year Capital Plan, which identifies anticipated facilities that would be constructed during the specified planning horizon. Funding used for land acquisitions, facility improvements, and partial funding of new equipment is generated through LACFD's Developer Fee Program, and funding used for increases in staffing is generated from local property taxes. The LACFD has a developer fee in effect in the Antelope Valley, Santa Clarita Valley, and Santa Monica/Malibu areas. The Los Angeles County Board of Supervisors and City Council for Santa Clarita approved to leave the developer rates unchanged for the 2017–2018 fiscal year ($1.0883 per square-foot of new floor areas of building), effective November 28, 2017. Application of the developer fees and property tax revenues generated by new development help ensure adequate fire service levels for future developments (LACFD 2019).

Wildland Fire Hazard Potential

The LACFD designates lands in Los Angeles County related to their potential for wildland fire hazards. These designations are made by the County Forester, and are based on criteria such as an area's accessibility, amount and type of vegetative cover, water availability, and topography. The two designations used by LACFD are Moderate Fire Hazard Zone and Very High Fire Hazard Severity Zone (VHFHSZ). Areas within Los Angeles County not designated as either Moderate Fire Hazard Zone or VHFHSZ are not considered to be subject to severe wildland fire hazards.

LACFD has designated the project site, consistent with the rest of the Santa Clarita Valley, as a Fire Zone 4, VHFHSZ (CAL FIRE 2011). The VHFHSZ designation has more restrictive building requirements than the Moderate Fire Hazard Zone designation, and is considered to be the most severe fire zone. Fire Zone 4 typically has the following vegetation types: chaparral, coastal sage scrub, riparian, and oak woodlands vegetation communities. Wildland fires are relatively common occurrences in these vegetation communities, which are similar to the types found in Santa Clarita Valley and surrounding areas. The plant species characteristics of Fire Zone 4 have adapted to periodic wildland fire conditions and maintain a healthy ecosystem in the regional vicinity (City of Santa Clarita 2011a).

Typically, vegetation begins to lose its moisture content during the spring months, and by the summer and fall when Santa Ana wind conditions occur, wildland fire conditions become extremely high. Historically, large fires tend to burn these areas every 20 to 25 years. Generally, fire prevention for urban development in wildland fire hazard areas focuses on restricting the types of building materials used, building design, and incorporating setbacks. Development within a VHFHSZ is required to meet the building construction requirements specified in the City's Building and Safety Code for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modifications (City of Santa Clarita 2011a).

Due to the high fire hazard potential that exists in a VHFHSZ, development within these areas is subject to various governmental codes, guidelines, and programs that are aimed at reducing the hazard potential to acceptable levels. The County of Los Angeles has prepared fuel modification guidelines and landscape criteria for all new construction to implement relating to fuel modification planning and to help reduce the threat of fires in high hazard areas. Per Section 1117.2.1 of the Los Angeles County Fire Code, "A fuel modification plan, a landscape plan and an irrigation plan … shall be submitted with any subdivision of land or prior to any new construction … where the structure or subdivision is located within areas designated as a Very High Fire Hazard Severity Zone in the Los Angeles County Building Code."

A fuel modification plan identifies specific zones within a property that are subject to fuel modification. A fuel modification zone is a strip of land where combustible native or ornamental vegetation has been modified and/or partially or totally replaced with drought-tolerant, fire-resistant plants. The City has adopted the Los Angeles County Fire Code, and the proposed project is subject to the Fire Code requirements.

Police Protection

Primary law enforcement service for the City is provided by the County of Los Angeles Sheriff's Department (LASD), Santa Clarita Valley Station. The Santa Clarita Valley Station's service area covers 656 square miles, including both City and County of Los Angeles (County) areas and portions of the Angeles National Forest. The project site is serviced by the Santa Clarita Valley Station, located approximately 7.5 miles west of the project site, at 23740 Magic Mountain Parkway, Santa Clarita, California (City of Santa Clarita 2011a). The 25,100-square-foot Sheriff's station was constructed in 1972. Since that time, the population of the Santa Clarita Valley has increased approximately six-fold, from approximately 50,000 to 299,000. Given the age of the current station and the population growth of the Santa Clarita Valley, the station is undersized and obsolete. In addition, given the growth in the eastern and northern areas of the Santa Clarita Valley, the station is not ideally located to effectively serve the entire City (City of Santa Clarita 2016). On May 24, 2016, the Santa Clarita City Council approved a Memorandum of Understanding between the County of Los Angeles and the City of Santa Clarita for the New Santa Clarita Valley Sheriff's Station. Currently, a new two-story 44,339-square-foot Sheriff's station, with a 4,000-square-foot service garage and a helipad is being constructed at 26201 Golden Valley Road, Santa Clarita, California. This new station site is approximately 4.8 miles west of the project site (City of Santa Clarita 2018). The new station is anticipated to be operational by early 2021 and will replace the existing Sheriff's station (City of Santa Clarita 2020).

The LASD generally prescribes a deputy-to-resident ratio of 1 deputy per 1,000 residents, which is described in the Safety Element of the City's General Plan. The Santa Clarita Valley Station serves a population of approximately 293,000 people. With 208 sworn officers (June 2019), the Santa Clarita Valley Station currently provides an officer-to-population ratio of approximately 0.70 officers per 1,000 residents, which represents a deficiency of 85 deputies. Thus, the existing service level ratios are not at a desired level. Equipment and services provided to the City include 24-hour designated LASD cars, helicopters, search and rescue, mounted posse, and emergency operation centers (June 2019).

School Services

Seven public school districts currently serve the Santa Clarita Valley. The Sulphur Springs Union School District (SSUSD) and the William S. Hart Union High School District (WSHUHSD) currently provide public elementary, junior high school, and high school education for the project area.

Sulphur Springs Union School District

As shown in Table 4.13-1, there are nine elementary schools within the SSUSD, providing a total enrollment of 5,395 students for the 2017/2018 school year (DOE 2018a). Total capacity of schools within the SSUSD was 7,864 students for the 2016/2017 school year, when considering existing permanent and portable school structures, so the SSUSD currently has greater total capacity than enrolled students (SSUSD 2017).

Table 4.13-1. SSUSD Existing School Facilities Capacity

K-6 School	2016/2017 Enrollment	Total Capacity[1]
Fair Oaks Ranch	979	1,071
Pinetree	574	789
Sulphur Springs	629	874
Golden Oak	556	592
Canyon Springs	515	902
Mitchell	627	987
Mint Canyon	457	676
Leona H. Cox	483	930
Valley View	550	1,043
Total	**5,370**	**7,864**

Source: SSUSD 2017

[1] Includes both permanent and portable structures

William S. Hart Union High School District

There are 10 high schools and six junior high schools in the WSHUHSD, providing a total enrollment of 25,080 students for the 2017/2018 school year (DOE 2018b). The total capacity of schools within the WSHUHSD was 20,906 students during the 2016/2017 school year, and the student enrollment exceeds facility capacity at both the junior high and high school levels (WSHUHSD 2018), as shown in Table 4.13-2.

Table 4.13-2. WSHUHSD Existing School Facilities Capacity

School Level	2016/2017 Capacity	2016/2017 Enrollment	Excess/(Shortage) Capacity
Junior High (Grades 7–8)	6,320	6,794	(474)
High School (Grades 9–12)	14,586	15,643	(1,057)
Total	**20,906**	**22,437**	**(1,531)**

Source: WSHUSHD 2018.

Library Services

In 2011, the City assumed library services from the County of Los Angeles and established the Santa Clarita Public Library system. The City operates three public libraries within the City: Canyon Country Jo Anne Darcy Library, Old Town Newhall Library, and Valencia Library. The public schools in the City's planning area also maintain their own library collections. The Master's College and the California Institute of the Arts also provide private library facilities, and College of the Canyons has a library that is open to the public (City of Santa Clarita 2019).

Santa Clarita Public Libraries are open varying hours 7 days per week. Typical library hours range from 9:00 a.m. to 8:00 p.m. Monday through Thursday, with reduced hours on Fridays and weekends (City of Santa Clarita 2019).

Santa Clarita Public Library's first 3 years were marked by successful completion of the 2011–2014 Strategic Plan. The Old Town Newhall Library also opened during this period, which combined with the Canyon Country Jo Anne Darcy Library and the Valencia Library and brought total library space to almost 71,000 square feet (City of Santa Clarita 2019).

In fiscal year 2014–2015, the Santa Clarita Public Library received 894,329 library patron visits, circulated 1,500,557 books and materials, issued 15,810 new library cards, and filled 150,450 hold requests made by patrons. The libraries hosted 2,420 programs and welcomed 60,848 patrons of all ages at a library program. Additionally, the libraries provided 216,173 patrons the use of public computers, and 61,400 patrons used the library's free Wi-Fi service on their personal devices. Finally, visits to the library's website increased by nearly 80% to 614,268 visits (City of Santa Clarita 2015).

The library's planning guidelines specify 2.75 library material items per capita and 0.5 square feet per capita. In fiscal year 2013–2014, the total collection included 384,601 items housed in 71,066 square feet, which equates to 1.84 items per capita and 0.3398 square feet per capita. Both statistics are below the planning guidelines (City of Santa Clarita 2015).

The Santa Clarita Public Library is funded primarily by property taxes; rental income; miscellaneous revenues, including revenue from fines and fees; and developer fees for new residential development.

4.13.2 Regulatory Framework

Federal

There are no federal regulations related to public services.

State

Assembly Bill 2926

The State of California has traditionally been responsible for funding local public schools. To assist in providing facilities to serve students generated by new development projects, the state passed Assembly Bill 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

Senate Bill 50

Senate Bill (SB) 50 and Proposition 1A (both of which passed in 1998) provided comprehensive school facilities financing and reform by, among other methods, authorizing a $9.2 billion school facilities bond issue; authorizing school construction cost containment provisions; and providing an 8-year suspension of the Mira, Hart, and Murrieta court cases. Specifically, the bond funds are to provide $2.9 billion for new construction and $2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate, and reinstate the school facility fee cap for legislative actions (e.g., General Plan amendments, Specific Plan adoption, zoning code amendments), as was allowed under the Mira, Hart, and Murrieta court cases. According to California Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions remain in place as long as subsequent state bonds are approved and available.

SB 50 establishes three levels of developer fees that may be imposed upon new development by the governing board of a school district depending on certain conditions within a district. These three levels are described below:

1. Level 1 fees are the base statutory fees. These amounts are the maximum that can be legally imposed upon new development projects by a school district unless the district qualifies for a higher level of funding.
2. Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The state would match the 50 percent funding if funds are available. Under Level 2, the governing board of a school district may require a developer to finance up to 50 percent of new school construction costs. However, to qualify for Level 2 funding, the district must satisfy at least one of the following four requirements until January 1, 2000, or satisfy at least two of the four requirements after January 1, 2000:
    1) Impose a Multi-Track Year Round Education (MTYRE) with:
        - At least 30% of K-6 enrollment in the high school attendance area on MTYRE for unified and elementary school districts; or
        - At least 30% of high school district enrollment on MTYRE; or
        - At least 40% of K-12 enrollment on MTYRE within boundaries of the high school attendance area for which the district is applying for funding.
    2) Place a local bond measure on the ballot in the last four years which received at least 50 percent plus 1 of the votes.
    3) District has issued debt or incurred obligations for capital outlay equal to a specified (under California Government Code §65995.5(b)(3)(C)) percentage of its local bonding capacity.
    4) At least 20% of teaching stations within the district are portable classrooms
3. Level 3 fees apply if the state runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions (e.g., the School Facilities Funding Mitigation Agreement) and/or agreements between developers, the affected school districts, and, occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

California Fire Code

The California Fire Code applies to all occupancies throughout the State of California, as annotated. The California Fire Code is the minimum state standard for fire code implementation in California and is based on the content of the Uniform Fire Code. The California Fire Code (Title 24, Part 9) establishes fire-flow requirements. The minimum fire-flow requirements for one- and two-family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet is 1,000 gallons per minute. The California Fire Code provides for a reduction in required flow of up to 50% when the building is provided with an approved automatic sprinkler system.

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Uniform Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, including regulations for building standards (also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials; fire hose size requirements; restrictions on the use of compressed air; requirements for access roads; and guidelines for testing, maintaining, and using all firefighting and emergency medical equipment.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Air Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971, California Public Resources Code Sections 5400 through 5409. Under the Public Park Preservation Act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation, land, or both are provided to replace the parkland acquired.

The Public Park Preservation Act only applies when a public agency acquires real property that is in use as a public park and the public agency uses the property for non-park purposes. In this case, the project applicant already owns the project site, and the site would not be acquired by a public agency. Therefore, the Public Park Preservation Act does not apply.

Local

Los Angeles County Fire Code

The Los Angeles County Fire Code consists of fire prevention provisions, development specifications, and fuel modification requirements. Fire prevention provisions covered in the County Fire Code include access roads, adequate road widths, all-weather access requirements, fire flow requirements, and fire hydrant spacing. The Fire Code also requires clearance of brush around structures located in hillside areas that are considered at risk for wildland fire.

Los Angeles County Operational Area Emergency Response Plan

The County approved an Operational Area Emergency Response Plan in 1998, which was updated in 2012 (County of Los Angeles 2012). The plan establishes the County's emergency organization, assigns tasks, specifies policies and general procedures, and provides for coordination of planning efforts among the various emergency departments, agencies, special districts, and jurisdictions that make up the County Operational Area. The plan ensures the most effective allocation of resources for the protection of the public in the event of an emergency.

City of Santa Clarita Fire Code

Title 22, City Fire Code, of the Santa Clarita Municipal Code states the City has adopted by reference the California Code of Regulations, Title 24, Part 9, described and referred to as the 2010 California Fire Code published by the California Building Standards and based on the International Fire Code, 2009 Edition, prepared by the International Code Council. The Santa Clarita Fire Code was adopted on November 23, 2010, and took effect on January 1, 2011.

Santa Clarita General Plan

Applicable goals, objectives, and policies from the General Plan Safety Element, Land Use Element, and Conservation and Open Space Element are listed below (City of Santa Clarita 2011a, 2011b, 2011c).

Fire Services

Goal S 3: Protection of public safety and property from fires.

Objective S 3.1: Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.

Policy S 3.1.2: Program adequate funding for capital fire protection costs, and explore all feasible funding options to meet facility needs.

Policy S 3.1.3: Require adequate fire flow as a condition of approval for all new development, which may include installation of additional reservoir capacity and/or distribution facilities.

Objective S 3.2: Provide for the specialized needs of fire protection services in both urban and wildland interface areas.

Policy S 3.2.2: Enforce standards for maintaining defensible space around structures through clearing of dry brush and vegetation.

Policy S 3.2.3: Establish landscape guidelines for fire-prone areas with recommended plant materials, and provide this information to builders and members of the public.

Policy S 3.2.4: Require sprinkler systems, fire resistant building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.

Policy S 3.2.5: Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.

Objective S 3.3: Maintain acceptable emergency response times throughout the planning area.

Policy S 3.3.1: Plan for fire response times of five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.

Policy S 3.3.2: Require the installation and maintenance of street name signs on all new development.

Policy S 3.3.3: Require the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets.

Police Services

Goal S 5: Protection of public safety through the provision of law enforcement services and crime prevention strategies.

Objective S 5.1: Cooperate with the Los Angeles County Sheriff's Department's plans for expansion of facility space to meet current and future law enforcement needs in the Santa Clarita Valley.

Objective S 5.2: Cooperate with the Sheriff's Department on crime prevention programs to serve residents and businesses. Policy S 5.2.1: Promote and participate in the Business Watch program to assist business owners in developing and implementing crime prevention strategies.

Schools and Library Services

Goal LU 8: Equitable and convenient access to social, cultural, educational, civic, medical, and recreational facilities and opportunities for all residents.

Objective LU 8.1: Work with service providers to plan for adequate community facilities and services to meet the needs of present and future residents.

Parks

Goal CO 9: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.

Policy CO 9.1.1: Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population.

Policy CO 9.1.13: Provide passive areas for natural habitat, mediation, birdwatching, and similar activities in parks, where feasible and appropriate, including mediation gardens, wildflower and butterfly gardens, botanic gardens, and similar features.

4.13.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services would occur if the project would:

1. 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:
    a. Fire protection.
    b. Police protection.
    c. Schools.
    d. Parks.
    e. Other public facilities.

4.13.4 Impacts Analysis

Threshold PUB-1 ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:***

a. Fire protection?

The proposed project would involve redevelopment of the former Mountain Course of the Sand Canyon Golf Course with a resort hotel and associated amenities. Daily project operations are expected to result in new visitors and employees present at the project site given that the project site has been unused since 2016.

Upon completion of construction, during operation of the project, there is the potential for emergencies to occur, some of which may require LACFD response. Increased emergency calls could increase the need for fire services within the City. However, for the reasons enumerated below, the proposed increase in activity at the project site is not expected to result in the need for new or expanded fire protection facilities.

The need for new or expanded public services (such as fire protection facilities) is typically associated with a permanent population increase. The proposed project would not involve construction of new homes or result in the permanent increase in City population. Although the proposed project would lead to increased employment on the site and visitors to the City, as discussed in Section 4.12, Population and Housing, the proposed project would not induce substantial unplanned population growth. The project would be constructed on a site already serviced by existing fire protection services and facilities.

The proposed project would be designed and constructed in accordance with all applicable provisions of the applicable fire code, which includes requirements for adequate fire flows, width of emergency access routes, turning radii, automatic sprinkler systems, fire alarms, and floor-to-sky height limits along emergency access routes. Compliance with fire code standards would be ensured through the plan check process prior to the issuance of building permits, and would reduce the potential demand for fire services by decreasing the likelihood and/or severity of a fire emergency at the site. Furthermore, there are currently 15 fire stations in the Santa Clarita Valley, three of which are within 2 miles of the project site. In the event that the nearest station, Fire Station 123, cannot meet the immediate needs of a call for services independently or does not have capability to address the full extent of a larger incident, the other fire stations within the City or the closest available LACFD resources could respond or provide support.

The proposed project would be consistent with or would not hinder implementation of the General Plan goals and policies pertaining to fire protection services listed in Section 4.13.2, Regulatory Framework. Many of these goals and policies are actions or coordination efforts to be undertaken by the City or County, and not by the project applicant. For those goals and policies, the proposed project would not hinder the City's or

County's ability to implement its goals and policies pertaining to fire protection. The City's General Plan sets forth goals and policies for reaching response time goals and providing adequate service levels. The City's General Plan also contains policies encouraging coordination between the LACFD and other divisions within the County and City, as well as LACFD involvement in the development process. The proposed project would not hinder the County's or the City's ability to encourage LACFD coordination and involvement, and would comply with all requirements for LACFD plan checks and inspections.

To offset the costs of increased personnel and/or equipment needed to serve the growing City and the project itself, the applicant must pay development fees established by the LACFD.

For these reasons, the construction or expansion of existing fire facilities would not be required as a result of developing the proposed project. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, and impacts would be **less than significant.**

b. Police protection?

As with fire services, an increase in activities, visitors, employees, and events at the project site attributable to the proposed project could increase the frequency of emergency and non-emergency calls to the LASD from the project site compared with existing conditions. For example, the proposed project would introduce alcohol-serving uses to the project site, which could create an increase in police service calls. Increased calls to the LASD would have the potential to increase the need for police services in the City. However, the proposed project is not expected to result in the need for new or expanded police protection facilities, for the reasons described below.

A need for new or expanded public services, such as police facilities, is typically associated with a permanent population increase. The proposed project would not involve construction of new homes or result in the permanent increase in City population. The project would be constructed on a site already serviced by existing police protection services and facilities.

Although the proposed project would lead to increased employment on the site and visitors in the City, as discussed in Section 4.12, Population and Housing, the proposed project would not induce substantial population growth. Additionally, in coordination with the LASD, the proposed project would incorporate operational practices and design elements to increase on-site safety and to reduce the potential for crime to occur. Building entries, parking areas, and walkways would be sufficiently lit, which would facilitate safe pedestrian movement within the project site. Furthermore, police units are continuously mobile, and service calls are responded to by the nearest available mobile unit. Although new development would place increased demand on police protection services, it is not anticipated that the proposed project would result in the need for construction or expansion of police facilities in the City. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities.

Additionally, the proposed project would be consistent with or would not hinder implementation of the General Plan goals and policies pertaining to police protection services (see Section 4.13.2). Many of these goals and policies are actions to be taken by the City and not by the project itself. For those goals and policies, the proposed project would not hinder the City's abilities to implement its goals and policies pertaining to police protection. The City's General Plan sets forth goals and policies for reaching response time goals and providing adequate service levels. As substantiated in this analysis, the proposed project is not anticipated to adversely affect service ratios or response times for police services such that new or expanded facilities would be required. The City and County General Plans also contain policies encouraging coordination between the LASD and other divisions within the County and City, as well as LASD involvement in the development process. The proposed project would not hinder the County's or the City's abilities to encourage LASD coordination and involvement in the development process. As such, the proposed project is either consistent with General Plan goals and policies pertaining to police protection, or would not hinder implementation of these goals and policies. For the reasons described above, impacts to police protection services resulting from the proposed project would be **less than significant**.

c. Schools?

Implementation of the project would not result in increased demand for schools or require the construction of new schools. The need for new school facilities is typically associated with a permanent residential population increase that generates an increase in enrollment large enough to result in the need for new or expanded schools. The proposed project would not result in the development of new residential housing. The proposed project would result in increased employment opportunities during construction and operation. However, the proposed project is not expected to result in the need for new or expanded school facilities, for the reasons described below.

A need for new or expanded public services, such as school facilities, is typically associated with a population increase. The proposed project would not involve construction of new homes. Although the proposed project would lead to increased employment on the site, as discussed in Section 4.12, Population and Housing, the proposed project would not induce substantial population growth.

Student Generation

SSUSD developed a student generation factor that identifies the number of students per housing unit for residential construction projects and projections of enrollment. The local student generation factor is 0.3377 students per household. In its 2018 Developer Fee Justification Study, SSUSD assumes an additional 1,108 students will enroll in SSUSD over the next 5 years, based on anticipated residential development (SSUSD 2018). Anticipated new residential development would exceed the existing facility capacity within SSUSD.

The proposed project does not include any residential development, so development of the project would not directly generate new students within SSUSD. Nonetheless, development of new commercial/industrial facilities within a community can attract new employees to move to the area. Using employee generation factors presented

in the 2018 Developer Fee Justification Study, Table 4.13-3 summarizes the potential students generated by the proposed project.

Table 4.13-3. Project Student Generation

Use	Building Area (square feet)
Main Hotel	165,000
Spa Garden Inn	67,500
View and Oak Villas Associated with the Hotel	128,500
Function Building (grand ballroom, junior ball room, and meeting rooms)	64,000
Restaurants	21,000
Children's Center	7,000
Spa/Gym/Salon	35,000
Total Building Area	**488,000**
Ratio of Employees per Square Foot[1]	0.00113
Total Employees Generated by Project	**551.44**
Ratio of Students Per Employee[2]	0.0409
Total Students Generated by Project	**22.55**

Source: SSUSD 2018

1 Generation Rates from Table 11 of the 2018 Developer Fee Justification Study. Utilized Lodging (0.0113) for project hotel land uses

2 Ratio established by SSUSD 2018 Developer Fee Justification Study

Ultimately, the proposed project has the potential to generate approximately 22 students in SSUSD, which is a 0.4% increase based on 2017–2018 enrollment. As discussed in Section 4.13.1, Environmental Setting, adequate capacity at area schools exists to accommodate the potential increase in new elementary (K–6) students within SSUSD. However, the existing junior and high schools within the WSHUHSD are currently overenrolled. Nonetheless, if approximately half of the new students generated by the project, approximately 11 students, were to attend WSHUHSD schools, this would only modestly contribute to the existing over-enrollment at the local junior and high schools. As such, the proposed project would not result in student generation that would significantly impact school services in the relevant district such that new or expanded school facilities would be required.

Additionally, based on the fee justification determined by both SSUSD and WSHUHSD, the project applicant would be required to pay a developer fee established in California Education Code Section 17620 and California Government Code Section 65993(b)(3) (non-residential mitigation payments) to support future development of school services to meet the growing population. Because the proposed project is not growth inducing, and because payment of the developer fee would reduce impacts associated with students generated by new employees, project impacts on school services would be **less than significant**.

d. Parks?

The proposed project would involve redevelopment of a former nine-hole golf course with a hotel and resort and associated recreational amenities. The proposed project does not include development of a public park to serve City residents. Additionally, project operations would not result in permanent increases to the residential population of the City, and, therefore, would not increase demand for public parkland based on the standard minimum parkland-to-population ratio developed by the City. Therefore, the proposed project would result in **no**

impacts associated with development of a public park. A full analysis of impacts associated with recreation is included in Section 4.14, Recreation, of this EIR.

e. Other public facilities?

The proposed project does not include any residential development, so development of the project would not directly increase the City's full-time residential population such that use of the existing library facilities or other public facilities in the City would be substantially affected. Nonetheless, development of new commercial/industrial facilities within a community can attract new employees to move to the area. Section 17.51.010 (C) of the City's Municipal Code sets forth development impact fees to accommodate the need for public facilities and mitigate the financial and physical impacts for all development projects within the City. For library services within the City, there is only a development impact fees associated with residential development because direct population growth associated with new dwelling units has the greatest impact on library services. Since the proposed project would not include a residential component, it is not anticipated that additional demand for library services such that new or expanded libraries would be necessary would occur. Therefore, impacts to library services would be **less than significant**.

4.13.5 Mitigation Measures

The proposed project would have a less-than-significant impact on public services. No mitigation measures are required.

4.13.6 Level of Significance After Mitigation

The proposed project would have a less-than-significant impact on public services. No mitigation measures are required.

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4.14 Recreation

This section describes the existing recreation setting of the City of Santa Clarita (City), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Sand Canyon Resort Project (project). The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines.

4.14.1 Environmental Setting

The project site, which is approximately 77 acres, is located in the Sand Canyon area of the City. Specifically, the project site is located within the former Robinson Ranch Golf Course site (now Sand Canyon Golf Course) and until 2016 functioned as the nine-hole Mountain Course. Since 2016 the project site has been unmaintained and has been subject to wildfire and flooding. The project site is currently designated as Open Space in the City's General Plan and Zoning Code. A summary of existing park and open space land is illustrated on Exhibit CO-8 of the City's General Plan (City of Santa Clarita 2011), which designates the project site as Golf Course.

Local and Regional Parks

The City Department of Parks, Recreation and Community Services currently maintains 34 parks totaling approximately 375 acres. The parks range in size from slightly more than 0.5 acres to 80 acres and include numerous recreational facilities. The standard minimum parkland-to-population ratio developed by the City is 3 acres per 1,000 residents, and the City's General Plan standard is 5 acres per 1,000 residents. According to the City's General Plan Conservation and Open Space Element, based on current park facilities within the City, there are approximately 1.5 to 2 acres of parkland per 1,000 residents, which is below both the City's minimum standard and the General Plan standard (City of Santa Clarita 2011). The City's parks are categorized as discussed in the following paragraphs.

Neighborhood Parks

According to the City General Plan's Conservation and Open Space Element, neighborhood parks typically provide active recreational areas along with fields, courts, and/or some passive areas (e.g., picnic areas). Neighborhood parks typically vary in size from 5 to 10 acres and are intended to serve a population of up to 5,000 within a 0.5-mile radius. Generally, neighborhood parks are located within the residential areas that are served by the park. The City has 12 neighborhood parks, the closest of which is the Oak Spring Canyon Park located approximately 1.1 miles north of the project site (City of Santa Clarita 2011). Oak Spring Canyon Park includes a basketball court, a children's play area, picnic tables, and a public restroom.

Community Parks

Community parks are generally 10 to 40 acres in size and are located to serve several neighborhoods of approximately 20,000 people within an approximately 2-mile radius. These parks can include both passive and active areas. The City has five community parks, the closest of which to the project site is the Canyon Country Park. The Canyon Country Park is located approximately 1.25 miles northwest of the project site (City of Santa Clarita 2011). The Canyon Country Park includes a baseball diamond, barbeques, a children's play area, a community room, picnic tables, and a public restroom.

Regional Parks

Regional parks are run by the Los Angeles County Parks and Recreation Department and are generally more than 50 acres and offer a wide range of specialized recreational activities to serve a population within approximately a 1-hour drive. The two regional parks located within the general vicinity of the City are William S. Hart Regional Park and Val Verde Park. Additionally, one regional sports complex, Castaic Regional Sports Complex, is located in the general vicinity of the City (City of Santa Clarita 2011).

William S. Hart Regional Park is a 265-acre former ranch that was donated to Los Angeles County to be used as a park and museum. This park is located approximately 11 miles southwest of the project site and includes barbeques, a gift shop, hiking trails, mountain biking trails, a museum, picnic tables, public restrooms, a senior center, and a swimming pool, all accessible to the public (County of Los Angeles 2019a).

Val Verde Park is approximately 58 acres in size and is located approximately 20 miles west of the project site. Val Verde Park includes baseball fields, basketball courts, a children's play area, a community center, public restrooms, a swimming pool and aquatic facilities, tennis courts, barbeques, camping sites, hiking trails, horseshoe pits, picnic tables, soccer fields, and softball fields, all of which are accessible to the community (County of Los Angeles 2019b).

Castaic Regional Sports Complex is a 54-acre site located approximately 25 miles northwest of the project site. Amenities available at the Castaic Regional Sport Complex include basketball courts, baseball fields, a skate park, a children's play area, a gymnasium, a community center, public restrooms, barbeques, a computer lab, fitness courses, football fields, horseshoe pits, picnic tables, a running track, soccer fields, softball fields, volleyball courts, and a swimming pool and aquatic facilities (County of Los Angeles 2019c).

State Parks

The two California state parks within the City's planning area are Santa Clarita Woodlands State Park and Placerita Canyon State Park (City of Santa Clarita 2011). Santa Clarita Woodlands Park is located approximately 14 miles southwest of the project site, and Placerita Canyon State Park is located approximately 5.5 miles from the project site.

Santa Clarita Woodlands Park is managed by the Mountains Recreation and Conservation Authority and is composed of four main recreational areas: Ed Davis Park at Towsley Canyon, East and Rice Canyons, Pico Canyon, and Mentryville. Included within the 4,000-acre park are hiking trails, oak and other vegetative woodlands, mountain biking trails, and equestrian trails (MRCA 2019).

Placerita Canyon State Park is managed by the County of Los Angeles and includes eight trails with a trail network over 12 miles in length as well as a newly renovated nature center. Also in this park are public restrooms, animal exhibits, equestrian staging areas, equestrian trails, a gift shop, a museum, and picnic tables (County of Los Angeles 2019d).

Federal Parks

The City's planning area encompasses a portion of the Angeles National Forest and is adjacent to Los Padres National Forest (City of Santa Clarita 2011). The project site is in the southeastern portion of the City and is in immediate proximity to the Angeles National Forest to the south; whereas Los Padres National Forest is located to the northwest of the project site.

Open Space Areas

In addition to developed parks, the City has approximately 6,112.7 acres of undeveloped lands that are or will be preserved as open space recreation areas. Many of these areas include amenities such as hiking trails, horse trails, nature preserves, natural watercourses, golf courses, and wildlife corridors. The project site has a General Plan and Zoning designation of Open Space (OS) and was operated as a nine-hole golf course until 2016.

4.14.2 Regulatory Framework

Federal

There are no federal regulations related to the provision of recreational facilities that are applicable to the project.

State

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based on the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds. The Quimby Act applies only to development of residential subdivisions; therefore, the project would not be subject to the Quimby Act.

California Public Park Preservation Act

The primary instrument for protecting and preserving California's parkland is the California Public Park Preservation Act (Park Preservation Act) of 1971 (California Public Resources Code Sections 5400–5409). Under the Park Preservation Act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation, land, or both are provided to replace the parkland acquired.

The Park Preservation Act applies only when a public agency both acquires real property that is in use as a public park and uses the property for non-park purposes. In this case, no public agency is acquiring the park. In addition, the land would continue to be used for park purposes. Therefore, the Park Preservation Act does not apply.

Local

City of Santa Clarita General Plan

Applicable goals, objectives, and policies from the General Plan Conservation and Open Space Element (City of Santa Clarita 2011) are listed below.

Park, Recreation and Trail Facilities

Goal CO 9: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.

Policy CO 9.1.1: Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population.

Policy CO 9.1.13: Provide passive areas for natural habitat, mediation, birdwatching, and similar activities in parks, where feasible and appropriate, including mediation gardens, wildflower and butterfly gardens, botanic gardens, and similar features.

Open Space

Goal CO 10: Preservation of open space to meet the community's multiple objectives for resource preservation.

Objective CO 10.2: Ensure the inclusion of adequate open space within development projects.

Policy CO 10.2.1: Encourage provision of vegetated open space on a development project's site, which may include shallow wetlands and ponds, drought tolerant landscaping, and pedestrian hardscape that includes vegetated areas.

Policy CO 10.2.2: Encourage that open space provided within development projects be usable and accessible, rather than configured in unusable strips and left-over remnants, and that open space areas are designed to connect to each other and to adjacent open spaces, to the extent reasonable and practical.

Policy CO 10.2.4: Seek opportunities to incorporate site features into the open space of a project design, which may include significant trees, vegetation, terrain, or water features, to provide thermal, acoustic, and aesthetic benefits.

4.14.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to recreation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to recreation would occur if the project would:

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.14.4 Impacts Analysis

Threshold REC-1. ***Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

The proposed project involves the redevelopment of a former nine-hole golf course with a hotel and resort and associated recreational amenities. While the project would not require the construction or expansion of additional off-site recreational facilities and amenities, the proposed project would involve the addition of recreational facilities and amenities to the project site, which could result in an adverse physical effect to the environment. The proposed project would not include new permanent residences that would generate permanent increases in the local population resulting in the need to develop new parks; therefore, the analysis includes a qualitative discussion of the adequacy of parks and recreation as it pertains to the project. The potential for project-related impacts to the environment during both construction and operation have been evaluated in this Draft Environmental Impact Report (EIR).

Construction

Construction activities related to the proposed project would involve introducing heavy machinery to the project site for grading, excavation, and development of recreational facilities and amenities associated with the proposed hotel resort. Impacts associated with project construction would be temporary and short in duration, as the project is proposed to be constructed over a period of approximately 24 months. Staging of construction equipment and construction activities would be implemented according to City regulations. Any off-site improvements or staging of equipment off site would be required to comply with applicable City regulations. Construction activities would not result in or affect the use of existing recreational facilities throughout the City. As such, construction impacts would be **less than significant**.

Operation

Upon completion of project construction, project operations would not result in permanent increases to the residential population of the City and therefore would not increase demand for public parkland based on the standard minimum parkland-to-population ratio developed by the City. The proposed project is not a subdivision; therefore, it is exempt from parkland dedication or in-lieu fee (City of Santa Clarita 2018). However, a condition would be placed on the approval of a tentative tract map that if a building permit is requested for construction of a residential structure or structures on one or more of the parcels within 4 years after the tentative tract map is approved, the owner of each parcel may be required to pay a fee as a condition to the issuance of any such building permit (City of Santa Clarita 2018).

The project site is currently vacant and was previously operated as a private nine-hole golf course. The project site is designated Open Space (OS) in the City's General Plan and Zoning Code. The project site is further designated as a Golf Course on Figure CO-8 of the City's General Plan, which illustrates recreation and open space lands by type of use. Although the project site is designated OS in the City's General Plan and zoning code, it is not designated parkland within the City (City of Santa Clarita 2011). Therefore, the conversion of the project site from OS to resort would not increase the use of existing neighborhood and regional parks due to a reduction in overall parkland.

Visitors at the proposed resort could use existing recreational facilities available in the City, resulting in increased usage of local, regional, state, and federal parks. However, because the project includes its own recreational

amenities, including multiuse pedestrian pathways, swimming facilities, a "chip and putt" golf course, a tennis court, and pickleball courts, and given that no permanent increases in residential population would occur, the occasional use of existing recreational facilities would be minimal and thus would not result in the physical deterioration of the existing recreational facilities in the City and the surrounding areas. As such, project implementation would have a **less-than-significant impact** on recreational facilities and no mitigation is required.

Threshold REC-2. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project would convert approximately 32.4 acres of OS designated land to a hotel resort with associated amenities. The remaining 44.6 acres of the project site would remain designated as OS and include undeveloped natural open space in the western portion of the site and active recreation amenities in areas associated with the resort in the eastern portion of the project site. Additionally, an existing 1-acre detention facility would be expanded to approximately 1.9 acres in size. Proposed recreational amenities and facilities for guests include two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, a "chip and putt" golf course, and passive open space areas. As such, the project itself includes recreational facilities, the construction and operation of which have the potential to result in physical effects on the environment, as discussed below.

Construction

Construction activities related to the proposed recreational components of the project would involve introducing heavy machinery to the project site for grading, excavation, and development. Impacts associated with project construction would be temporary and short in duration, as the project is proposed to be constructed over a period of approximately 24 months. Staging of construction equipment and construction activities would be implemented according to City regulations. Any off-site improvements or staging of equipment off site would be required to comply with applicable City regulations. As discussed throughout this EIR, impacts associated with construction of the proposed project, including the project's recreational amenities, would result in either no impact or less than significant impacts to aesthetics, energy, greenhouse gas emissions, hydrology and water quality, population and housing, public services, and utilities and service systems. For air quality, biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, land use and planning, noise and vibration, transportation, and wildfire, construction impacts associated with the recreational components of the project could result in potentially significant impacts.

Operation

During operation of the proposed project, the recreational facilities available to the hotel resort guests would increase the amount of recreational opportunities within the Sand Canyon area of the City and specifically serve the needs of the resort guests. As discussed throughout this EIR, impacts associated with operation of the proposed project, including the project's recreational amenities, would result in either no impact or less than significant impacts to aesthetics, air quality, biological resources, cultural and tribal cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, operational noise and vibration, population and housing, and public services. For land use and planning and wildfire impacts, impacts have been determined to be potentially significant.

Conclusion

The project itself includes recreational facilities, the construction and operation of which have the potential to result in physical effects on the environment. As discussed above, construction and operation of the recreational components of the proposed project could result in **potentially significant** environmental impacts specifically related to air quality, biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, land use and planning, noise and vibration, transportation, and wildfire.

4.14.5 Mitigation Measures

As identified above, the recreational facilities associated with the proposed project have the potential to result in impacts related to air quality, biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials, land use and planning, noise and vibration, transportation, and wildfire. With implementation of the following mitigation measures (MMs), impacts associated with recreation would be reduced. These mitigation measures are provided in full in their respective EIR sections.

- MM-AQ-1 (see Section 4.2.5)
- MM-BIO-1 through MM-BIO-5 (see Section 4.3.5)
- MM-CUL-1 and MM-CUL-2 (see Section 4.4.5)
- MM-TCR-1 (see Section 4.4.5)
- MM-GEO-1 and MM-GEO-2 (see Section 4.6.5)
- MM-NOI-1 and MM-NOI-2 (see Section 4.11.5)
- MM-TRA-1 through MM-TRA-5 (see Section 4.15.5)
- MM-FIRE-1 through MM-FIRE-11 (see Section 4.17.5)

4.14.6 Level of Significance After Mitigation

Threshold REC-2. ***Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

Impacts associated with recreation would be less than significant with implementation of the mitigation measures identified in Section 4.14.5 for all environmental issue areas with the exceptions of construction noise and vibration and cumulative operational noise from vehicle traffic. As discussed in Section 4.11, Noise, project construction activities, including those associated with the recreational components of the project, would remain **significant and unavoidable**.

4.14.7 References Cited

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4.15 Transportation

This section describes the existing traffic/circulation setting near the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, and evaluates potential adverse impacts related to (1) conflicts with an applicable program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities; (2) conflict or inconsistency with California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b); (3) a substantial increase in hazards due to a geometric design feature; and (4) inadequate emergency access. Following the impact analysis, this section lists any applicable project design features and identifies mitigation measures required related to implementation of the proposed project.

The following discussion summarizes the Vehicle Miles Traveled (VMT) Analysis and Traffic Impact Analysis (TIA) prepared by Stantec on August 7, 2020, and November 8, 2019, respectively, per requirements established by the revised CEQA Guidelines, the City of Santa Clarita Traffic Study Guidelines (City of Santa Clarita 1990), and the Transportation Analysis Updates in Santa Clarita (City of Santa Clarita 2020a). Additionally, a Transportation Demand Management Plan and a Parking Analysis for Sand Canyon Resort have been prepared by Stantec. All reports are included as Appendix J of this Environmental Impact Report (EIR).

4.15.1 Environmental Setting

This section describes key roadway segments and intersections, as well as transit, pedestrian, and biking facilities within the vicinity of the proposed project.

Existing Roadway System

The proposed project is located in the southeast portion of the City of Santa Clarita (City). The project site is located north of Robinson Ranch Road, east of Sand Canyon Road, west of the Sand Canyon Country Club clubhouse, and south of Oak Springs Canyon Road. Access to the project site will be via four new intersections with Robinson Ranch Road in addition to the existing gated entry via the Sand Canyon Road/Robinson Ranch Road intersection. A secondary access is proposed south of the property through Live Oak Springs Canyon Road, which could be used as an emergency evacuation route. Regional access to the project will be via State Route (SR) 14, which is located approximately 1 mile north of the project. Access to SR-14 is via an interchange with northbound ramps connecting to Sand Canyon Road and southbound hook ramps on Soledad Canyon Road.

Soledad Canyon Road in the study area (defined in the TIA) is designated as a Major Highway in the City of Santa Clarita General Plan (City of Santa Clarita 2011). It is an east–west arterial with six lanes between Sierra Highway and Galeton Road and a four-lane road for the remaining portion in the study area.

Sand Canyon Road is a north–south arterial with mostly two lanes between Sierra Highway and Soledad Canyon Road, four lanes between Soledad Canyon Road and SR-14 Northbound Ramps, and two lanes south of the SR-14 northbound ramps. It is designated as a Major Highway between Soledad Canyon Road and Lost Canyon Road, a Secondary Highway between Sierra Highway and Soledad Canyon Road, and a Limited Secondary Highway south of Lost Canyon Road (City of Santa Clarita 2011).

SR-14 or Antelope Valley Freeway is located north of the project site. It provides access to the Antelope Valley to the northeast and connects to Interstate 5 to the southwest.

In consultation with City staff, using the criteria of identifying locations where the project would add 50 or more peak hour trips, the following five intersections were selected and included in the traffic analysis of the project:

1. SR-14 southbound ramps/Soledad Canyon Road (signalized)
2. Sand Canyon Road/SR-14 northbound ramps (signalized)
3. Sand Canyon Road/Soledad Canyon Road (signalized)
4. Sand Canyon Road/Lost Canyon Road (all-way stop)
5. Sand Canyon Road/Robinson Ranch Road (two-way stop)

Figure 4.15-1 illustrates the project site location and study area selected for traffic analysis. Figure 4.15-2, Master Plan of Highways, illustrates the classification of roadway designation in the vicinity of the project site.

Public Transportation

The City of Santa Clarita Transit (SCT) Route 6 is the closest service route to the project. The closest bus stop is approximately 2 miles from the project. SCT Routes 6 travels along Soledad Canyon Road and provides services between the east side of the City and Stevenson Ranch with stops at the Santa Clarita and Newhall Metrolink stations, as well as at the McBean Regional Transit Center. Additional routes are accessible from this route, which provides service to the greater Santa Clarita Valley area. Figure 4.15-3 illustrates the City's transit routes.

SCT Commuter Express offers express commuter bus travel to Los Angeles, Warner Center, Van Nuys, Century City, and the Antelope Valley. Three Metrolink stations (i.e., Newhall Station, Santa Clarita Station, and Via Princessa Station) exist within the City, which serve the Antelope Valley line. This line travels between Lancaster and Union Station, Los Angeles. The closest Metrolink station is the Via Princessa Station, which is approximately 4.5 miles west of the project.

Pedestrian and Bicycle Facilities

The City of Santa Clarita Non-Motorized Transportation Plan Update (City of Santa Clarita 2014) focuses on the City's bicycle and pedestrian network, planning and policies related to bicycling and walking, nonmotorized connections to transit, safe routes to schools, and complete streets. This plan update also provides direction for future investments in bicycle and pedestrian infrastructure.

Currently, there are no bike lanes serving the project site. There is a proposed Class III Bike Path along Sand Canyon Road. The proposed Class III Bike Path along Sand Canyon Road would connect to the existing Class II Bike Lane along Soledad Canyon Road. Figure 4.15-4 illustrates the existing and planned future bicycle facilities in the study area.

The existing multipurpose pedestrian pathway along Sand Canyon Road would be extended from Road Runner Road to the southern boundary of the City. There are limited pedestrian facilities along roadways adjacent to the project due to the rural nature of the study area.

4.15.2 Regulatory Framework

State

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the CEQA process for several categories of development projects, including the development of infill projects in transit priority areas, and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 adds Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects, to the CEQA Statute (California Public Resources Code, Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metrics for determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity, such as widening a roadway or increasing the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the Governor's Office of Planning and Research (OPR) to develop an alternative metric for analyzing transportation impacts in CEQA documents. The alternative shall promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of multimodal transportation system, and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis would shift from vehicle delay to VMT within transit priority areas (i.e., areas well served by transit).

Pursuant to SB 743, OPR released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released updates to Technical Advisory on Evaluating Transportation Impacts in CEQA(OPR 2018), to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdictions. While OPR's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance . . . recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add new Section 15064.3, Determining the Significance of Transportation Impacts, which describes specific considerations for evaluating a project's transportation impacts using the VMT methodology. This new methodology is required to be used for projects beginning on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

1. Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
2. Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
3. Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
4. Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Since the project is a land use development, CEQA Guidelines Section 15064.3(b)1 applies to the proposed project.

Senate Bill 375 (Sustainable Communities Strategies)

SB 375, the Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act) supports the state's climate action goals to reduce greenhouse gas emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board sets regional targets for greenhouse gas emissions reductions from passenger vehicle use. In 2010, the California Air Resources Board established these targets for 2020 and 2035 for each region covered by one of the state's Metropolitan Planning Organizations (MPOs). The California Air Resources Board will periodically review and update the targets as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its greenhouse gas emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. The California Air Resources Board must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional greenhouse gas targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code, Sections 21155, 21155.1, 21155.2, 21159.28.).

California Department of Transportation

As the owner and operator of the state highway system, the California Department of Transportation (Caltrans) implements established state planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact state highway facilities. Pursuant to Section 21092.4 of the California Public Resources Code, for projects of statewide, regional, or area-wide significance, the lead agency shall consult with transportation planning agencies and public agencies that have transportation facilities that could be affected by the project.

To comply with SB 743 implementation, the 2020 Caltrans Draft Transportation Impact Study Guide (TISG) (Caltrans 2020) will replace the Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). Per the 2020 TISG, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses. Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 TISG states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the state highway system and connections with the state highway system (Caltrans 2020). The analysis of intersections provided in the TIA in Appendix J is consistent with and is based on the Guide for the Preparation of Traffic Impact Studies (Caltrans 2002).

Regional

Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy

In addition to the Regional Comprehensive Plan, the Southern California Association of Governments (SCAG) has prepared and adopted the 2016 RTP/SCS. The 2016 RTP/SCS aims to plan, build, and connect communities within Southern California by providing expanded and environmentally sustainable transit options, including bus and rail service, in close proximity to residential and business land uses (SCAG 2016). The 2016 RTP/SCS identifies priorities for transportation planning within the Southern California region, sets goals and policies, and identifies performance measures for transportation improvements to ensure that future projects are consistent with other planning goals for the area.

The RTP/SCS contains overarching goals that are applicable to the project, including, but not limited to, the following:

- Identify regional strategic areas for infill and investment.
- Identify strategic centers based on a three-tiered system of existing, planned, and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment.
- Develop "Complete Communities."
- Plan for additional housing and jobs near transit.
- Continue to protect stable, existing single-family areas.
- Ensure adequate access to open space and preservation of habitat.
- Incorporate local input and feedback on future growth.

The 2020–2045 RTP/SCS (also known as the Connect SoCal Plan) (SCAG 2020) was made available in March 2020 and presents the land use and transportation vision for the region through the year 2045, providing a long-term investment framework for addressing the region's challenges. The Proposed Final Connect SoCal Plan has not yet been adopted by SCAG's Regional Council; however, in May 2020 the Regional Council approved Connect SoCal for the limited purpose of submitting the plan to the Federal Highway Administration and Federal Transit Administration for review prior to the June 1, 2020 deadline, as required by the Clean Air Act.

Local

City of Santa Clarita General Plan Circulation Element

The City of Santa Clarita General Plan is the primary planning document for the incorporated areas of the City, including the Sand Canyon community. The Circulation Element (City of Santa Clarita 2011) provides the framework for the continued development of sustainable and efficient transportation within the City and surrounding areas. The Circulation Element plans for increased transportation efficiency through the coordination of land use planning with transportation planning by promoting concentrated development within the City near transit facilities.

Based on the circulation planning needs identified for the Santa Clarita Valley, following goals and policies were developed and included in the Circulation Element:

Goal C 1: An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans (Policy C1.1.1 through C 1.3.10).

Goal C 2: A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character (Policy C 2.1.1 through C 2.2.15).

Goal C 3: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking (Policy C 3.1.1 through C 3.3.8).

Goal C 4: Rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns.

Goal C 5: Establish transit impact fee rates that are based on the actual impacts of new development on the transit system, and regularly monitor and adjust these fees as needed to ensure adequate mitigation.

Goal C 7: Walkable communities, in which interconnected walkways provide a safe, comfortable and viable alternative to driving for local destinations (Policy C 7.1.1 through C 7.1.10).

4.15.3 Methodology

This section summarizes the methodologies used to perform the VMT and transportation analyses. The methodologies described are consistent with City's traffic study guidelines (City of Santa Clarita 1990) and VMT analysis guidelines. In December 2018, the CEQA Guidelines were updated to include a threshold for evaluating traffic impacts using the VMT methodology. This new methodology is required to be used statewide beginning on July 1, 2020.

Vehicle Miles Traveled

OPR has approved the addition of new Section 15064.3, Determining the Significance of Transportation Impacts, to the state's CEQA Guidelines, compliance with which will be required beginning July 1, 2020. The Updated CEQA Guidelines state that "generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts" and define VMT as "the amount and distance of automobile travel attributable to a project." "Automobile" refers to on-road passenger vehicles, specifically cars and light trucks. OPR has clarified in the Technical Advisory (OPR 2018) and recent informational presentations that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of the project on transit and non-motorized traveled.

To aid in this transition, OPR released a Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). Pursuant to OPR guidelines, the City has adopted its own VMT analysis guidelines and thresholds. Therefore, the proposed project analysis uses the City's VMT analysis methodology and thresholds.

Screening for Land Use Projects

The City's VMT analysis guidelines suggest that projects can be exempt from requiring a detailed VMT analysis based on project size, locally serving retail, areas of low VMT, transit priority areas, affordable housing, and transportation facilities project types. Consistent with OPR's Technical Advisory, projects that meet the screening thresholds based on their location and project type may be presumed to result in a less-than-significant transportation impact (OPR 2018).

Table 4.15-1. Project VMT Screening Criteria and Threshold

Category	Criteria/Screening	Threshold
Project Size	Small projects can be screened out from completing a full VMT analysis.	If the project generates less than 110 trips per day, the project is assumed to have a less than significant impact.
Locally Serving Retail	If the project is a local serving retail, the project is assumed to have a less-than-significant impact.	If local serving retail is 50,000 square feet or less, the retail project may be presumed to have a less-than-significant impact.
Low VMT Area	Residential and office projects that are located in areas with low VMT and that are similar in character to the existing development can be screened out from completing a full VMT analysis.	If the residential and office project is in an area that is already 15% below the baseline VMT, the project is assumed to have a less-than-significant impact.
Transit Proximity	Projects within 0.5 miles of a major transit stop or a stop located along a high-quality transit corridor reduce VMT and therefore can be screened out from completing a full VMT analysis.	If the project is within 0.5 miles of a major or high-quality transit stop/corridor, the project is assumed to have a less-than-significant impact. The project should generally also meet the following criteria: • FAR > 0.75 • Not provide more parking than required by City • Be consistent with the regional SCS • Not replace existing affordable units with a smaller number of moderate- to high-income units

Table 4.15-1. Project VMT Screening Criteria and Threshold

Category	Criteria/Screening	Threshold
Affordable Residential	Affordable housing in infill locations can be screened out from completing a full VMT analysis.	If a residential project is comprised 100% of affordable units and is located in an infill location, then the project is assumed to have a less-than-significant impact.
Transportation Facilities	Transportation projects that promote non-auto travel, improve safety, or improve traffic operations can be screened out from completing a full VMT analysis	If the project promotes non-auto travel, such as transit, bicycle, and pedestrian facilities; improves safety; improves traffic operations at current bottlenecks; improves intersection traffic control; or promotes widening at intersections to provide new turn lanes, then the project is assumed to have a less-than-significant impact.

Source: Appendix J.

The proposed project does not meet any of the screening criteria as explained as follows:

- Project Size (110 daily trips or less): Since the project generates more than 110 trips per day, it cannot be assumed to cause a less-than-significant transportation impact.
- Low VMT Area: Based on City's model data the project is not in a low VMT generating area; therefore, it does not qualify for the location-based screening
- Transit Proximity: A project can be screened out as having a less-than-significant impact on VMT if the project is within 0.5 miles of an "existing major transit stop or an existing stop along a high-quality transit corridor." A major transit stop is defined as the intersection of two or more major bus routes with a frequency service interval of 15 minutes or less during the morning and afternoon peak commute periods. A high-quality transit corridor is defined as an existing corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. Based on this definition, the proposed project would not be eligible to be screened out under this threshold since it is not within 0.5 miles of either type of transit facility.
- The proposed project is not comprised of affordable housing and does not include locally serving retail.

Based on the City's VMT guidelines, the project requires a detailed project-level VMT analysis. An assessment of the project's VMT impact under base and cumulative year conditions has been conducted using following methodology.

Methodology for Vehicle Miles Traveled Estimation and Efficiency Metric

The City has selected the SCAG model as the most appropriate tool for the SB 743 implementation process, since the SCAG model covers the entire SCAG region, and therefore captures a more complete assessment of trip length and VMT as compared to the City's traffic model. This ensures that VMT generated in the City that occurs outside the City limits is captured and allows for comparison between the City's VMT data and regional VMT data. The most recent version of the SCAG model has a base year of 2012 and future year of 2040 and was developed for the 2016 RTP/SCS. The VMT data is based on the traffic analysis zones (TAZs) in the City during the Base Year 2012, Future Year 2040 conditions, and interpolated conditions to estimate the Existing Year 2020 baseline.

In the City's guidelines, an origin-destination VMT methodology was determined to be the appropriate methodology for estimating the VMT of land use projects and plans. The origin-destination VMT method estimates the VMT generated by land uses in a specific geographic area, such as the City or a larger geographic area such

as Los Angeles County. All vehicles traveling to/from the defined geographic area are tracked within the SCAG model and the number of trips and length of trips are used to calculate the origin-destination VMT.

For the City, the VMT methodology includes all trips within the SCAG model for each of the following variable formats:

- Total VMT per Service Population (all vehicles and all trip purposes): The total VMT to and from all zones in the City is divided by the total service population (employees and residents) in the City to get the efficiency metric of VMT per service population.
- Home-Based VMT per Capita (automobile only): Includes all VMT for home-based auto vehicle trips that are traced back to the residence of the trip-maker (non-home-based trips are excluded). This VMT is then divided by the population within the City to get the efficiency metric of Home-Based VMT per Capita.
- Home-Based Work VMT per Employee (automobile only): Includes all VMT for auto vehicle trips between home and work. This VMT is then divided by the number of employees within the City to get the efficiency metric of Home-Based Work VMT per Employee.

The Technical Advisory (OPR 2018) and the City's VMT guidelines (City of Santa Clarita 2020a) do not specifically address or provide methodology for VMT analysis of specialty uses such as the proposed project (resort hotel). Therefore, the project's VMT was evaluated in two parts:

1. As an employee trips generator consistent with the guidelines for employment (commercial or industrial) using available travel demand model
2. As a generator of visitor/tourist (resort guests) trips using qualitative analysis

Level of Service Performance Criteria

Traffic operations of roadway facilities are described using LOS and are provided for informational purposes and General Plan consistency requirements. LOS is a qualitative description of traffic flow based on several factors, including speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing free-flow conditions, to LOS F, representing severe traffic congestion. The ranges are defined in the Highway Capacity Manual 2010 (TRB 2010) and are used by the City for estimating intersection LOS.

The Highway Capacity Manual 2010 calculation methodology and associated LOS performance standards used in the project's TIA are summarized in the following subsections.

Delay Methodology

Calculation Methodology

Level of service based on "average vehicle delay" calculated as follows:

- Synchro/HCM delay-based intersection methodology for traffic signals
- HCM 2010 delay-based intersection methodology for stop sign control
- Sidra delay-based intersection methodology for roundabouts

Performance Standard

Level of Service D defined as follows:

- stopped delay to not exceed 55 seconds for signalized intersections
- stopped delay to not exceed 35 seconds for stop sign control
- stopped delay to not exceed 50 seconds for roundabouts

Traffic Impact Thresholds

An intersection is considered to be operating unacceptably if the project would (Appendix J):

- Worsen an intersection maintained by the City of Santa Clarita from LOS D or better to LOS E or F
- Cause the following increase in delay at an intersection maintained by the City of Santa Clarita that operated (with the Project) at LOS D or worse:
  - LOS D with the Project: more than 4-second increase in delay is significant
  - LOS E or F with the Project: more than 2-second increase in delay is significant

For intersections under joint jurisdiction of the City and Caltrans, the analysis utilizes the corresponding threshold of the local agency (City) as applicable.

Project Trip Generation

The proposed resort includes 387 guest rooms consisting of a hotel and separate villas and a banquet facility that includes ballrooms and meeting rooms for weddings, events, and conferences for day use, and will be integrated with the existing a 27-hole golf course. The project includes amenities like "chip and putt" golf, swimming pools, tennis, pickleball courts, a 2-mile-long multipurpose pedestrian pathway, upscale restaurants, spa and sauna, beauty salons, gym, and kids club. Table 4.15-2 summarizes the trip generation of the proposed project.

Table 4.15-2. Trip Generation Summary

Trip Rates	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
			In	*Out*	*Total*	*In*	*Out*	*Total*	
Resort Hotel (330)[1]	—	Room	0.23	0.09	0.32	0.18	0.23	0.41	—
Resort Case Study[2]	—	Room	—	—	—	—	—	—	2.35
Proposed Project									
Hotel	392[3]	Room	90	35	125	71	90	161	921

Source: Appendix J.
Notes:
1 Peak Hour Trip Rate Source: ITE 2017 (ITE code given in parentheses).
2 Average Daily Traffic Trip Rate Source: Appendix J.
3 The TIA analyzes 392 guest rooms, which results in a higher trip generation; therefore, the analysis is more conservative as opposed to 387 guest rooms.

The peak hour trip generation is based on the trip generation rates from Institute of Transportation Engineers Trip Generation Manual (ITE 2017) for a resort hotel type of use. Since Institute of Transportation Engineers does not have a daily trip rate for a resort hotel, the average daily trip rate used for this study was derived from a case study of similar types of resorts in California (see **Error! Reference source not found.** Appendix J for the detailed memo). The trip generation estimates show that the proposed project would generate approximately 921 average daily trips. Typically, approximately 8% to 10% of daily traffic occurs during the peak hours (74 to 92 trips); however, for a conservative analysis, the slightly higher Institute of Transportation Engineers peak hour trip rates were utilized for the purpose of the TIA, with 125 trips occurring during the AM peak hour and 161 trips occurring during the PM peak hour.

Project Trip Distribution and Assignment

The geographic distribution of project-generated trips was derived using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM). The SCVCTM is a computerized travel demand model that utilizes a sophisticated trip distribution function to derive the distribution of vehicle trips, and which has previously been calibrated to the existing conditions of the Santa Clarita Valley. The SCVCTM is jointly maintained by City of Santa Clarita and County of Los Angeles staff, and is utilized for all major transportation planning efforts within the Santa Clarita Valley. Production and attraction trip data is generated by the model based on five separate trip purposes, and trip distribution patterns are then derived by the model. As a final step, the model assigns these trips to the roadway network based on the derived distribution patterns. The project's trip distribution percentages are illustrated in Figure 4.15-5 as determined by a SCVCTM select zone run. As shown, approximately 97% of the project trips are oriented towards the north on Sand Canyon Road, of which approximately 61% continue south on SR-14, and 10% continue north on SR-14. Approximately 3% of the project trips are oriented towards the south of the project on Sand Canyon Road. Project trips during the AM and the PM peak hours are shown in Figure 4.15-6 and Figure 4.15-7, respectively.

On-Site Roadway System

As mentioned previously, access to the project site will be via four proposed new intersections with Robinson Ranch Road, of which the "E" Drive intersection will be gated. A secondary access is proposed south of the property through Live Oak Springs Canyon Road, which could be used as an emergency evacuation route.

Peak hour turning movement volumes for project buildout conditions for the intersections used to access the project site are illustrated in Figure 4.15-8 and Figure 4.15-9 for the AM and PM peak hours, respectively.

4.15.4 Thresholds of Significance

The significance criteria used to evaluate the project impacts to traffic and circulation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to traffic and circulation would occur if the project would:

1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

4. Result in inadequate emergency access.

City of Santa Clarita VMT Thresholds

The City has adopted the following specific VMT thresholds (City of Santa Clarita 2020b):

a) A residential project's traffic and transportation analyses that do not result in a 15% reduction of Vehicle Miles Traveled (VMT) as compared to the Citywide baseline VMT for home-based per capita. This is consistent with the Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA. See Transportation Analysis Updates in Santa Clarita report June 2020 for reference for (a) through (e).
b) An employment (commercial or industrial) project's and transportation analyses that do not result in a 15% reduction of VMT as compared to the Citywide baseline VMT for home-based work VMT per employee.
c) A regional retail project's traffic and transportation analyses that result in a net increase in total VMT in comparison to the Citywide Baseline VMT.
d) A land use plan's traffic and transportation analyses that do not result in a 15% reduction of VMT as compared to Citywide baseline VMT for total VMT per service population.
e) A transportation project's traffic and transportation analyses that result in an increase in VMT in the study area in comparison to baseline conditions.

The VMT metric home-based work (HBW) VMT per employee and threshold of 15% reduction (for employment based uses) as compared to the Citywide baseline VMT have been selected for the proposed project's VMT analysis.

4.15.5 Impact Analysis

Threshold TRA-1. ***Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

As discussed below, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities and the impact would be **less than significant.**

Regional Transportation Plan/Sustainable Communities Strategy Consistency Analysis

The proposed project's consistency with the 2016 RTP/SCS is summarized in Table 4.15-3. The proposed project would not conflict with the applicable goals in the RTP/SCS.

Table 4.15-3. Project Consistency with RTP/SCS Goals

Policy	Discussion
Identify regional strategic areas for infill and investment.	**Consistent**. The proposed project would replace a previously developed, currently unused golf course with a new resort and spa. The proposed project would retain a large portion of the project site as open space, including 2 miles of on-site pedestrian pathways. The proposed project would serve as a hospitality and recreational gathering center, connecting the local community and providing for the diverse lifestyles within Santa Clarita. Additionally, the proposed project would convert a vacant, underutilized recreational use (golf

Table 4.15-3. Project Consistency with RTP/SCS Goals

Policy	Discussion
	course) to a use with broadened recreational opportunities that would serve a greater diversity of purposes and interests.
Identify strategic centers based on a three-tiered system of existing, planned and potential relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment.	**Consistent**. The proposed project would not involve development of transportation infrastructure. According to the Traffic Impact Analysis and Vehicle Miles Traveled Analysis prepared for the project (see Appendix J of this EIR), the proposed project would not result in significant impacts to traffic and circulation. As such, the proposed project would not require development of new transportation infrastructure and would not have an adverse impact on such infrastructure.
Develop "Complete Communities."	**Consistent**. The proposed project would provide hospitality and recreational amenities for the existing community.
Plan for additional housing and jobs near transit.	**Consistent**. The proposed project, which would provide approximately 500 employment opportunities, would adhere to a Transportation Demand Management Plan, which outlines measures to reduce traffic to and from the site. Measures to reduce traffic include providing rideshare information, preferential parking, rideshare vehicle loading, and bicycle storage facilities, as well as shower facilities and a central lunch area for employees to encourage sustainable modes of transportation such as public transit, bicycling, and carpooling. Additionally, the City of Santa Clarita Transit bus service's nearest stop (on Route 6), is located 2 miles from the project site and is easily accessible for those employees who choose to bike. The proposed project is located in close proximity to surrounding residential land uses and may attract employees within a walkable distance to the project site, thereby further reducing single-vehicle occupancy.
Continue to protect stable, existing single-family areas.	**Consistent**. The proposed project would not damage or divide the existing single-family residential communities surrounding the project site. The proposed project would provide hospitality and recreational amenities to residents in the project vicinity and would also generate approximately 500 employment opportunities within the local economy.
Ensure adequate access to open space and preservation of habitat.	**Consistent**. Under the proposed project, over half of the project site would remain designated Open Space. Various commercial recreational amenities would be provided to replace the existing golf course use. These amenities would be accessible for patrons of the resort and for the public via a new pedestrian pathway network, as shown in Figure 3-10, Pedestrian Pathways. Additionally, the proposed project would have a less-than-significant impact to biological resources, with implementation of Mitigation Measure (MM) BIO-1 through MM-BIO-5, as described in Section 4.3, Biological Resources.
Incorporate local input and feedback on future growth.	**Consistent**. The proposed project would be subject to environmental review pursuant to CEQA, which includes public review periods and public hearings. Additionally, the project would be subject to City Council approval.

Source: SCAG 2016.

City of Santa Clarita General Plan Circulation Element

The proposed project's consistency with the General Plan Circulation Element goals is discussed in Section 4.15.2, Regulatory Framework. The City strives to maintain the LOS standard per Objective C 2.2 and Policy C 2.2.4 under Goal C 2 identified in Section 4.15.2:

> Objective C 2.2: Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel.
>
> Policy C 2.2.4: Strive to maintain a Level of Service (LOS) D or better on most roadway segments and intersections to the extent practical; in some locations, a LOS E may be acceptable, or LOS F may be necessary, for limited durations during peak traffic periods.

Although the City's LOS policy would not be applicable as a transportation impact under CEQA per SB 743, the study area intersection operations analysis results are summarized below for the following scenarios: Existing Conditions, Opening Day plus Project Conditions, Interim Year (2028) Cumulative plus Project Conditions, and Long Range (2040) General Plan Buildout plus Project Conditions.

Existing Conditions

Table 4.15-4 provides operating conditions at the study area intersections under the Existing Conditions. All intersections in the study area currently operate at LOS D or better during both the AM and the PM peak hour.

It should be noted that the Sand Canyon Road/Lost Canyon Road intersection was analyzed as a stop-controlled intersection under Existing Conditions; however, it would be improved to the configuration of a roundabout (to be constructed by another project) prior to the opening day conditions.

Table 4.15-4. Intersection Level of Service Summary – Existing Conditions

No.	Intersection	Traffic Control	AM Peak		PM Peak	
			Delay[1]	*LOS*	*Delay*[1]	*LOS*
1	SR-14 Southbound Ramp/Soledad Canyon	Signalized	28.0	C	22.6	C
2	Sand Canyon/SR-14 Northbound Ramp	Signalized	13.9	B	18.0	B
3	Sand Canyon/Soledad Canyon	Signalized	41.7	D	42.7	D
4	Sand Canyon/Lost Canyon	AWSC	17.8	C	14.0	B
5	Sand Canyon/Robinson Ranch Road	TWSC	13.6	B	14.1	B

Source: Appendix J.
Notes: LOS = level of service; SR = State Route; AWSC = all-way stop control; TWSC = two-way stop control.
[1] Delay is measured in seconds per vehicle.

Opening Day plus Project Conditions

Table 4.15-5 provides a comparison between the opening day (2023) without and with project operating conditions at the study area intersections. Under the opening day (2023) conditions, the study area intersections would operate at LOS D or better during both the AM and the PM peak hour, and the project would not cause an operational deficiency.

Table 4.15-5. Intersection Level of Service Summary – Opening Day Conditions

No.	Intersection	Traffic Control	Without-Project				With-Project				Increase	
			AM Peak		*PM Peak*		*AM Peak*		*PM Peak*			
			Delay[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*AM*	*PM*
1	SR-14 Southbound Ramp/Soledad Canyon	Signalized	31.3	C	24.2	C	32.0	C	24.6	C	0.7	0.4
2	Sand Canyon/SR-14 Northbound Ramp	Signalized	14.5	B	19.5	B	14.8	B	21.0	C	0.3	1.5
3	Sand Canyon/Soledad Canyon	Signalized	42.5	D	46.5	D	42.8	D	50.0	D	0.3	3.5
4	Sand Canyon/Lost Canyon	Roundabout	5.7	A	3.0	A	5.9	A	3.0	A	0.2	0.0
5	Sand Canyon/Robinson Ranch Road	TWSC	14.6	B	15.2	C	15.5	C	15.7	C	0.9	0.5

Source: Appendix J.
Notes: LOS = level of service; SR = State Route; TWSC = two-way stop control.
[1] Delay is measured in seconds per vehicle.

Interim Year (2028) Cumulative plus Project Conditions

Table 4.15-6 provides a comparison between the interim year (2028) cumulative without and with project operating conditions at the study area intersections. The study area intersections would generally operate at LOS D or better during both the AM and the PM peak hour, with the following exceptions:

- SR-14 southbound ramp/Soledad Canyon Road intersection would operate at LOS E during the AM peak hour
- Sand Canyon Road/Soledad Canyon Road intersection would operate at LOS E during the AM peak hour and LOS F during the PM peak hour

The additional traffic added by the project would not result in any new LOS deficiencies and the increase in average vehicle delay would not cause an unacceptable level of operational deficiency at the above-mentioned intersections.

Table 4.15-6. Intersection Level of Service Summary – Interim Year (2028) Cumulative Conditions

No.	Intersection	Traffic Control	Without-Project				With-Project				Increase	
			AM Peak		*PM Peak*		*AM Peak*		*PM Peak*			
			Delay[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*AM*	*PM*
1	SR-14 Southbound Ramp/Soledad Canyon	Signalized	61.6	E	33.1	C	62.8	E	35.4	D	1.2	2.3
2	Sand Canyon/SR-14 Northbound Ramp	Signalized	18.9	B	29.9	C	21.0	C	32.7	C	2.1	2.8
3	Sand Canyon/Soledad Canyon	Signalized	72.2	E	127.1	F	72.4	E	127.9	F	0.2	0.8
4	Sand Canyon/Lost Canyon	Roundabout	9.7	A	5.8	A	13.1	B	6.6	A	3.4	0.8
5	Sand	TWSC	14.8	B	15.8	C	16.5	C	16.4	C	1.7	0.6

Table 4.15-6. Intersection Level of Service Summary – Interim Year (2028) Cumulative Conditions

No.	Intersection	Traffic Control	Without-Project				With-Project				Increase	
			AM Peak		*PM Peak*		*AM Peak*		*PM Peak*			
			Delay[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*AM*	*PM*
	Canyon/Robinson Ranch Road											

Source: Appendix J.
Notes: LOS = level of service; SR = State Route; TWSC = two-way stop control.
[1] Delay is measured in seconds per vehicle

Long Range (2040) General Plan Buildout plus Project Conditions

Table 4.15-7 provides a comparison between the long range (2040) buildout without and with project operating conditions at the study area intersections. The study area intersections would generally operate at LOS D or better during both the AM and the PM peak hour, with the following exceptions:

- SR-14 southbound ramp/Soledad Canyon Road intersection would operate at LOS E during the AM peak hour
- Sand Canyon Road/Soledad Canyon Road intersection would operate at LOS F during both the AM and the PM peak hour

The additional traffic added by the project would not result in any new LOS deficiencies and the increase in average vehicle delay would not cause an unacceptable level of operational deficiency at the above-mentioned intersections.

Table 4.15-7. Intersection Level of Service Summary – Long Range (2040) General Plan Buildout Conditions

No.	Intersection	Traffic Control	Without-Project				With-Project				Increase	
			AM Peak		*PM Peak*		*AM Peak*		*PM Peak*			
			Delay[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*Delay*[1]	*LOS*	*AM*	*PM*
1	SR-14 Southbound Ramp/ Soledad Canyon	Signalized	76.5	E	39.6	D	76.8	E	42.5	D	0.3	2.9
2	Sand Canyon/SR-14 Northbound Ramp	Signalized	21.2	C	33.0	C	24.2	C	37.9	C	3.0	4.9
3	Sand Canyon/ Soledad Canyon	Signalized	79.6	E	131.3	F	80.1	F	132.8	F	0.5	1.5
4	Sand Canyon/ Lost Canyon	Roundabout	10.6	B	5.9	A	15.2	B	6.8	A	4.6	0.9
5	Sand Canyon/ Robinson Ranch Road	TWSC	15.7	C	16.7	C	17.6	C	17.5	C	1.9	0.8

Source: Appendix J.
Notes: LOS = level of service; SR = State Route; TWSC = two-way stop control.
[1] Delay is measured in seconds per vehicle.

Transit, Bicycle, and Pedestrian Facilities

Currently, SCT Route 6 is the closest service route to the project site and the closest bus stop is approximately 2 miles from the project site. The closest Metrolink station is 4.5 miles from the site. The project proposes to provide shuttle services for guests and employees to/from the Metrolink stations to increase share of transit trips.

The project would not conflict with any plans or policies regarding existing or proposed bicycle and pedestrian facilities in the study area and would be consistent with the City's Non-Motorized Transportation Plan Update (City of Santa Clarita 2014).

Threshold TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) focuses on newly adopted criteria (VMT) adopted pursuant to SB 743 for determining the significance of transportation impacts.

On June 23, 2020, the City approved an addendum to the local guidelines and procedures for implementation of the provisions of CEQA, adopting VMT thresholds for determining significant transportation impacts effective on July 1, 2020. For the purposes of this Draft EIR, the recommended VMT analysis methodology and thresholds identified within the City's guidelines have been used. The VMT analysis memorandum prepared by Stantec is included in Appendix J.

Vehicle Miles Traveled Analysis

As mentioned under Section 4.15.3, the VMT of the project has been evaluated in two parts: (1) Analysis of Employee HBW VMT and (2) Analysis of Visitor/Tourist (Resort Guests) VMT.

Analysis of Employee Vehicle Miles Traveled

The resort proposes to have approximately 500 employees (includes part-time and full-time employees) in the future. However, not all employees will be present at the site at the same time. At any given time, approximately 40% of the total employees would be present on site based on the project's plan to operate the resort with two shifts for most of the employees, one from 6:00 a.m. to 2:00 p.m. and the other from 2:00 p.m. to 10:00 p.m., with the remaining 20% of the employees working 10:00 p.m.–6:00 a.m. The baseline VMT trends of the project's TAZ can be used to estimate the project's employee-generated VMT, since there are other employment generating uses in the project's TAZ. The project is located in TAZ 20276100. As shown in Table 4.15-8, the Project's HBW VMT is estimated to be 21.7 vehicle-miles per employee, which is 17.6% above the Citywide average VMT per employee.

The results of the VMT analysis are summarized in Table 4.15-8.

Table 4.15-8. Project VMT Analysis Summary

Analysis Metric: Resort Hotel	
Project Land Use	392 guest rooms, resort hotel
Project Screening	None
Project TAZ 20276100 Population	2,520 residents
Project TAZ 20276100 Employment	473 employees
Project TAZ 20276100 Home-Based Work VMT per Employee (2020)	21.7 VMT per employee
Santa Clarita Average Home-Based Work VMT per Employee (2020)	18.45 VMT per employee[1]

Table 4.15-8. Project VMT Analysis Summary

Analysis Metric: Resort Hotel	
Percent Difference (comparison to baseline)	+17.6%
Threshold of Significance (15% reduction from baseline)	15.7 VMT per employee[2]
Difference (project minus threshold of significance)	6.0 VMT per employee
Above or Below Threshold of Significance	Above Threshold of Significance
Significant Transportation Impact	Yes
Project Impact (comparison to threshold of significance)	+38.2%

Source: Appendix J.
Notes: TAZ = traffic analysis zone; VMT = vehicle miles traveled.
1 SCAG 2016 RTP/SCS Travel Demand Model, Santa Clarita 2020 VMT Look Up Table provided by the City via email dated June 23, 2020.
2 Fehr & Peers 2020.

Based on the VMT guidelines, for the significance threshold, a 15% reduction is applied to the Citywide baseline average HBW VMT (18.45 VMT per employee), resulting in a threshold of significance of 15.7 VMT per employee. Since the project's 21.7 VMT per employee is greater than the threshold of significance, the project would result in a potentially significant impact.

Analysis of Visitor/Tourist (Resort Guests) Vehicle Miles Traveled

The project includes a resort style hotel, which will attract a wide range of visitor and guest types. Some guests will be from the Southern California area, while others will be arriving from out of state or from other countries. The facility is being designed as a full-service destination resort where guests can stay multiple days without the need to leave the facility. It will also provide facilities for conferences and special events such as weddings. A shuttle bus will operate between the resort and the new Vista Canyon Metrolink rail station, which is being constructed approximately 2 miles from the project site.

The SCAG model does not include data specific to hotel or resort types of use; therefore, the SCAG model does not allow for a quantitative analysis of VMT regarding the resort's visitors and guests. The City's VMT analysis guidelines (City of Santa Clarita 2020a) provide limited guidance on evaluating special types of use such as a resort but do state that the approach should be consistent with the overall goal of SB 743, which is to reduce VMT. The specific approach used for analysis of special uses is left to the discretion of the lead agency.

Vehicle trips made by the resort's visitors and guests are a unique trip type. Unlike trips made for the purpose of work, school, or shopping, a typical vacation or special event trip will be made infrequently. When considered on a per capita basis, these infrequent trips will have a negligible effect on per capita VMT rates. Guests, while at the resort, will typically generate minimal VMT due to the all-inclusive features of the resort. In comparison to a typical day that includes trips made for work, school, or shopping, resort guests can be expected to generate significantly lower than average VMT. Overall, the resorts visitors and guests are expected to have a **less-than-significant impact** on VMT.

Conclusion

Based on the VMT analysis for project's employees shown above, the project would conflict with CEQA Guidelines Section 15064.3(b) and the project's impact would be **potentially significant**.

Threshold TRA-3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

As mentioned previously, the proposed project would be accessed via four proposed new intersections with Robinson Ranch Road, of which the "E" Drive intersection will be gated. A secondary access is proposed south of the property through Live Oak Springs Canyon Road, which could be used as an emergency evacuation route. Peak hour turning movement volumes for project buildout conditions for the project access intersections, as shown on Figures 4.15-8 and 4.15-9 for the AM and PM peak hours, respectively, were analyzed in the TIA. Based on the intersection analysis and as shown in Table 4.15-9, each on-site project intersection is anticipated to operate at an acceptable LOS C or better. No queuing impacts are anticipated at the study area intersection locations.

Table 4.15-9. Intersection Level of Service Summary -Project Access

No.	Intersection	AM Peak		PM Peak	
		Delay[1]	*LOS*	*Delay*[1]	*LOS*
5	Sand Canyon/Robinson Ranch Road	13.8	B	15.0	C
10	"E" Drive/Robinson Ranch Road	9.0	A	9.4	A
11	"C" Drive/Robinson Ranch Road	9.3	A	9.5	A
12	"A" Drive/Robinson Ranch Road	9.2	A	9.5	A
13	"B" Drive/Robinson Ranch Road	9.1	A	9.4	A

Source: Appendix J.
Notes: LOS = level of service.
[1] Delay is measured in seconds per vehicle

All roadway improvements required as a result of the project, whether located on or off site, would be designed and constructed in accordance with all applicable roadway standards and practices. The project driveways' intersections along Robinson Ranch Road have been analyzed as intersections and will be improved and designed per local standards to accommodate project traffic.

This approach would ensure compliance with any and all applicable roadway design requirements. As such, no hazardous design features would be part of the project's roadway improvements. Therefore, impacts associated with hazardous design features or incompatible uses in conjunction with the implementation of improvements would be **less than significant**.

Threshold TRA-4. Would the project result in inadequate emergency access?

All areas of the project site would be accessible to emergency responders during both construction and operation. Local access to the proposed project would be provided via the Sand Canyon Road/Robinson Ranch Road intersection via an existing gated entry. A total of four new access points are proposed off Robinson Ranch Road, each of which would be designed and constructed according to applicable design standards. Similarly, the internal drive aisles and loading and parking areas would be designed to comply with City's width, clearance, and turning radius requirements. Additionally, a secondary access is proposed from south of the property through Live Oak Springs Canyon Road, which could be used as an emergency evacuation route during natural disasters like fire.

The proposed project would provide adequate access to the project site, including access for emergency vehicles. The project applicant would be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state, and/or federal requirements related to emergency

access and evacuation plans. The mitigation measures related to emergency access and evacuation plans for the proposed project are described in detail in Section 4.17, Wildfire. The proposed site plan, including the access driveways, will be reviewed and approved by the fire department during plan check review. Adherence to these requirements would ensure that impacts due to inadequate emergency access are below a level of significance. Therefore, impacts associated with inadequate emergency access would be **less than significant**.

4.15.6 Project Design Features and Mitigation Measures

The proposed project would require mitigation measures (MMs), as impacts would be potentially significant. Certain measures are feasible for reducing or removing VMT. Various sources, such as the California Air Pollution Control Officers Association Quantifying Greenhouse Gas Mitigation Measures report (CAPCOA 2010), have identified actions and changes to project features that reduce or eliminate VMT. The following strategies are described in the VMT guidelines as sample options that are most effective in areas like Santa Clarita and are appropriate for the proposed project to avoid or substantially reduce the project's significant impact:

- Provide ride-sharing programs
- Implement subsidized or discounted transit program
- Encourage telecommuting and alternative work schedules
- Implement commute trip reduction marketing
- Provide employer-sponsored vanpool/shuttle

According to the California Air Pollution Control Officers Association report, each of these strategies would be applicable in urban and suburban locations (CAPCOA 2010). Because the project is located in a more rural area of suburban Santa Clarita, they may not be as effective as the calculations would indicate. To account for this fact, conservative estimates of employee participation have been applied to the VMT reduction calculations.

MM-TRA-1 **Provide Ride-Sharing Programs for Employees.** The project shall provide/promote ride-sharing programs to the resort employees by utilizing approaches such as designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading/unloading and waiting areas for ride-sharing vehicles, and providing a website or message boards for coordinating rides. Increasing the vehicle occupancy by utilizing ride sharing will result in fewer cars driving the same trip, thereby decreasing the vehicle miles traveled (VMT).

As shown in Table 4.15-10 and Table 4.15-11, providing ride-sharing programs to approximately 25% of the resort employees would result in a 1.3% reduction in VMT.

MM-TRA-2 **Implement Subsidized or Discounted Transit Program for Employees.** The project shall provide subsidized or discounted daily or monthly public transit passes to the resort employees. Although subsidized or discounted transit program would be available to all staff, the vehicle miles traveled (VMT) reduction calculation conservatively assumes that the program would be available and utilized by 25% of staff members.

As shown Table 4.15-10 and Table 4.15-11, implementing subsidized or discounted transit program to approximately 25% of the resort employees would result in a 0.8% reduction in VMT.

MM-TRA-3 **Encourage Telecommuting and Alternative Work Schedules for Employees.** According to the California Air Pollution Control Officers Association, encouraging telecommuting and alternative work schedules would reduce the number of commute trips, thereby reducing the project's vehicle miles traveled (VMT). Staggered start times, flexible schedules, or compressed work weeks are examples of alternative work schedules. Because resort operations require most of the employees to be on site 24 hours per day, telecommuting and alternative work schedules may not be feasible for a majority of the employees. The project shall implement a 4-day/40-hour work schedule for approximately 10% of the resort employees.

As shown in Table 4.15-10 and Table 4.15-11, with 10% employee participation in an alternate work schedule consisting of a 4-day/40-hour work week, a VMT reduction of 1.5% would result.

MM-TRA-4 **Implement Commute Trip Reduction Marketing.** The project shall implement marketing strategies to reduce commute trips. The marketing strategies would include new employee orientation regarding trip reduction and alternative mode options, event promotions, and publications. Although the marketing would target all employees, a conservative assumption of marketing to only 25% of the employees was utilized in the reduction calculation.

As shown in Table 4.15-10 and Table 4.15-11, implementing/promoting commute trip reduction marketing to approximately 25% of the resort employees would result in a 1.0% reduction in vehicle miles traveled.

MM-TRA-5 **Provide Employer-Sponsored Vanpool/Shuttle.** The project shall provide an employer-sponsored vanpool and shuttle for use by employees for commutes to work; the shuttle shall service the nearby transit station. The vanpool and shuttle will be available to all employees; however, the calculations conservatively assume the program would be offered to/utilized by 25% of employees.

As shown Table 4.15-10 and Table 4.15-11, providing employer-sponsored vanpool/shuttle to approximately 25% of the resort employees would result in a 1.7% reduction in vehicle miles traveled.

The buildout of the project would have approximately 500 employees. Since the project will have more than 50 employees, the City has requested that the project prepare a Transportation Demand Management plan. Stantec has prepared the Sand Canyon Resort – Transportation Demand Management Plan, dated March 2, 2018, and Parking Analysis, dated September 5, 2018, both of which are included in Appendix J. The following Transportation Demand Management strategies from the memo are summarized as Project Design Feature (PDF) TRA-1, which is intended to reduce vehicle trips and parking needs of the project.

PDF-TRA-1 The following Transportation Demand Management (TDM) facilities and services are recommended be provided by the resort, as required by the City of Santa Clarita.

1. An employee common area space such as a lunch room or coffee area would be used to provide rideshare information like the current bus and train routes and schedules, and other public transit resources. The building management should assign an Employee Transportation Coordinator (ETC) among staff to implement and promote TDM strategies. A commuter information kiosk would be installed to provide transit and rideshare information, with access to local transportation agency websites including Santa Clarita Transit, Metrolink, and Rideshare service at www.commutesmart.info.

2. Provide designated at least five parking spaces for carpool vehicles. Implement a carpool permit system administered by the ETC. At least two motorcycle parking spaces should be provided by converting a regular car parking space in the designated employee parking area.
3. Rideshare vehicle loading areas should be provided at the curb in front of the employee entrances to the building, preferably with a bench.
4. Secure bicycle storage racks would be provided for at least 10 bicycles located adjacent to the employee entrances of the buildings.
5. Shower facilities would be provided, with at least two shower stalls; these can be unisex if separate dressing areas enclosed with internal doors are provided for each shower stall and they have a shared wash basin and mirror area.
6. A central lunch area or outside eating area would be provided to allow employees to have a place for lunch to minimize the need for additional travel. Information on catering/delivery of food would also be provided to reduce vehicle trips for lunch.
7. The resort management would offer financial incentives to encourage employees to commute by other modes of transportation. Under the Commuter Choice Program, employers can pay their employees up to $100 per month ($1,200 per year) in tax-free benefits to commute to work by transit or eligible vanpools. It offers a significant tax savings to both employers and employees.
8. Detailed design of the TDM facilities in the parking lot would be completed by the project civil engineers, and facilities such as the central lunch area and shower facilities would be designed by the project architects.

4.15.7 Level of Significance After Mitigation

Threshold TRA-2. ***Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?***

MM-TRA 1 through MM-TRA-5 were identified and examined for applicability to the proposed project's VMT reduction (see Table 4.15-10). The VMT reductions associated with the mitigation measures are applied incrementally, resulting in a lower net reduction in comparison to the sum of the numbers (see Table 4.15-11). The proposed project's VMT with mitigation is summarized in Table 4.15-12.

Table 4.15-10. VMT Reduction Calculation

Strategy	VMT Reduction Calculation	Project Reduction (%)
MM-TRA-1: Ride-Sharing Program for Employees (TRT-3)	% VMT Reduction = Commute x Employee Where Commute = % reduction in commute VMT (for low density suburb, Commute = 5%) Employee = % employees eligible (25%)	% VMT reduction = 5% x 25% = 1.3%
MM-TRA-2: Implement Subsidized or Discounted Transit Program for Employees (TRT-4)	% VMT Reduction = A x B x C Where A = % reduction in commute vehicle trips (for low density suburb, providing a daily transit subsidy of $1.49, % reduction in commute VT = 3.3%) B = % employees eligible (25%) C = Adjustment from commute VT to commute	% VMT reduction = 3.3% x 25% x 1.0 = 0.8%

Table 4.15-10. VMT Reduction Calculation

Strategy	VMT Reduction Calculation	Project Reduction (%)
	VMT (C = 1.0)	
MM-TRA-3: Encourage Telecommuting and Alternative Work Schedules for Employees (TRT-6)	% Commute VMT Reduction = Commute Where Commute = % reduction in commute VMT	% VMT reduction in commute VMT for a maximum of 10% employee participation, for a 4-day / 40-hour work week = 1.5%
MM-TRA-4: Implement Commute Trip Reduction Marketing (TRT-7)	% Commute VMT Reduction = A x B x C Where A = % reduction in commute vehicle trips (4%) B = % employees eligible (25%) C = Adjustment from commute VT to commute VMT (C = 1.0)	% VMT reduction = 4% x 25% x 1.0 = 1.0%
MM-TRA-5: Provide Employer-Sponsored Vanpool/Shuttle (TRT-11)	% VMT Reduction = A x B x C Where A = % shift in vanpool mode share of commute trips (10%*) B = % employees eligible (25%) C = adjustment from vanpool mode share to commute VMT (C = 0.67)	% VMT reduction = 10% x 25% x 0.67 = 1.7% *10% represents the mid-range of typical annual reduction in vehicle mode share

Source: Appendix J.
Note: VMT = vehicle miles traveled.
TRT refers to Commute Trip Reduction Fact Sheets for Transportation category from CAPCOA 2010.

Table 4.15-11. VMT Reduction Summary

Description	California Air Pollution Control Officers Association Category	Project Reduction (%)
1. The Project shall provide ride-sharing programs for approximately 25% of the employees	Commute Trip Reduction Programs TRT-3	1.3%
2. The Project shall implement subsidized or discounted transit programs for approximately 25% of the employees	Commute Trip Reduction Programs TRT-4	0.8%
3. The Project shall encourage alternative work schedules for approximately 10% of the employees	Commute Trip Reduction Programs TRT-6	1.5%
4. The Project shall implement commute trip reduction marketing for approximately 25% of the employees	Commute Trip Reduction Programs TRT-7	1.0%
5. The Project shall provide employer-sponsored vanpool/shuttle programs for approximately 25% of the employees	Commute Trip Reduction Programs TRT-11	1.7%
	Total	**6.1%[1]**

Source: Appendix J.
Note:
[1] The calculated reductions do not sum to a total since the effect of individual strategy reductions are multiplicative (not additive). Overall % VMT Reduction = 1-(1-A)*(1-B)*(1-C) where A, B, C equals reductions for individual strategies.

Table 4.15-12. Project VMT with Mitigation

Description	California Air Pollution Control Officers Association Category
Project TAZ Home-Based Work VMT per Employee (2020)	21.7 VMT per employee
Mitigation Reduction	6.1%
Project with Mitigation	20.4 VMT per employee
City Threshold of Significance	15.7 VMT per employee
Is Project above or below Threshold	Above Threshold of Significance
Significant Transportation Impact	Yes

Source: Appendix J.
Note: VMT = vehicle miles traveled.

The 6.1% reduction in VMT is applied to the project's HBW VMT per employee and results in 20.4 HBW VMT per employee, which is above the city threshold of 15.7 HBW VMT per employee. Therefore, with implementation of the mitigation measures, the proposed project's significant impact cannot be fully mitigated. Hence the proposed project would be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts would be **significant and unavoidable**.

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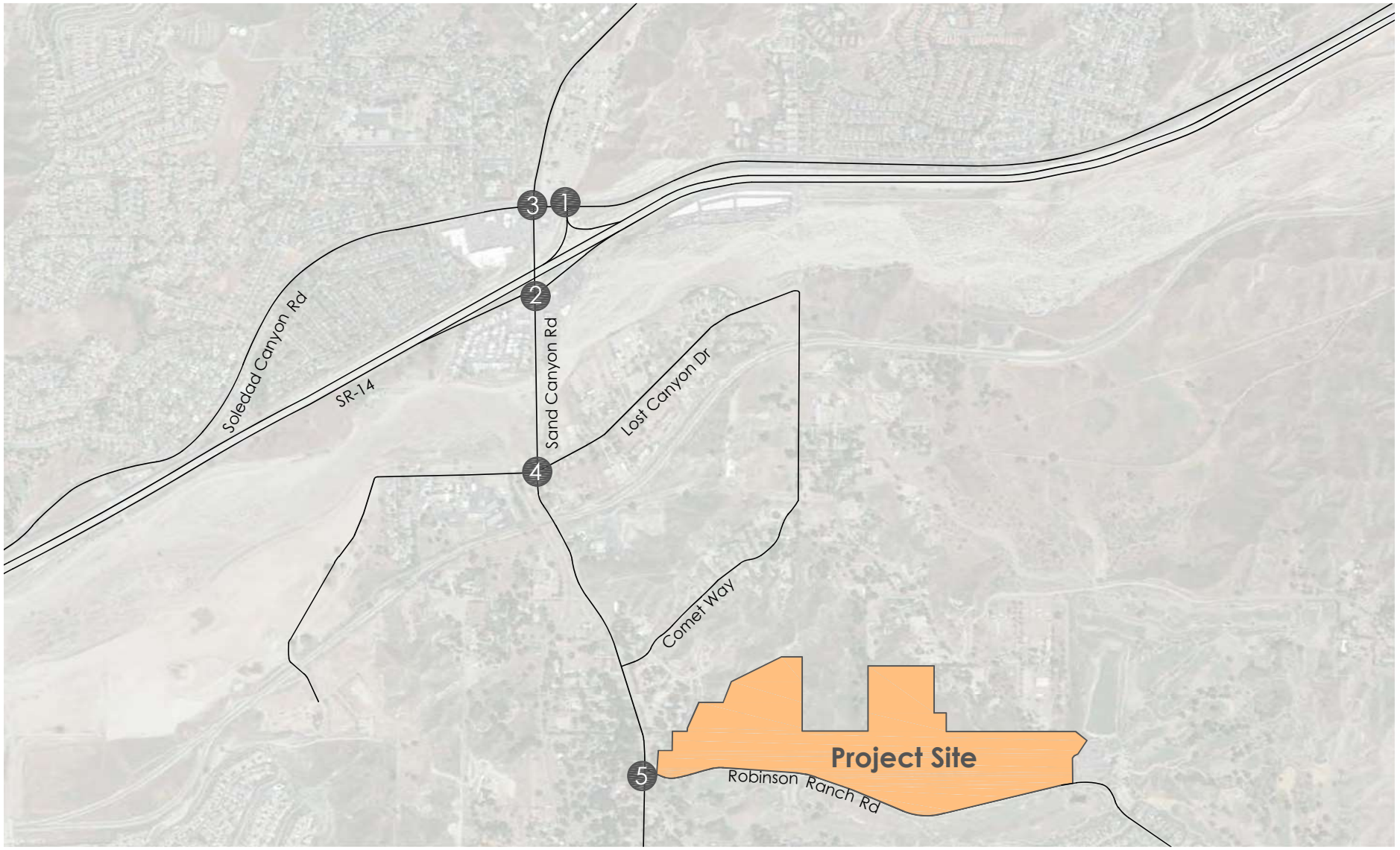

SOURCE: Stantec 2020

FIGURE 4.15-1

Project Site Location and Traffic Study Area

Sand Canyon Resort Project

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SOURCE: Stantec 2020

FIGURE 4.15-2

Master Plan of Highways

Sand Canyon Resort Project

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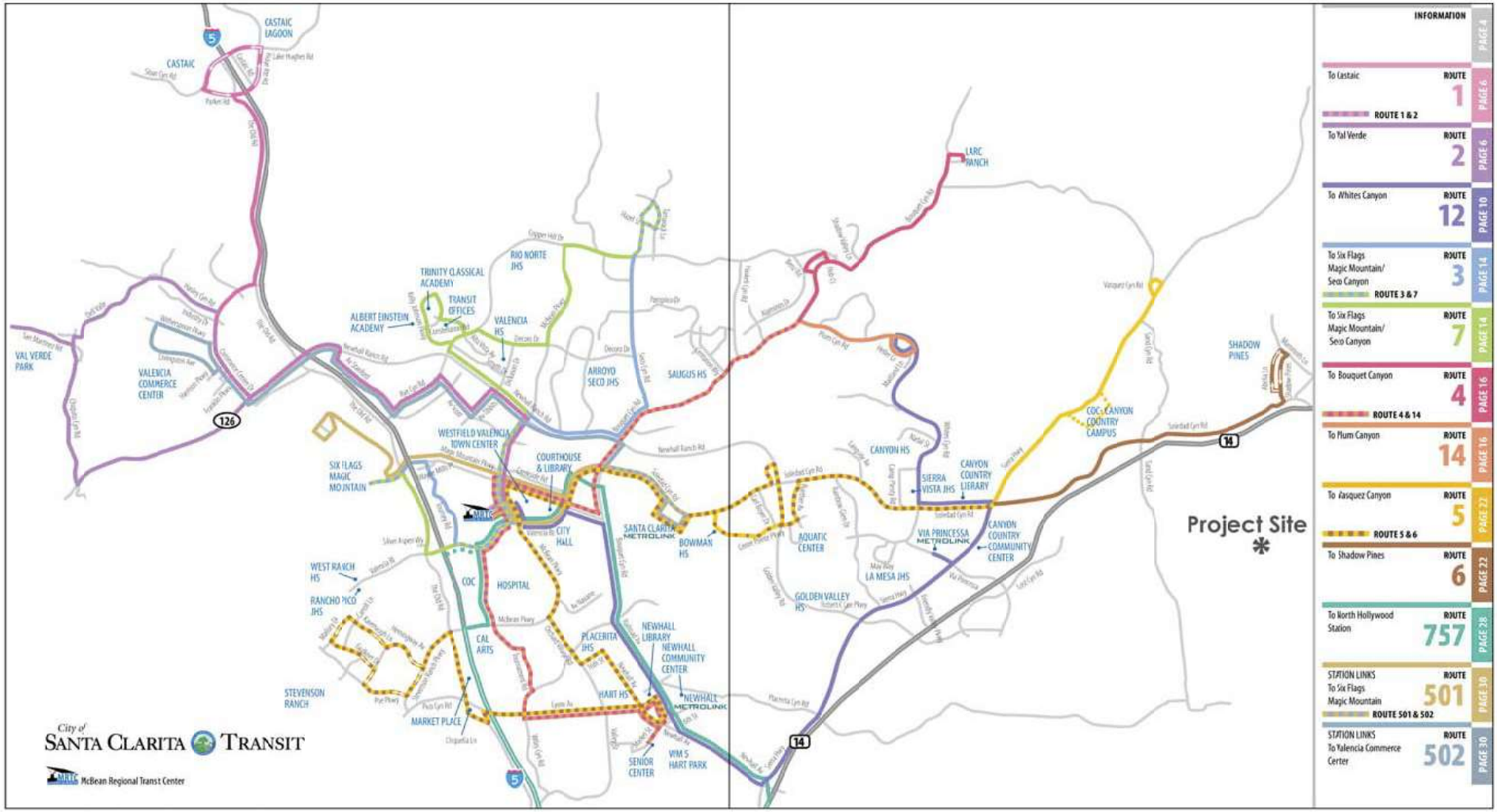

Source: City of Santa Clarita Transit

SOURCE: Stantec 2020

FIGURE 4.15-3

City of Santa Clara Transit Map

Sand Canyon Resort Project

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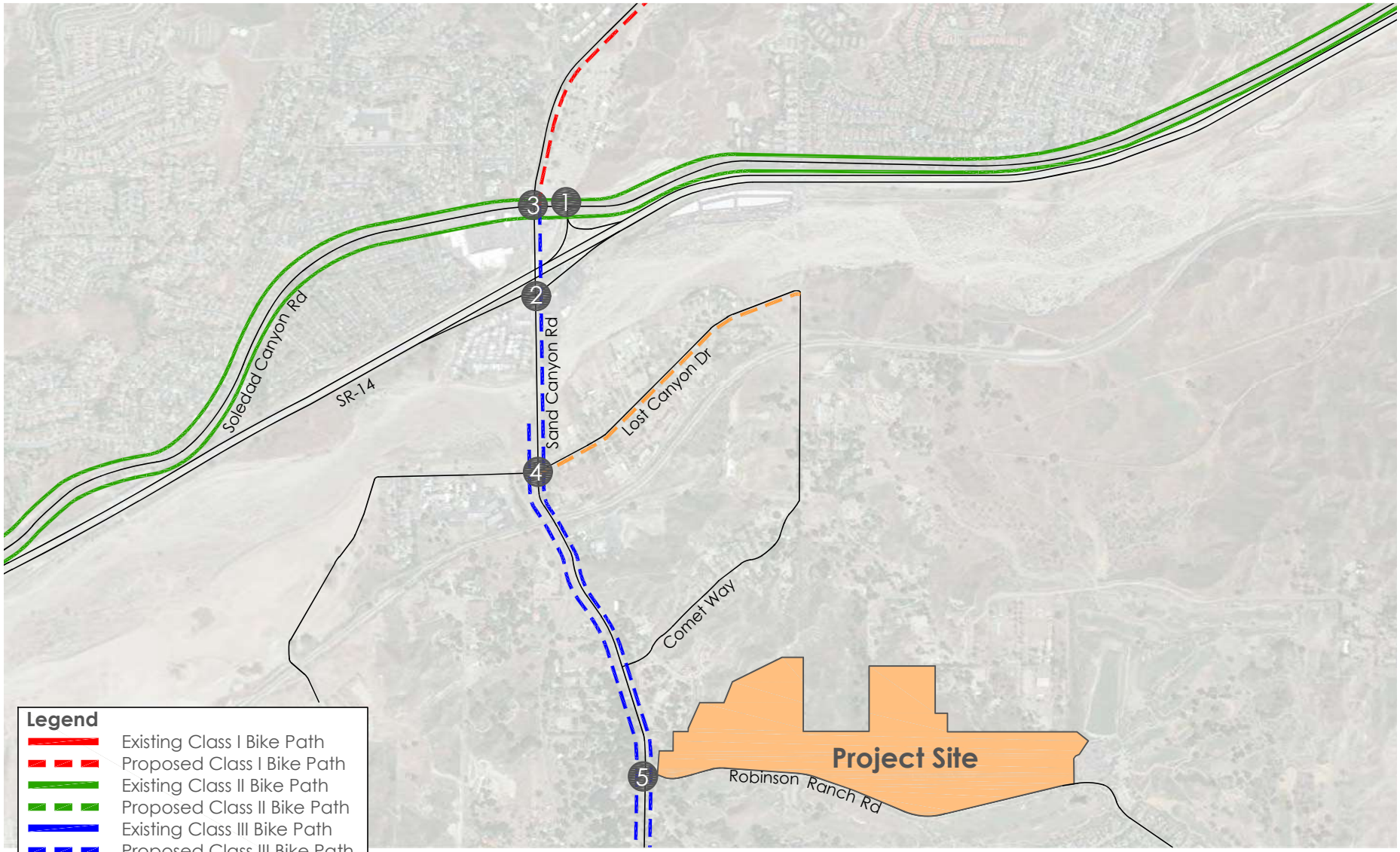

SOURCE: Stantec 2020

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FIGURE 4.15-4

Existing and Future Bicycle Facilities

Sand Canyon Resort Project

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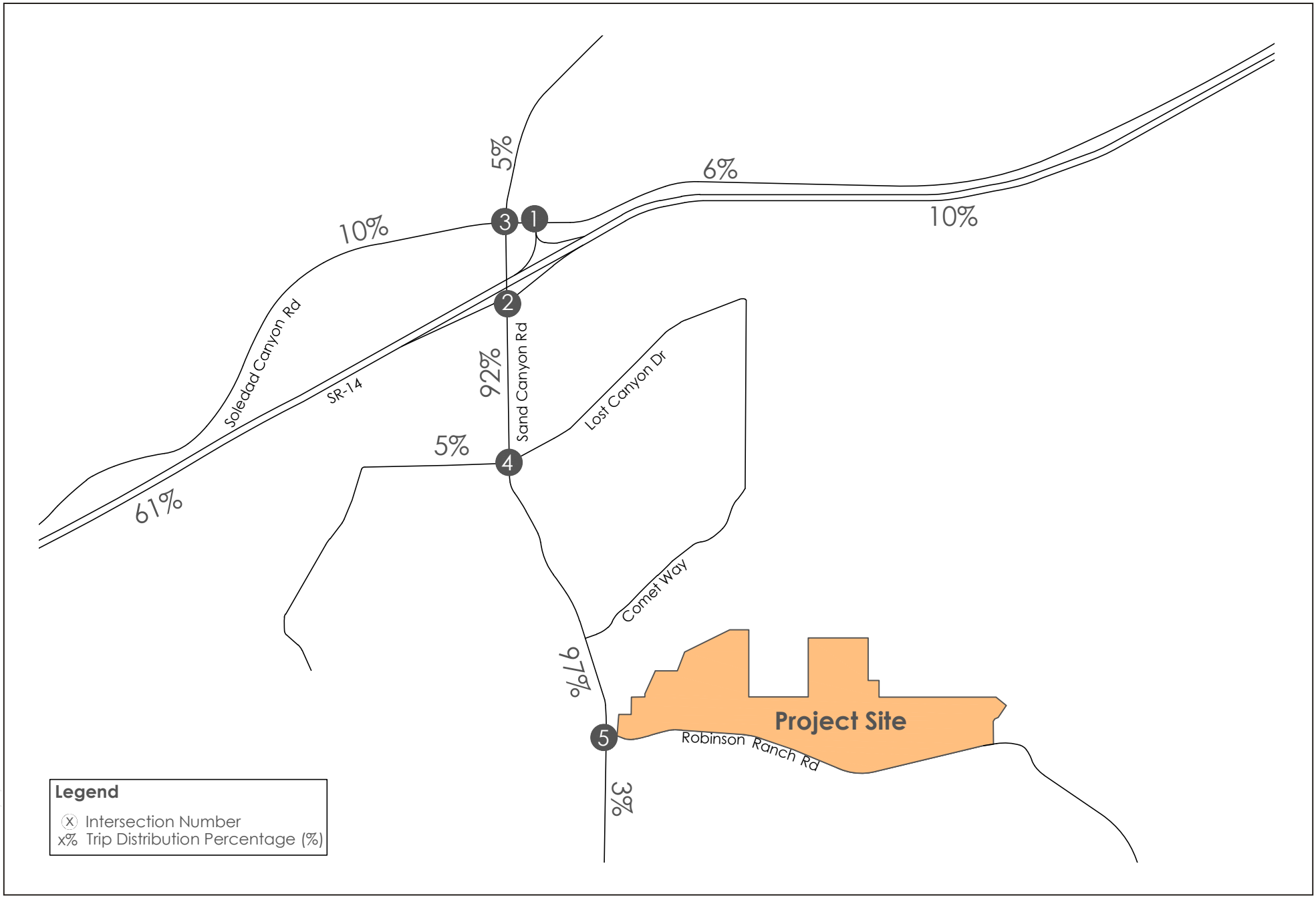

SOURCE: Stantec 2020

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FIGURE 4.15-5

Project Trip Distribution

Sand Canyon Resort Project

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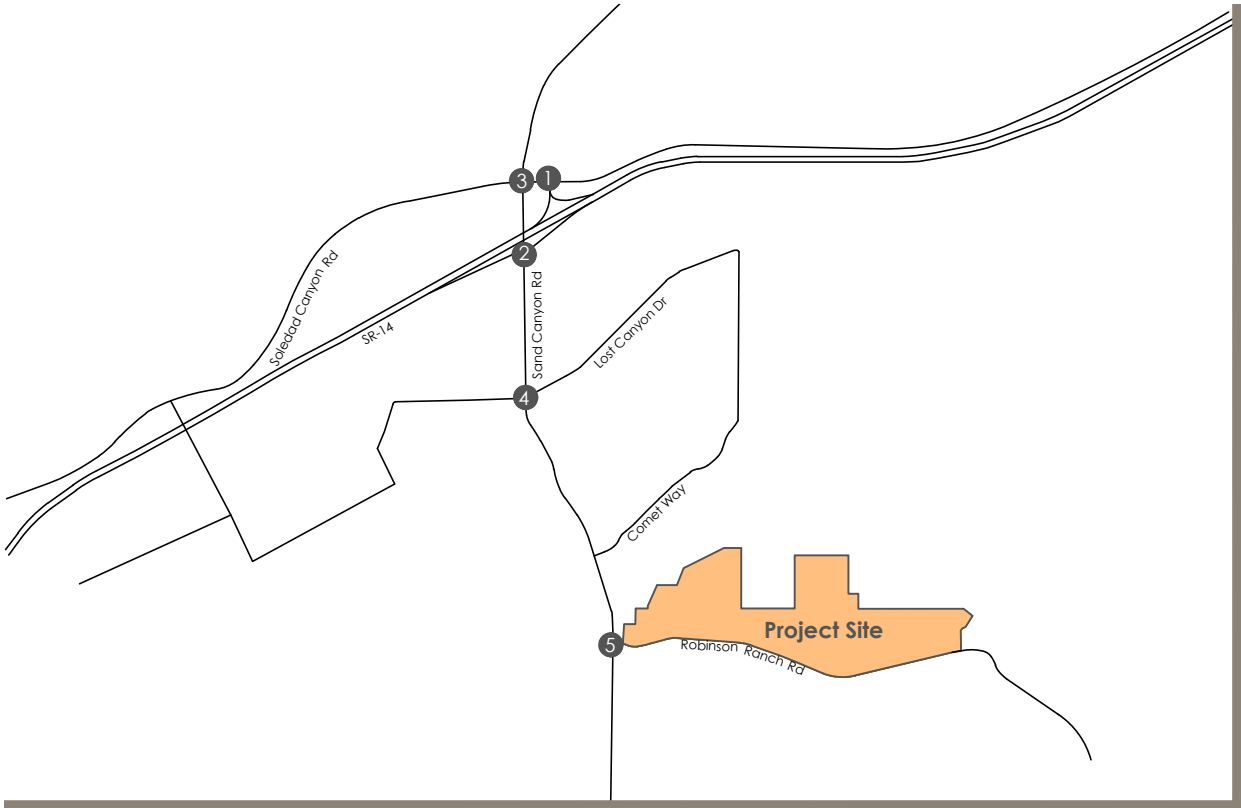
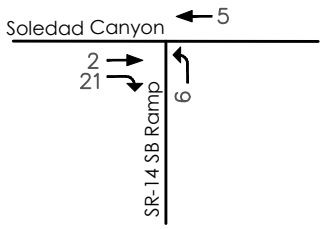
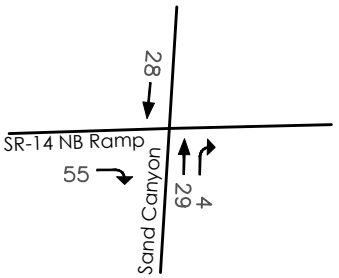
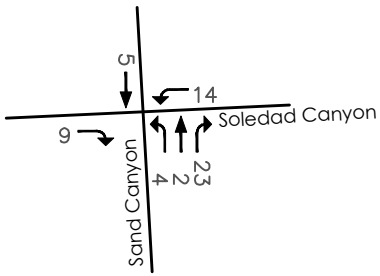




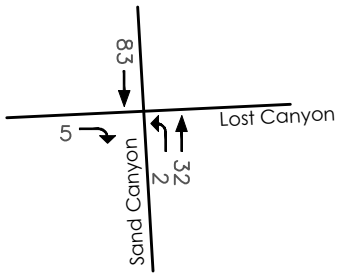
2. Sand Canyon & SR-14 NB Ramp



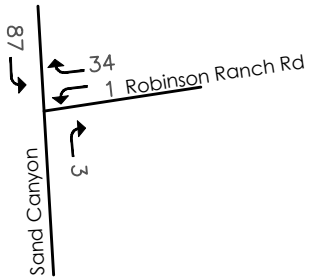
3. Sand Canyon Road & Soledad Canyon Road



4. Sand Canyon Road & Lost Canyon Drive



5. Sand Canyon Road & Robinson Ranch Road



SOURCE: Stantec 2020

FIGURE 4.15-6

Project Only Trips – AM Peak Hour

Sand Canyon Resort Project

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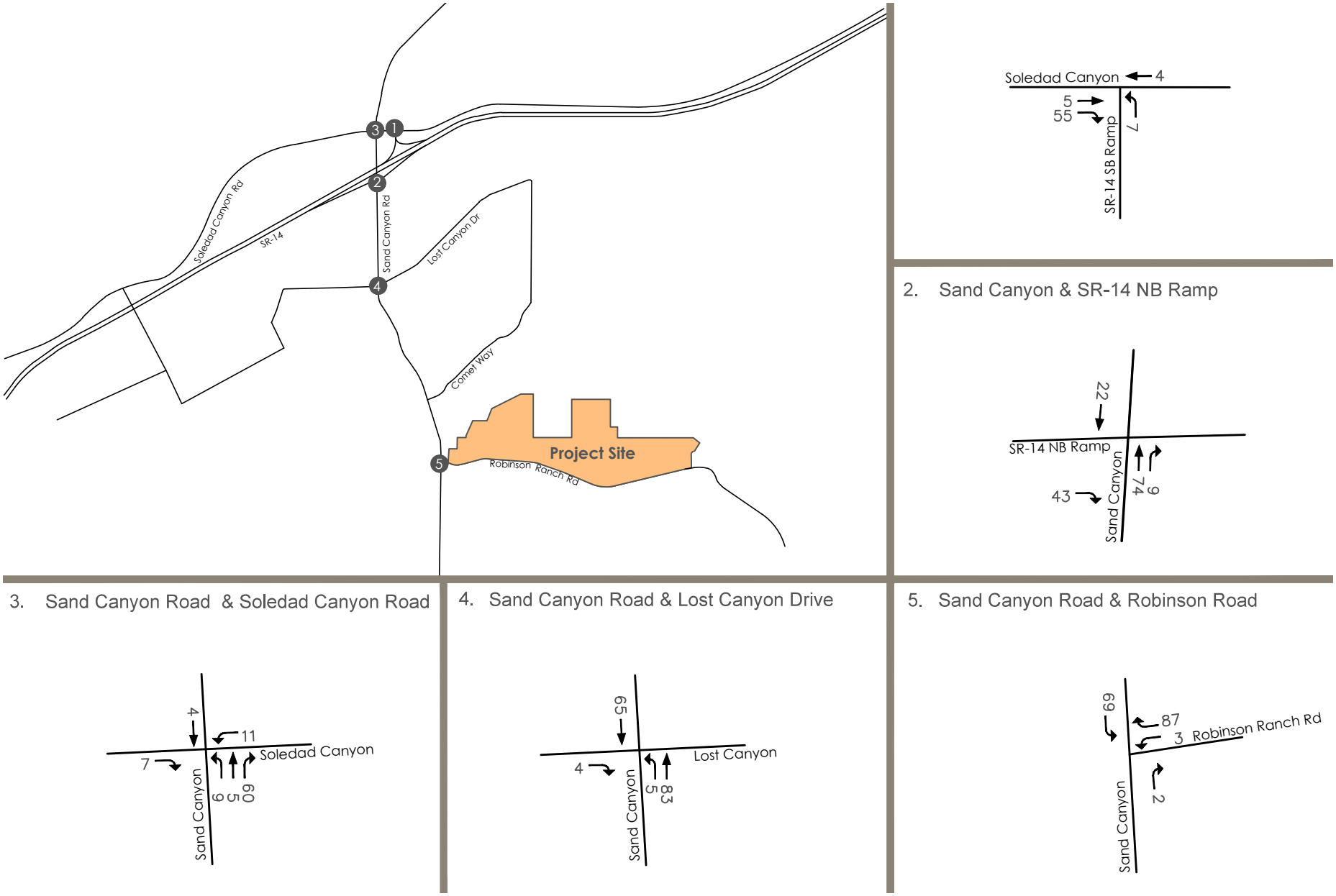

SOURCE: Stantec 2020

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FIGURE 4.15-7

Project Only Trips – PM Peak Hour

Sand Canyon Resort Project

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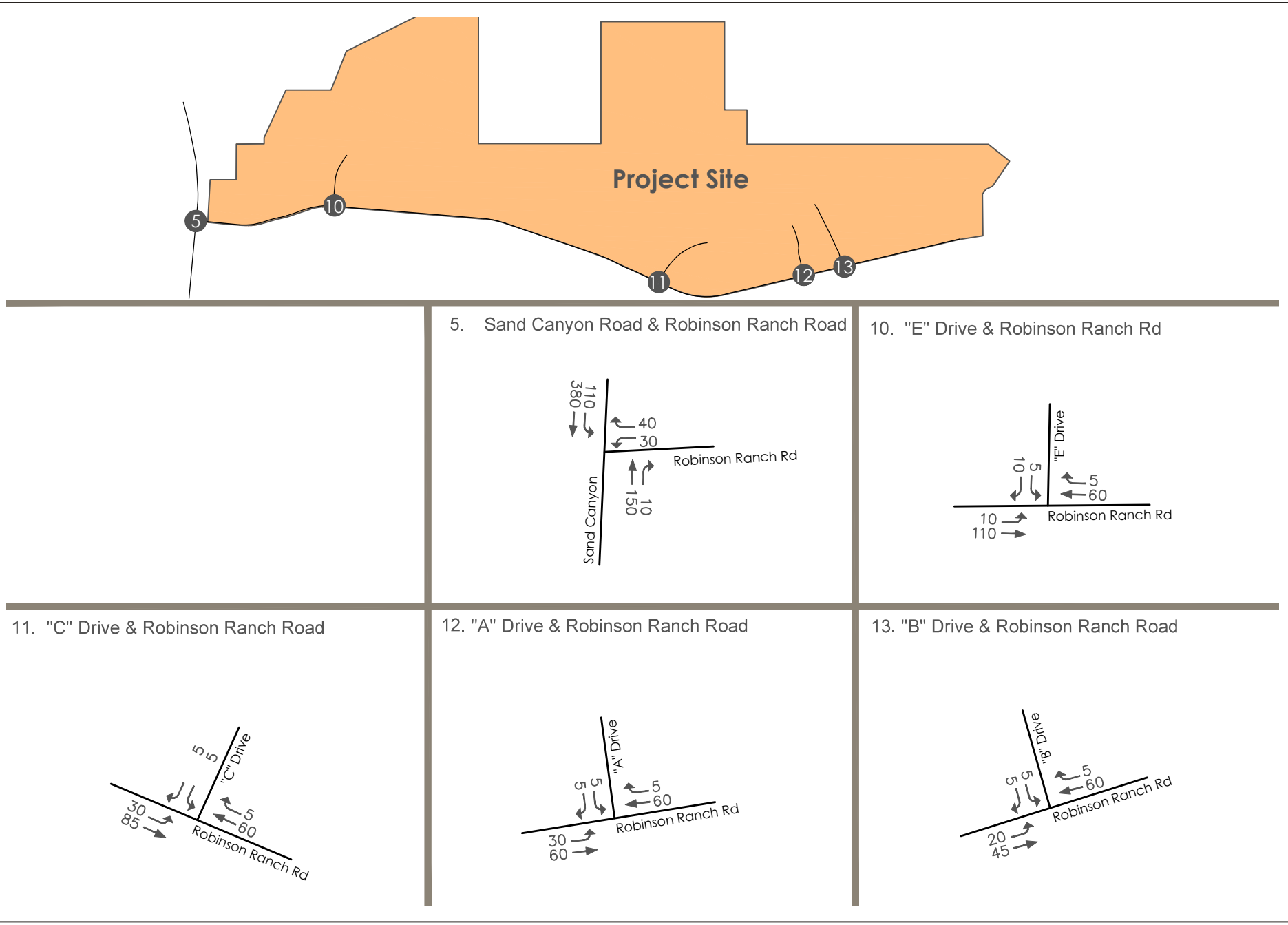

SOURCE: Stantec 2020

FIGURE 4.15-8

Project Site Access Volumes (Existing Plus Project Conditions) - AM Peak Hour

Sand Canyon Resort Project

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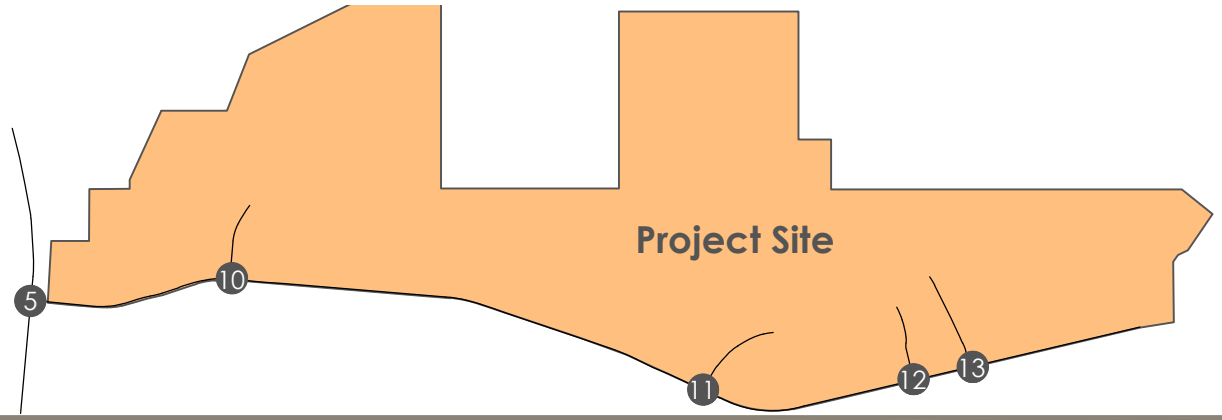
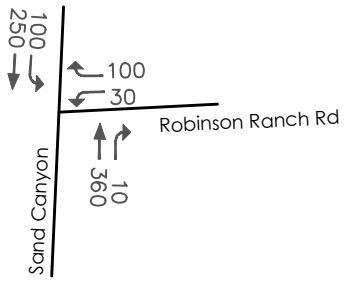
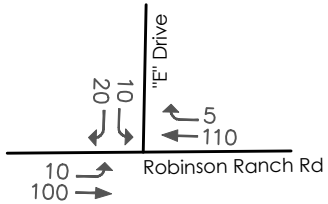


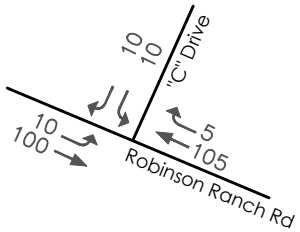
5. Sand Canyon Road & Robinson Ranch Road



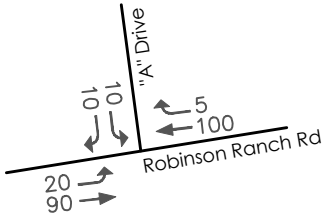
10. "E" Drive & Robinson Ranch Rd



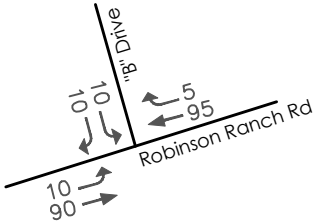
11. "C" Drive & Robinson Ranch Road



12. "A" Drive & Robinson Ranch Road



13. "B" Drive & Robinson Ranch Road



SOURCE: Stantec 2020

FIGURE 4.15-9

Project Site Access Volumes (Existing Plus Project Conditions) - PM Peak Hour

Sand Canyon Resort Project

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4.16 Utilities and Service Systems

This section describes the existing utilities setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.16.1 Environmental Setting

Water Services

The Santa Clarita Water District supplies water to the project site via a 16-inch waterlines in Robinson Ranch Road. The Santa Clarita Water District is one of four retail water suppliers in the Santa Clarita Valley, including the Los Angeles County Water Works District No. 36, the Newhall Water Division, and the Valencia Water Company that source their water supply from the Santa Clarita Valley Water Agency (SCV Water; previously the Castaic Lake Water). SCV Water is a wholesale water supply company. SCV Water sources its water predominantly from groundwater and imported water.

Groundwater

According to SCV Water, groundwater in the Santa Clarita Valley comes from two sources, the Alluvium Aquifer and the Saugus Formation, both of which are aquifers of the Santa Clara River Valley East Groundwater Basin. The Alluvium Aquifer generally underlies the Santa Clara River and its tributaries to a maximum depth of 200 feet. The Saugus Formation underlies the entire Upper Santa Clara River area to at least a depth of 2,000 feet (SCV Water 2019). Historically, groundwater supplies have contributed up to 50% of the Santa Clarita Valley's total water supply. In 2018, approximately 35,900 acre-feet of SCV Water's supply came from the Alluvium and Saugus Aquifers (Luhdorff and Scalmanini Consulting Engineers 2018).

Imported Water

SCV Water imports approximately half of its water supply from the State Water Project. The State Water Project is a 600-mile, north–south running water supply system that runs from Lake Oroville in northeast Sacramento to Castaic Lake, where it flows through large underground pipelines to supply SCV Water (SCV Water 2019). According to the 2018 Santa Clarita Valley Water Report, imported water supplies available to SCV Water in 2018 totaled 42,000 acre-feet, of which 21,611 acre-feet was designated for Santa Clarita Water District's imported water supply (Luhdorff and Scalmanini Consulting Engineers 2018).

According to the 2018 Santa Clarita Valley Water Report, total water use in the Santa Clarita Valley was 78,300 acre-feet in 2018; of which 65,200 acre-feet were for use in the municipal (i.e., urban) sector and 13,100 acre-feet were for use in the agricultural sector (Luhdorff and Scalmanini Consulting Engineers 2018). According to SCV Water's Urban Water Management Plan (UWMP), the SCV Water Agency projects adequate water supplies for all of its retailers through the planning year of 2040. Table 4.16-1 shows the supply and demand projection comparisons for SVC Water's retail suppliers through 2040.

Table 4.16-1. Wholesale and Retail Water Demand and Supply Projections

Entity	Supply/Demand	2020	2030	2040
Retail Water Suppliers				
LACWWD 36	Demand (af)	2,300	3,100	3,900
NCWD	Demand (af)	10,100	11,200	12,600
SCWD	Demand (af)	28,400	29,900	32,400
VWC	Demand (af)	28,100	36,600	39,600
	Total Demand (af)	**68,900**	**80,800**	**88,500**
Wholesale Provider				
SVC Water Agency	**Total Supply (af)**	**133,412**	**120,532**	**120,332**

Source: Data adapted from SCV Water (2015).
Notes: LACWWD = Los Angeles County Water Works District; af = acre-feet; NCWD = Newhall Water Division; SCWD = Santa Clarita Water District; VWC = Valencia Water Company; SVC = Santa Clarita Valley.

Wastewater Services

The City of Santa Clarita (City) contracts with the Los Angeles County Sewer Maintenance District for the maintenance of its sanitary sewer system. Based on a project-specific Sewer Area Study (Appendix K), as well as a Los Angeles County Department of Public Works sewer map (LADPW 2011), wastewater from the project site flows into the public wastewater system via an 8-inch vitrified clay pipes (VCPs) in Robinson Ranch Road, which in turn flows into a 15-inch VCP in Sand Canyon Road. The 15-inch line then flows into an 18-inch VCP in Lost Canyon Road.

Wastewater from the project site is treated by the Los Angeles County Sanitation District (LACSD) at the Saugus Water Reclamation Plant (WRP) and at the Valencia WRP, together, which form the Santa Clarita Valley Joint Sewage System. According to the LACSD, these WRPs currently treat 19.6 million gallons per day (mgd) of wastewater; however, these facilities have the combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level (Lanza, pers. comm. 2019).

Solid Waste Disposal Services

Waste Management Inc. provides solid waste disposal services to the project site and to the City. Waste Management Inc.'s services range from waste collection and disposal, recycling and organics collection, and providing necessary infrastructure to manage waste collection and disposal effectively and efficiently (Waste Management Inc. 2019). Although Waste Management Inc. transfers solid waste to more than 267 landfill sites throughout the country, there are two landfills is proximity to the project site, including Sunshine Canyon Landfill, located approximately 10 miles southwest of the project site, and the Chiquita Canyon Sanitary Landfill, located in Castaic, approximately 17 miles west of the project site (CalRecycle 2019a). These two landfills have a combined remaining capacity of approximately 86 million cubic yards, as shown in Table 4.16-2.

Table 4.16-2. Existing Landfills

Landfill Name	Maximum Permitted Throughput (Tons/Day)[1]	Remaining Capacity (cy)
Sunshine Canyon Landfill	12,100	77,900,000
Chiquita Canyon Landfill	6,000	8,617,126
Total	**18,100**	**86,517,126**

Source: CalRecycle 2019a.

Notes: cy = cubic yards.
[1] Weight of solid waste varies, but 0.4 tons of household trash is equal to one cubic yard (Cal Recycle 2019b).

Stormwater Drainage

As stated in Section 4.9, Hydrology and Water Quality, the Sand Canyon drainage, encompassing most of the project site and the adjoining drainage to the west, has been partially controlled by past development (Figure 4.9-1, Regional Topography and Hydrology, of Section 4.9). Off-site stormwater flows occur through drainage swales along roadways and through earthen open channels within urbanized areas. Sand Canyon Creek is partially improved with stream stabilizers along various reaches, and timber and rail wall revetment along its lower reaches. The western portion of the project site, which drains mostly north or west, receives off-site water from Live Oak Springs Creek, running roughly parallel to Live Oak Springs Canyon Road. The stream originates southeast of the project site, in the Magic Mountain Wilderness Area. Therefore, the total acreage of this local watershed downstream to the Santa Clara River is 750 acres. Live Oak Springs Creek ultimately drains into Sand Canyon Creek and the Santa Clara River. The eastern portion of the site drains to the north and northeast, toward Oak Spring Creek, which in turn flows to the Santa Clara River (Appendix K).

Utilities

Electrical Power

Southern California Edison provides electricity to the City. According to Southern California Edison's DERiM mapping system, existing electricity infrastructure includes 66-kilovolt sub-transmission lines that run from the North Oaks Substation, south of Soledad Canyon Road, through the Sand Canyon area. Electricity is transported to the project area via overhead transmission lines in Sand Canyon Road and Appaloosa Road, and an underground transmission line that runs through the southwestern portion of the existing Sand Canyon Country Club, from Live Oak Springs Canyon Road to immediately south of Robinson Ranch Road (SCE 2019).

Natural Gas

The Southern California Gas Company provides the City with natural gas service. Southern California Gas Company's service territory encompasses approximately 20,000 square miles and more than 500 communities. The nearest natural gas transmission lines to the project site include an underground transmission line, which lies approximately 1,300 feet north of the project site, and an underground high-pressure distribution line, which lies in Sierra Highway approximately 2.3 miles west of the project site (SoCalGas 2019).

Telecommunications

AT&T is the primary telecommunications provider for the City (AT&T 2019).

4.16.2 Regulatory Framework

Federal

Federal Clean Water Act of 1987

The Clean Water Act (CWA) is the primary federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas. As defined by the U.S. Environmental Protection Agency (EPA), the CWA is the primary

law regulating pollution of the nation's waterways and is intended to govern the restoration and maintenance of the chemical, physical, and biological integrity of the nation's water (EPA 2019a).

Section 303 of the CWA requires states to identify where existing pollution control technologies alone cannot meet water quality standards. Every 2 years, states are required to submit a list of impaired water bodies to the EPA, where they are prioritized based on (1) the severity of the pollution and (2) the designated use of the water (EPA 2019a).

Section 401 of the CWA requires that an applicant seeking a federal permit to conduct any activity, including the construction or operation of a facility that may result in the discharge of any pollutants, obtain certification from the state. The Section 401 certification requirement verifies compliance with existing water quality requirements or waives the certification requirement (EPA 2019b).

Section 402 of the CWA implements the National Pollution Discharge Elimination System (NPDES).

Section 404 of the CWA established a permit program to regulate the discharge of dredged materials or fill into waters of the United States, including wetlands. Common activities regulated by Section 404 include water resource projects (e.g., dams/levees), infrastructure development (e.g., road and airports), and, mining activities (EPA 2019c).

National Pollution Discharge Elimination System

The NPDES is legislated by Section 402 of the CWA and regulated by the EPA. The permitting program prohibits the unauthorized discharge of pollutants from a point source (e.g., pipe, ditch, well) to United States waters. The permitting program addresses municipal, commercial, and industrial wastewater discharges and discharges from large animal feeding operations. Under Section 402 of the CWA, permittees must verify compliance with permit requirements by monitoring their effluent, maintaining records, and filing periodic reports. The program is administered at the local level by the Regional Water Quality Control Boards (RWQCBs). Under the NPDES program, the State Water Resources Control Board (SWRCB) implements Waste Discharge Requirements for some discharges in addition to those subject to NPDES permits. Permits contain specific requirements that limit the pollutants in discharges. They also require dischargers to monitor their wastewater to ensure that it meets all requirements. Wastewater dischargers must maintain their treatment facilities, and treatment plant operators must be certified. The SWRCB routinely inspects treatment facilities and strictly enforce permit requirements.

State

Urban Water Management Planning Act

In 1983, the California legislature enacted the Urban Water Management Planning Act (California Water Code, Sections 10610–10656), which requires specified urban water suppliers within the state to prepare a UWMP and update it every 5 years. State and local agencies and the public frequently use UWMPs to determine if water supply planning has been efficiently implemented. As such, UWMPs serve as an important element in documenting water supply availability and reliability for purposes of compliance with Senate Bill (SB) 610 and SB 221, which link water supply sufficiency to large land use development project approvals. Urban water suppliers also must prepare UWMPs, pursuant to the Urban Water Management Planning Act, in order to be eligible for state funding and drought assistance.

A UWMP provides information on water usage, water supply sources, and water reliability planning within a specified water agency service area. It also may provide implementation schedules to meet projected demands over the planning horizon a description of opportunities for new development of desalinated water, groundwater information (where groundwater is identified as an existing or planned water source), a description of water quality over the

planning horizon, and identification of water management tools that maximize local resources and minimize imported water supplies. Additionally, a UWMP evaluates the reliability of water supplies within the specified service area. This includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption of water supplies.

Senate Bill 221

SB 221, enacted in 2001 and codified in the Water Code, requires a city, county, or local agency to include a condition to any tentative subdivision map that a sufficient, water supply shall be available to serve the subdivision. The term "sufficient water supply" is defined as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the proposed subdivision project's projected water demand, in addition to existing and planned future water uses, including agricultural and industrial uses, within the specified service area. SB 221 further requires any verification of "projected" water supplies to be based on entitlement contracts, capital outlay programs and regulatory permits and approvals.

Senate Bill 7

SB 7 (SB X7-7) was enacted in November 2009 and requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita urban water use by 20% by December 31, 2020 (California Water Code Section 10608.20). In order to reach this goal, SB X7-7 requires each urban retail water supplier to report progress in meeting water use targets (California Water Code Section 10608.40). The law also requires wholesale water suppliers to support their retail member agencies' efforts to comply with SB X7-7 through a combination of regionally and locally administered active and passive water conservation measures, programs, and policies, as well as the use of recycled water.

California Water Code

California's Porter-Cologne Water Quality Control Act (1969), which became Division 7 (Water Quality) of the California Water Code, establishes the responsibilities and authorities of the nine RWQCBs and the SWRCB. Among other things, it directs each regional board to formulate and adopt a water quality control plan—known as a basin plan—for all areas within the region. The water quality objectives used for this study are primarily those set forth in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the RWQCB. The basin plan defines existing and potential beneficial uses and water quality objectives for coastal waters, groundwater, surface waters, imported surface waters, and reclaimed waters in the basin (RWQCB 2019).

California Green Building Standards Code

The California Code of Regulations, Title 24 established the California Green Building Standards Code (CALGreen), which legislates the nation's first mandatory green/sustainable building code in an effort to meet the greenhouse gas reduction goals of Assembly Bill (AB) 32. CALGreen establishes mandatory measures through which a development can reduce their energy consumption. Such measures for non-residential projects include, but are not limited to, (1) the provision of bicycle facilities (e.g., lockers and parking); (2) the provision of a proportionate number of clean air vehicle parking spaces; and (3) the utilization of water-efficient plumbing fixtures etc. Title 24 of the California Code of Regulations also sets minimum standards for solid waste handling and disposal, including waste tire storage and disposal, hazardous waste disposal facilities, construction and demolition (C&D) and inert debris transfer/processing, C&D waste and inert debris disposal.

Model Water Efficient Landscape Ordinance

The California Code of Regulations, Title 23, Chapter 2.7 Section 490 et seq., legislates the conservation of California's limited water supply through the establishment of water efficient landscaping regulations. The purpose of the ordinance is to promote the values and benefits of landscaping practices that go beyond the conservation and efficient use of water while incentivizing local government agencies to establish and enforce provisions for water management practices and water waste prevention for existing landscapes. The Model Water Efficient Landscape Ordinance is incorporated by reference into the City's Municipal Code, Section 17.51.030, Landscaping and Irrigation Standards.

California Integrated Waste Management Act

AB 939, known as the California Integrated Waste Management Act of 1989, required all California cities and counties to divert 50% of the waste generated within their boundaries by the year 2000. The act requires each California city and county to prepare, adopt, and submit to CalRecycle a Source Reduction and Recycling Element (SRRE) that demonstrates how the jurisdiction will meet the California Integrated Waste Management Act's mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in California Public Resources Code Sections 41003 and 41303. In addition, the SRRE must include a program for the management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation, and (4) land disposal.

Assembly Bill 341

AB 341 (2012) established a statewide goal to divert 75% of solid waste from landfills by 2020. Part of the City's compliance with the requirements of AB 341 includes the establishment of a City Recycling Ordinance. Municipal Code Section 15.44.220 requires that person(s) in charge of day-to-day operations at a residence/building/facility arrange for the collection of their recyclable solid waste materials through services franchised by the City.

Assembly Bill 1826

AB 1826 (2014) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that, after January 1, 2016, all local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings with five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.

California Water Action Plan

California Water Action Plan: Actions for Reliability, Restoration, and Resilience was released by Governor Brown in January 2014. A collaborative effort of the California Natural Resources Agency, the California EPA, and California Department of Food and Agriculture, the California Water Action Plan was developed to meet three broad objectives: more reliable water supplies; the restoration of important species and habitat; and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection, and environment) that can better withstand inevitable and unforeseen pressures in the coming decades (California Natural Resources Agency 2016).

Over the next 5 years, the following actions are designed to move California toward more sustainable water management:

- Make conservation a California way of life
- Increase regional self-reliance and integrated water management across all levels of government
- Achieve the co-equal goals for the Delta
- Protect and restore important ecosystems
- Manage and prepare for dry periods
- Expand water storage capacity and improve groundwater management
- Provide safe water for all communities
- Increase flood protection
- Increase operational and regulatory efficiency
- Identify sustainable and integrated financing opportunities

Local

City of Santa Clarita Municipal Code

Section 17.51.030, Landscaping and Irrigation Standards

Section 17.51.030 of the City's Municipal Code legislates local landscaping design and requirements, including (1) the efficient use of water through appropriate low-water-using plant materials, water conserving irrigation, and regular maintenance of landscaped areas; (2) the conservation of potable water by maximizing the use of recycled water and other water conserving technology for appropriate applications; and (3) the incorporation, by reference, of the state-mandated Model Water Efficient Landscape Ordinance.

Section 15.44.320, Solid Waste Collector Requirements

Section 15.44.320 of the City's Municipal Code establishes the legislation through which solid waste service providers handle, transport, and dispose of solid waste. Section 15.44.320 also requires that solid waste service providers divert or cause to be diverted the maximum feasible amount of recyclable solid wastes from landfills, including construction material.

Section 15.46.300, Construction and Demolition Materials Management Plans

Section 15.46.300 of the City's Municipal Code establishes the legislation through which developers must submit Construction and Demolition Materials Management Plans (C&DMMPs) outlining the following:

- The estimated weight of the project's C&D materials generated
- The maximum weight of C&D materials that it is feasible to divert
- The vendor facility that the applicant proposes to use to collect, divert, market, reuse, or receive the C&D materials
- The estimated weight of residual C&D materials that would be transported for disposal in a landfill or transformation facility
- The estimated weight of inert waste to be removed from the waste stream and not disposed of in a solid waste landfill

City of Santa Clarita General Plan Conservation and Open Space Element

The City's General Plan Conservation and Open Space Element outlines goals and policies pertaining to the efficient use of the City's resources, specifically water and energy (City of Santa Clarita 2011). These goals and policies are analyzed in Section 4.10, Land Use and Planning, of this document.

4.16.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
3. 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.
4. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.16.4 Impact Analysis

Threshold UTL-1. ***Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

Water Supply Infrastructure

The water distribution system adjacent to the project site is comprised primarily of a 16-inch waterline in Robinson Ranch Road. The local distribution system mains within the study area connect to the 16-inch water pipeline along Robinson Ranch Road. The proposed project will require the expansion of the on-site water distribution system as well as the connection of the new facilities to the existing domestic water and fire flow system. Per the Water Availability Letter for the Sand Canyon Resort (MC No. 18-021), prepared by SCV Water in March 2019, the project applicant would be responsible for all fees and charges associated with any expanded or new water utility infrastructure (Appendix K). The relocation, expansion, and construction of new water utility infrastructure is included under the proposed project and, as such, is analyzed throughout this document.

Wastewater Treatment

The proposed project would connect new sewer pipelines throughout the project area to the existing 8-inch VCP sewer line in Robinson Ranch Road, which drains to the existing 15-inch sewer main in Sand Canyon Road.

According to a Sewer Area Study prepared for the proposed project, the existing 8-inch VCP sewer line in Robinson Ranch Road and 15-inch VCP in Sand Canyon Road have adequate capacity to accommodate the additional wastewater generated by the proposed project (Appendix K). However, the downstream 18-inch VCP in Lost Canyon Road has been determined to be near capacity and would need to be upgraded with future development in the area. As such, the proposed project would be subject to a development impact fee, payment of which would be considered the project's fair share contribution to the improvement and expansion of new wastewater utility infrastructure. Furthermore, wastewater from the project site would be treated at the Saugus and Valencia WRPs. According to the LACSD, these WRPs (combined) currently treat 19.6 mgd of wastewater; however, these facilities have the combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level (Lanza, pers. comm. 2019). As such, the LACSD has remaining capacity between the two WRPs to treat 8.5 mgd of wastewater, and no new wastewater treatment facilities would be required or are included as part of the project.

Stormwater Drainage Facilities

As described in Section 4.9, additional stormwater drainages would be constructed as part of the proposed project. For hydrologic analysis purposes, the project site was divided into four watersheds in the existing and proposed conditions (Figures 4.9-6, Proposed Hydrology, of Section 4.9). Each watershed was delineated using the proposed site grading for developed area and existing topography for undeveloped areas. The proposed drainage watersheds would generally mimic the existing natural drainage courses.

Water quality/detention basins would be constructed within Watershed 100 (Figure 4.9-6 of Section 4.9) as part of the project in order to enhance water quality and reduce stormwater runoff flow rates and volumes. Water quality/detention basin No. 1, a 3.44 acre-feet basin located on an existing creek, would receive runoff from the water quality treatment area illustrated in Figure 4.9-5, Water Quality LID Features, of Section 4.9 and overflow into an existing debris basin located in the downstream, western portion of the project site. Water quality/detention basin No. 2 would detain flow from a small oak tree preserve (1.6 acres) and would similarly overflow into the existing debris basin (Appendix K).

Table 4.9-1, Water Quality/Detention Summary, of Section 4.9 provides a summary of proposed detention basin volumes, based on the 50-year, 24-hour rainfall event. Based on these analyses, proposed detention basins would accommodate proposed project-related increases in stormwater flow, such that offsite flooding would not occur (see Section 4.9 for details). In addition, on-site drainage improvements would be designed to accommodate on-site stormwater flow, such that on-site flooding would not occur. The construction of these proposed detention basins is included under the proposed project, and as such, the environmental impacts associated with new and expanded stormwater drainage facilities are analyzed throughout this document.

Electric Power, Natural Gas, and Telecommunication Facilities

Currently, AT&T provides telecommunication service via aboveground telecommunication facilities located in Sand Canyon Road. New electrical and natural gas facilities would also be constructed during project construction. Potential impacts associated with the future construction/operation of electrical, natural gas, and telecommunication facilities have been analyzed as part of this project and throughout this Environmental Impact Report (EIR).

In summary, the proposed project would require the relocation and expansion of existing utility infrastructure, as well as the construction of new utility infrastructure such as stormwater drainage facilities. The project applicant would be required to pay development impact and connection fees in order to bring utilities to the proposed project.

Furthermore, the grading, excavation, and construction of new utilities is considered under the proposed project and evaluated throughout this EIR. As such, the proposed project would have a **less-than-significant** impact to the environment as a result of the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities. No mitigation is required.

Threshold UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The water distribution system surrounding the project site is comprised primarily of a 16-inch waterlines in Robinson Ranch Road. The local distribution system mains within the study area connect to the 16-inch water pipeline along Robinson Ranch Road. The proposed project will require the expansion of the on-site water distribution system and the connection of the new facilities to the existing domestic water and fire flow system.

Normal Years

According to the 2018 Santa Clarita Water Valley Water Report, total valley-wide water demand in 2019 was projected to be approximately 80,000 acre-feet, which will continue to be met by local groundwater supply and imported water (Luhdorff and Scalmanini Consulting Engineers 2018). As shown in Table 4.16-1, the UWMP also projects that valley-wide water demand through 2030 and 2040 would total 80,800 acre-feet per year and 88,500 acre-feet per year, respectively, while projected available water supplies through 2030 and 2040 would be as high as 120,532 acre-feet per year and 120,332 acre-feet per year, respectively. As such, the SCV Water Agency projects adequate water supplies to meet its retail suppliers' water demand through the planning year 2040, given an average/normal year.

Single and Multiple Dry Years

Per the UWMP demand projections and assuming a maximum water demand of 80,800 acre-feet per year, the SCV Water Agency would have adequate water supplies during single and multiple dry years. According to the Upper Santa Clara River Integrated Regional Water Management Plan (IRWMP), in the event of a single dry year, water supplies would be limited and a local deficit of 10,800 acre-feet per year could result. However, according to the IRWMP, additional types of imported water may be made available to compensate for this deficit during a single dry year event (Kennedy/Jenks Consultant 2014). As shown in Table 4.16-3, in the event of multiple dry years, SCV Water would have adequate supplies to meet the demand of its water retailers.

Table 4.16-3. Water Supply During Single and Multiple Dry Years

Year	Available Water from Alluvium Aquifer (af)	Available Water from Saugus Aquifer (af)	Available Water from State Water Project (af)1	Maximum Total Available Water (af)	Difference (assuming maximum water demand of 80,800 af/y)
Normal Year	30,000–40,000	7,500–15,000	57,000	112,000	**32,200 (surplus)**
Year 1	30,000–35,000	15,500–25,000	10,000*	70,000	**10,800 (deficit)**
Year 2	30,000–35,000	21,000–25,000	32,250	92,250	**11,450 (surplus)**
Year 3	30,000–35,000	21,000–35,000	32,250	102,250	**21,450 (surplus)**

Source: Data adapted from Tables 3.1-2 and 3.1-3 of the IRWMP.

Notes: af = acre-feet; af/y = acre-feet per year.
[1] Based on projections for 2030 through 2050.
* Based on worst-case historic dry year (1977).

The water analysis prepared for the project estimated that the proposed project's water demand would be approximately 290 acre-feet per year (Appendix K). Given the IRWMP's maximum total available water supply (Table 3.15-3), the proposed project's water demand would utilize approximately 0.26% (normal), 0.4% (single dry year), or 0.31% (multiple dry years) of SCV Water's total water supply.

The SCV Water Agency would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant,** and no mitigation is required.

Threshold UTL-3. ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

Wastewater from the project site is treated at the Saugus WRP and at the Valencia WRP. According to the LACSD, these WRPs currently treat 19.6 mgd of wastewater; however, have the combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level (Lanza, pers. comm. 2019). As discussed in Section 4.7, Greenhouse Gas Emissions, summarized in Table 4.7-4, Estimated Annual Operational GHG Emissions, and detailed in Appendix B, project operational emissions were derived in part on projected water demand and wastewater generation. Based on this data, the projected wastewater demand for the project is 0.08 mgd. LACSD has remaining capacity between the two WRPs to treat an additional 8.5 mgd of wastewater. As such, the WRPs have adequate capacity to serve the proposed project in addition to existing commitments. Impacts would be **less than significant**, and no mitigation is required.

Threshold UTL-4. ***Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

Construction

C&D of the project would generate waste (e.g., concrete rubble, asphalt rubble, wood, drywall) that would result in an increased demand for solid waste collection and disposal capacity. The City's Municipal Code, Section 15.46.300, requires completion and submittal of a C&DMMP to the City for approval prior to issuance of building permits for the site. The C&DMMP will be required as a Condition of (project) Approval (SC-UTL-1). The C&DMMP will identify the type of project and estimate the weight of materials to be recycled during construction, as well as indicate the vendor or facility that has been commissioned to collect, divert, reuse, or receive the C&D materials. With compliance with this Condition of Approval, impacts would be **less than significant**, and no mitigation is required.

Operations

Once construction is complete, the project would generate solid wastes associated with the hospitality and recreational uses on the site. Wastes would include paper, cardboard, food, bio/hazardous wastes, and green waste. Table 4.16-4 lists the anticipated solid waste quantities generated at the site through operation of the proposed project. Estimated solid waste generations for the proposed project were calculated using the service sector solid waste generation rates provided by CalRecycle. These generation rates assume approximately 4 pounds

per room per day for the hotel/motel land use, 0.0312 pounds per square foot per day (lbs/sf/day) of "other" service industry land uses, and 0.005 pounds per square foot per day of restaurant space (CalRecycle 2019c).

Table 4.16-4. Solid Waste Generation Estimates

Proposed Land Use	Number/Size	Generation Factor1	Estimated Waste (lbs/day)
Hotel Rooms	401 hotel rooms	4 lbs/room/day	1,604
Restaurant Space	8,400 square feet	0.005 lbs/sf/day	42
Banquet/Gym/Ballroom[2]	44,980 square feet	0.0312 lbs/sf/day	1,403
Recreational/Open Space	NA	NA	—
		Total	**3,049**

Source: CalRecycle 2019c.
Notes: lbs/day = pounds per day; lbs/room/day; = pounds per room per day; lbs/sf/day = pounds per square feet per day; NA = not applicable; — = no data available.
1 The "Hotel Rooms" and "Restaurant Space" generation factors chosen are CalRecycle factors based on projects constructed in the City of Santa Clarita.
2 "Other" Service category land use estimate used.

As shown in Table 4.16-4, at full buildout the proposed project would generate a minimum of approximately 3,049 pounds of solid waste per day (1.53 tons per day), and approximately 556 tons per year. As stated in Section 4.16.1, to the closest landfill to the project site is the Sunshine Canyon Landfill, which has a remaining capacity of 77,900,000 cubic yards. Based on the daily permitted capacity at the landfill (12,100 tons/day), buildout of the proposed project would contribute 1.53 tons per day, which represents approximately 0.013% of daily permitted capacity.[1] On an annual basis, the proposed project would contribute 556 tons per year, which represents a minimal contribution to the remaining capacity of 77,900,000 cubic yards.

In the unlikely event that the Sunshine Canyon Landfill closed, or reached capacity prior to full buildout of the project, the Chiquita Canyon Landfill, located 17 miles southwest of the project site, has a remaining capacity of 8,617,126 cubic yards and would have adequate capacity to accommodate the proposed project.

All non-hazardous solid waste generated from the project site (e.g., plastic and glass bottles and jars, paper, newspaper, metal containers, cardboard) would be recycled per local and state regulations previously mentioned, with a goal of 75%, in compliance with the Integrated Waste Management Act. Remaining non-hazardous solid waste would be disposed of at one of the nearby landfills (hazardous waste is managed and disposed of in compliance with all applicable federal, state, and local laws and is discussed in greater detail in Section 4.8, Hazards and Hazardous Materials, of this EIR). The City will review building plans and ensure that proper space is set aside to allow for the collection and storage of recyclable materials prior to issuance of building permits to ensure that there is adequate space for recycling on the project site. Overall, impacts associated would be **less than significant**, and no mitigation is required.

Threshold UTL-5. ***Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

Although the increase in solid waste generated would be minimal compared to the daily permitted capacity at Sunshine Canyon Landfill, buildout of the proposed project would contribute to the volume of solid waste generated in the City that is diverted to existing landfills. As such, the proposed project would contribute to the acceleration of

1 1.53/12100 * 100 = 0.013%

landfill closures. However, compliance with City, county, and state waste reduction programs and policies would reduce the amount of solid waste being transferred to the landfills. The proposed project would be required to comply with applicable state and local regulations associated with the reduction of solid waste entering landfills, including the California Integrated Waste Management Act, as well as, the City's plans, policies, and programs related to the recycling/diversion and the disposal of solid waste.

As previously noted, during construction, all wastes will be recycled to the maximum extent possible, in accordance with the City's requirements. Additionally, the project shall prepare a C&DMMP, which will identify the type of project and estimate the weight of materials to be recycled during construction, as well as indicate the vendor or facility that has been commissioned to collect, divert, reuse or receive the C&D materials.

All non-hazardous solid waste generated from the project site once operational (e.g., plastic and glass bottles and jars, paper, newspaper, metal containers, and cardboard) would be recycled, with a goal of 75%, in compliance with the Integrated Waste Management Act. Thus, the project would comply with state and local statutes and regulations related to solid waste during construction and operation. Impacts would be **less than significant**, and no mitigation is required.

4.16.5 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

4.16.6 Level of Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are required.

4.16.7 References Cited

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4.17 Wildfire

This section describes the existing setting of the proposed Sand Canyon Resort Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. Potential wildfire impacts resulting from construction and operation of the proposed project were evaluated based on a review of existing resources and applicable laws, regulations, guidelines, and standards. Publicly available sources were reviewed in the development of this section, including, but not limited to, the City of Santa Clarita General Plan, the City of Santa Clarita Municipal and Fire Codes, County of Los Angeles Fuel Modification Standards, and the City of Santa Clarita Hazard Mitigation Plan. This section focuses on the effect of the proposed project on wildfire risk. Fire protection services for the proposed project are addressed in Section 4.13, Public Services.

4.17.1 Environmental Setting

The City of Santa Clarita (City) and the project site are susceptible to wildland fires due to steep and varied terrain, vegetative fuel composition, and the region's weather patterns. The shrub-dominated plant communities comprising a portion of the project site and occurring throughout the region are highly flammable. Adaptations to the local dry, Mediterranean climate include specialized roots, stems, and leaves. The latter two become available fuels of importance and contribute to wildfire intensity and spread. For example, chaparral leaves are coated with ether extractives, such as oils, fats, terpenes, and waxes. The extractive content is highest during fall (the height of fire season in the project area) and lowest during the spring. Additionally, the amount of moisture in shrub-dominated communities is lowest in the fall. These qualities make Southern California chaparral some of the most volatile wildland fuels in the United States (USFS 2012). Grassland fuels ignite and burn more readily than the forest and shrub-dominated communities. Grassland fires are characterized as having lower fire intensity and a faster rate of spread than fires burning in shrub-dominated and forest fuel types. During the late summer and fall months, Santa Ana winds occur in the area, increasing the potential for high-intensity, fast-moving wildfires.

Based on Fire Hazard Severity Zone (FHSZ) mapping data (CAL FIRE 2012), the proposed project site is located entirely within a Very High FHSZ (VHFHSZ). This designation is also consistent with the Fire Zone mapping data provided by the City (City of Santa Clarita 2019a). The California Department of Forestry and Fire Protection (CAL FIRE) uses FHSZs to classify anticipated fire-related hazards for the entire state and includes classifications for State Responsibility Areas (SRAs), Local Responsibility Areas, and Federal Responsibility Areas. Fire hazard severity classifications take into account the following elements: vegetation, topography, weather, crown fire production, and ember production and movement. The VHFHSZ designation can be attributed to a variety of factors, including highly flammable, dense, drought-adapted chaparral vegetation; seasonal, strong winds; and a Mediterranean climate[1] that results in vegetation drying during the fall months. Figure 4.17-1, Fire Hazard Severity Zones, identifies the CAL FIRE FHSZ designations for the project site and surrounding region.

Vegetation/Fuels

On-site vegetation is largely influenced by the former golf course that occupied the site. Mixed native and non-native grassland occupies the former golf course fairways, with scattered individual coast live oak trees along the fairway edges, primarily in the western portion of the site. Chamise chaparral, California buckwheat scrub, and Acton brittlebush scrub

[1] Weather patterns are typical of Southern California with a Mediterranean climate consisting of mild wet winters and warm to hot, dry summers.

communities occur on steeper slopes located between the former golf course fairways. Fremont cottonwood trees occur in a few locations, primarily in the eastern portion of the site (Compliance Biology Inc. 2017). Selective fuel modification and other disturbance has also influenced the current composition and distribution of vegetation across the project site (Compliance Biology Inc. 2017).

Regionally, the Santa Clarita Valley includes highly flammable grass, chaparral, and scrub plant communities, similar to those present on the project site (City of Santa Clarita 2010). Chaparral is considered a moderately fine fuel that is loosely compacted and has a moderate fuel load. Chaparral has a high surface-area-to-volume ratio, requiring less heat to remove fuel moisture and raise fuel to ignition temperature. Chaparral is subject to early seasonal drying in the late spring and early summer, but does not fully cure in the way that grasses do. The live fuel moisture content reaches its low point in the late summer and early fall months. Dead fuels consist mainly of 1-hour and 10-hour fuel sizes, or twigs and small stems ranging from 0.25 inches to 1 inch in diameter. Chaparral has the potential for a high rate of spread, rapid ignition, and extreme fire behavior given its high content of volatile organic compounds.

Sage scrub is considered a moderately fine fuel that is loosely compacted with a moderate fuel load. Coastal scrub has a high surface-area-to-volume ratio, requiring less heat to remove fuel moisture and raise fuel to ignition temperature. It is subject to early seasonal drying in the late spring and early summer, but does not fully cure in the way that grasses do. Compared to chaparral, coastal scrub tends to have a lower content of volatile organic compounds. The live fuel moisture content reaches its low point in the late summer and early fall months. Dead fuels consist mainly of 1-hour and 10-hour fuel sizes, or twigs and small stems ranging from 0.25 inches to 1 inch in diameter. Coastal scrub has potential for a high rate of spread, rapid ignition, and extreme fire behavior.

Grasses are fine fuels that are loosely compacted with a low fuel load.[2] Grasses have a high surface-area-to-volume ratio, requiring less heat to remove fuel moisture and raise fuel to ignition temperature. They are also subject to early seasonal drying in late spring and early summer. Live fuel moisture content in grasses typically reaches its low point in early summer, and grasses begin to cure soon after. Due to these characteristics, grasses have potential for a high rate of spread, rapid ignition, and facilitation of extreme fire behavior. Grasses are the vegetation type with the highest risk for wildfire ignition. Their low overall fuel loads typically result in faster moving fires with lower flame lengths and heat output. Untreated grasses can help spread fire into other adjacent surface fuel types (e.g., shrubs) or facilitate surface to crown fire transition where they exist beneath tree canopies.

Weather

As with most of Southern California, the regional climate in the vicinity of the project site is influenced by the Pacific Ocean and is frequently under the influence of a seasonal, migratory, subtropical high-pressure cell known as the Pacific High (WRCC 2019). Wet winters and dry summers with mild seasonal changes generally characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds (WRCC 2019). Additionally, local vegetation and seasonal drying produce climatic conditions that result in fuel-driven wildfires and fire-associated climatic changes. This type of condition is referred to as a plume-dominated wildfire. Plume-dominated wildfires are fires where the energy produced by the fire in conjunction with atmospheric instability creates significant convective forces and increased winds. Such fires are extremely unpredictable, spread in various directions simultaneously, and exhibit extreme fire behavior. These fires are extremely dangerous and are often large in size.

The regional prevailing wind pattern is from the west, but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are typically from the west-southwest (sea), and at night,

[2] The amount of available and potentially combustible material, usually expressed as tons/acre (SKCNP 2017).

winds are from the northeast (land). During the summer season, the diurnal winds can be slightly stronger than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. On the project site, the varied topography may affect wind velocity and patterns. The highest wind velocities are typically associated with downslope, canyon, and Santa Ana winds.

The fire season in Southern California typically starts in June, as vegetation begins to dry out after winter and spring rains, and typically ends in October, although fire weather may be present year-round (Schroeder and Buck 1970). The highest fire danger for this area coincides with the Santa Ana winds. Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis during late summer and early fall. They are dry, warm winds that flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Santa Ana winds can reach sustained speeds of 40 mph with gusts ranging from 70 to 115 mph possible (Schroeder et al. 1964). Santa Ana winds can lead to serious fire suppression problems.

Topography

Site topography is dominated by a northwest-trending ridge dividing Sand Canyon and Oak Springs Canyon, which terminates north of the project site at the Santa Clara River (Figure 4.9-1, Regional Topography and Hydrology). Several minor westerly and easterly trending ridges descend onto the project site from the main northwest-trending ridge. Slope aspects across the site vary based on slope position relative to the site's ridgelines, though south-, east-, north-, and west-facing slopes are all present. Slope gradients on site range from relatively flat in the southwest corner up to approximately 25% along the site's ridgeline areas in the northern and eastern portions of the site. Site elevations range from approximately 1,590 feet above mean sea level in the northwest portion of the proposed project site to approximately 1,740 feet above mean sea level in the southeast portion (Appendix F).

Regionally, the proposed project site is situated at the western edge of the San Gabriel Mountains and the Angeles National Forest, at the foot of Magic Mountain where it slopes northwesterly down to Soledad Canyon and the Santa Clara River. Terrain in this region, and on the project site, includes components that are favorable to wildfire spread, including steep slopes, ravines, ridges, mountains, and valleys. These terrain features influence the speed and direction of air movement, which has a direct effect on wildfire behavior.

Fire History

Fire history data can provide an understanding of fire frequency, fire type, burn severity, significant ignition sources, and other information relevant to understanding the fire and fuels environment in an area. There have been numerous recorded wildfires within the vicinity of the project site. Fire history data was obtained from CAL FIRE's Fire and Resources Assessment Program database (CAL FIRE 2018a). The Los Angeles County Fire Department submits fire history data to this database on an annual basis (Lopez, pers. comm. 2019); therefore, the Fire and Resources Assessment Program dataset includes Los Angeles County fire history records. Fire history records document 86 wildfires within 3 miles of the project site between 1911 and 2017 (CAL FIRE 2018a), primarily in the nearby San Gabriel Mountains to the south and east of the project site and in the lower foothills of the Sierra Pelona Mountains to the north of the project site. Based on a review of the fire history information, average fire return interval for the area within 3 miles of the project site is 1.2 years, with many fires having occurred within the same year. Average fire return interval for large fires (>1,000 acres) within 3 miles of the project site is 6.9 years, with intervals ranging from 1 to 31 years (CAL FIRE 2018a).

The majority of the project site has burned over the recorded fire history period. The western half of the project site burned in 1935 (Creek No. 161 Fire), the northwest corner burned in 1984 (Live Oak Fire), and the eastern portion of the property burned in 1960 (unnamed fire) and 1980 (Live Oak Fire).

2016 Sand Fire

The 2016 Sand Fire, which burned the project site, provides an example of the wildfire threat to the project site. The fire began on July 22, 2016, and lasted until August 6, 2016, burning a total of 41,383 acres. Over 10,000 people were evacuated and there was one fatality. The Sand Fire destroyed 116 structures and caused damage to 20 structures as it burned westward toward the City (CAL FIRE 2017). The fire burned under Santa Ana wind and weather conditions, which significantly influenced its spread rate and ultimate size.

Environmental Effects of Wildfires

Although wildfire can benefit natural ecosystems that have evolved with occasional burning and that benefit from the stimulation of growth through the reproduction of plants and wildlife habitat, fire can also be detrimental to biological and other natural resources, such as air quality and water quality.

Biological Resources

Flora

Grassland communities, usually non-native grasses, will readily establish after wildfires in chaparral and scrub communities. With repeated burning at short intervals of up to several years, it is possible to convert chaparral and scrub to non-native grasslands. Chaparral and scrub vegetation communities will typically re-sprout and, absent fire or other disturbances, will return to pre-fire conditions. Because vegetation communities can be converted following fire, these changes in dominant vegetation communities can drastically affect plant and animal habitat and can affect the prevalence of special-status species.

Fauna

Generally speaking, fires injure or kill a relatively small proportion of wild animals. For example, birds and larger mammals can flee wildfire, and small mammals and reptiles can seek refuge in subterranean burrows. Habitat changes resulting from fires have a much more profound impact on faunal populations and communities than do the fires themselves. Fires can result in short-term increases in vegetation productivity and the availability and nutrient content of forage and browse (USFS 2000). These increases can in turn lead to increases in herbivore populations. However, any increase in population size is highly dependent upon the population's ability to survive in the post-fire environment (USFS 2000). In general, fires that devastate a landscape featuring many shrubs and trees reduce habitat cover for species requiring cover and increase habitat for species (such as raptors) that prefer open areas (USFS 2000).

Air Quality

Carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons, and other constituent materials are all present in wildfire smoke. The specific composition of smoke depends largely on the fuel type (vegetation types contain different amounts of cellulose, oils, waxes, and starches, which when ignited produce different compounds). In addition, hazardous air pollutants and toxic air contaminants, such as benzene and formaldehyde, are also present in smoke. However, the principal pollutant of concern from wildfire smoke is particulate matter. In

general, particulate matter from smoke is very small in size and can be inhaled into the deepest recesses of the lungs, presenting a serious health concern (Lipsett 2008).

Factors including weather, stage of fire, and terrain can all dictate fire behavior and the impact of wildfire smoke. Wind, for instance, generally results in lower smoke concentrations because wind causes smoke to mix with a larger volume of air. Regional weather systems, such as the Santa Ana winds of Southern California, on the other hand, can spread fire quickly and result in numerous devastating impacts. The Santa Ana winds effectively work to reverse the typical onshore flow patterns and blow winds from dry, desert Great Basin areas westward toward the coast. As a result, coastal communities can be impacted by fires originating in inland areas (Lipsett 2008). Large quantities of pollutants can also be released by wildland fires over a relatively short period of time. Air quality during large fires can become severely hazardous and can remain impaired for several days after the fire is ignited.

Water Quality

Fire can impact water quality by increasing potential for erosion and sedimentation in areas where vegetation has been burned, resulting in increased water temperature through removal or drastic modification of shade-providing trees and vegetation. Water chemistry can also be altered through the introduction of pollutants and chemical constituents. Aquatic environments may also be impacted through the introduction of fire-retardant chemicals used during firefighting activities.

Erosion and Sedimentation

Watersheds severely burned by wildfire are vulnerable to accelerated rates of soil erosion and can experience large amounts of post-fire sediment deposits. Increases in post-fire suspended sediments in streams and lakes (in addition to possible increases in turbidity) can result from erosion and overland flow, channel scouring, and creep accumulations in stream channels after an event (USFS 2005). While less is known regarding the effect of fire on turbidity, it has been observed that post-fire turbidity levels in stream water are affected by the steepness of the burned watershed (USFS 2005). The little data available regarding post-fire turbidity levels have indicated that U.S. Environmental Protection Agency water quality standard for turbidity can be exceeded after a fire event (USFS 2005).

Water Temperature

When fire burns stream bank vegetation and shade trees, water temperature can rise, which in turn can lead to thermal pollution, which leads to increased biological activity in the stream. Increased activity levels place a greater demand on the dissolved oxygen content of the water and can affect the survivability and sustainability of aquatic populations and communities (USFS 2005). Water temperature increases up to 62°F have been recorded in stream flows following fires in which the stream bank vegetation was burned (USFS 2005).

Water Chemistry

Ash deposits generated by a fire can affect the pH of water immediately after the event, potentially increasing to levels that violate water quality standards. In addition, increases in the pH of nearby soil can also cause increases in stream flow pH (USFS 2005). Dissolved nitrogen levels can increase after fires as a result of accelerated mineralization and nitrification (dissolved nitrogen is commonly studied as an indicator of fire disturbance), but these levels do not typically exceed established water quality standards (USFS 2005). Dissolved phosphorous, sulfur, chloride, and total dissolved solids levels can increase after a fire, but studies have shown that these increases typically do not result in violation of drinking water quality standards (USFS 2005).

Fire Retardant

The use of fire retardants to protect communities, sensitive resources, or other assets has proven highly effective, but it can have a direct effect on aquatic environments. The use of ammonium-based retardants can affect water quality and, in some instances, can be toxic to aquatic biota (USFS 2005). Nitrogen-containing retardants can potentially affect drinking water quality, and retardants containing sodium ferrocyanide can potentially be lethal for aquatic organisms (USFS 2005).

4.17.2 Regulatory Framework

Federal

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not law or "codes" unless adopted as such or referenced as such by the California Fire Code or the local fire agency.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995 and updated in 2001 and 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgment of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles:

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan was a presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and providing assurance for sufficient firefighting capacity in the future. The plan addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability. The plan continues to provide invaluable technical, financial, and resource guidance and support for wildland fire management across the United States. The U.S. Forest Service and the Department of the Interior are working to successfully implement the key points outlined in the plan (USFS 2019).

International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated in order to protect life and property (often times these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

International Wildland–Urban Interface Code

The International Wildland–Urban Interface Code is published by the International Fire Code and is a model code addressing wildfire issues.

State

California Building Code

Chapter 7A of the California Building Code applies to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area. The purpose of this chapter is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within an SRA or any Wildland-Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a vegetation fire. Chapter 7A contributes to a systematic reduction in conflagration losses. New buildings located in such areas shall comply with the ignition resistant construction standards outlined in Chapter 7A.

California Fire Code

The California Fire Code is contained within Title 24, Chapter 9, of the California Code of Regulations. Based on the International Fire Code, the California Fire Code is created by the California Buildings Standards Commission and regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. Similar to the International Fire Code, the California Fire Code and the California Building Code use a hazards classification system to determine the appropriate measures to incorporate to protect life and property.

California Public Resources Code

California Public Resources Code, Section 4290, requires minimum fire safety standards related to defensible space that are applicable to SRA lands and lands classified and designated as VHFHSZs. California Public Resources Code, Section 4291, requires a reduction of fire hazards around buildings, requiring 100 feet of vegetation management around all buildings, and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction.

Fire Hazard Severity Zoning

CAL FIRE mapped FHSZs in Los Angeles County based on fuel loading, slope, fire weather, and other relevant factors as directed by California Public Resources Code, Sections 4201–4204, and Government Code Sections 51175–51189. FHSZs are ranked from moderate to very high and are categorized for fire protection within a Federal Responsibility Area, SRA, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively.

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. The plan sets out a vision for a natural environment that is more fire resilient, buildings and infrastructure that are more fire resistant, and a society that is more aware of and responsive to the benefits and threats of wildland fire, all achieved through local, state, federal, tribal, and private partnerships (CAL FIRE 2018b). Plan goals include the following:

1. Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
2. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
3. Support and participate in the collaborative development and implementation of local, county and regional plans that address fire protection and landowner objectives.
4. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
5. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
6. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
8. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

Local

In addition to the relevant plans, policies, and ordinances identified below, Section 4.13 provides information for the Los Angeles County Fire Code, the Los Angeles County Operational Area Emergency Response Plan, the City of Santa Clarita Fire Code, and the City of Santa Clarita General Plan as they relate to wildfire.

Los Angeles County Fire Department, 2020 Strategic Fire Plan

The Los Angeles County 2020 Strategic Fire Plan (County of Los Angeles 2020) is produced on an annual basis for the coming fire season. The plan includes an assessment of the fire situation in Los Angeles County, stakeholder contributions and priorities, and strategic targets for pre-fire solutions developed by people who reside and work in the local fire problem area. The Strategic Fire Plan is designed to achieve the goals and objectives of the 2010 Strategic Fire Plan for California. After identifying and evaluating existing wildfire hazards, the plan supports collaboration between stakeholders in the implementation and development of actions to reduce potential for a wildfire and ensure adequate response in the event of a wildfire.

Los Angeles County Fuel Modification Standards

Development in VHFHSZs is subject to various governmental codes, guidelines, and programs that are aimed at reducing the hazard potential to acceptable levels. The County of Los Angeles has prepared Fuel Modification Plan Guidelines, which set forth guidelines and landscape criteria for all new construction to implement ordinances relating to fuel modification planning and help reduce the threat of fires in high hazard areas. Per Section 1117.2.1 of the County Fire Code: "A fuel modification plan, a landscape plan and an irrigation plan . . . shall be submitted with any subdivision of land or prior to any new construction . . . where the structure or subdivision is located within areas designated as a Very High Fire Hazard Severity Zone in the Los Angeles County Building Code." A fuel modification plan identifies specific zones within a property that are subject to fuel modification. A fuel modification zone is a strip of land where combustible native or ornamental vegetation has been modified and/or partially or totally replaced with drought tolerant, fire resistant plants. The City has adopted the Los Angeles County Fire Code, and the proposed project is subject to the Los Angeles County Fire Code requirements.

City of Santa Clarita General Plan

The applicable goals, objectives, and policies from the General Plan Safety and Land Use Elements are listed below (City of Santa Clarita 2011a, 2011b).

Safety Element

Goal S 3: Protection of public safety and property from fires.

Objective S 3.1: Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.

Policy S 3.1.2: Program adequate funding for capital fire protection costs, and explore all feasible funding options to meet facility needs.

Policy S 3.1.3: Require adequate fire flow as a condition of approval for all new development, which may include installation of additional reservoir capacity and/or distribution facilities.

Objective S 3.2: Provide for the specialized needs of fire protection services in both urban and wildland interface areas.

Policy S 3.2.2: Enforce standards for maintaining defensible space around structures through clearing of dry brush and vegetation.

Policy S 3.2.3: Establish landscape guidelines for fire-prone areas with recommended plant materials, and provide this information to builders and members of the public.

Policy S 3.2.4: Require sprinkler systems, fire resistant building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.

Policy S 3.2.5: Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.

Policy S 3.2.6: For areas adjacent to the National Forest, cooperate with the United States Forest Service regarding land use and development issues.

Policy S 3.2.7: Continue to provide information and training to the public on fire safety in wildland interface areas.

Objective S 3.3: Maintain acceptable emergency response times throughout the planning area.

Policy S 3.3.1: Plan for fire response times of five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.

Policy S 3.3.2: Require the installation and maintenance of street name signs on all new development.

Policy S 3.3.3: Require the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets.

Land Use Element

Goal LU 3: Healthy and safe neighborhoods for all residents.

Objective LU 3.3: Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.

Policy LU 3.3.2: In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.

Policy LU 3.3.4: Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.

Policy LU 3.3.5: Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.

Policy LU 3.3.7: Ensure adequate addressing in all residential neighborhoods for emergency response personnel.

City of Santa Clarita Fire Code

Title 22, City Fire Code, of the Santa Clarita Municipal Code states the City has adopted by reference the California Code of Regulations, Title 24, Part 9, described and referred to as the 2010 California Fire Code, published by the California Building Standards and based upon the International Fire Code, 2009 Edition, prepared by the International Code Council. The Santa Clarita Fire Code was adopted on November 23, 2010, and took effect on January 1, 2011.

City of Santa Clarita Hazard Mitigation Plan

The City's Hazard Mitigation Plan (City of Santa Clarita 2010) outlines several mitigation actions intended to facilitate emergency evacuation, including coordinating with the Los Angeles County Fire and Sheriff's Departments to coordinate the Public Alert and Warning Notification System, coordinating with the Los Angeles County Fire Department to enhance emergency services to increase the efficiency of wildfire response and recovery activities, and incorporating mass notification procedures (e.g., text, social media) into evacuation notification efforts. The plan also includes a goal of identifying safe evacuation routes in high-risk natural disaster areas and of coordinating with Los Angeles County to identify emergency transportation routes.

City of Santa Clarita Sand Canyon Emergency Evacuation Guidelines

The City's Sand Canyon Emergency Evacuation Guidelines were adopted in 2019 to establish protocols for the declaration and management of emergencies and emergency evacuation in the Sand Canyon community (City of Santa Clarita 2019b). Roadways identified as potential emergency evacuation routes within the Sand Canyon community include Lost Canyon Road, Placerita Canyon Road, Bear Canyon, and Sand Canyon Road. Per the Emergency Evacuation Guidelines, at the time of an emergency, the appropriate route(s) will be identified by fire department/sheriff during the emergency.

4.17.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, if located in or near SRAs or lands classified as VHFHSZs, a significant impact related to wildfire would occur if the project would:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan.
2. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.
3. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.
4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

4.17.4 Impact Analysis

Threshold FIRE-1. ***Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

This section addresses the potential effect of the proposed project on adopted emergency response/evacuations plans. Fire service response standards are addressed in Section 4.13.

The City has identified that the terrain and layout of the Santa Clarita Valley can affect evacuation during a wildfire event (City of Santa Clarita 2010). The City ensures that impacts to evacuation are addressed through collaboration with Los Angeles County Fire and Sheriff's Departments and through implementation of the City's General Plan, Unified Development Code, and Unified Building Code. The City's Hazard Mitigation Plan (City of Santa Clarita 2010) outlines several mitigation actions intended to facilitate emergency evacuation, including coordinating with the Los Angeles County Fire and Sheriff's Departments to coordinate the Public Alert and Warning Notification System, coordinating with the Los Angeles County Fire Department to enhance emergency services to increase the efficiency of wildfire response and recovery activities, and incorporating mass notification procedures (e.g., text, social media) into evacuation notification efforts. The Hazard Mitigation Plan also includes a goal of identifying safe evacuation routes in high-risk natural disaster areas and coordinating with Los Angeles County to identify emergency transportation routes.

The project site is adjacent to a secondary disaster route as identified by Los Angeles County (County of Los Angeles 2010). Sand Canyon Road serves as the secondary disaster route and joins a primary disaster route (Highway 14) approximately 1 mile north of the intersection of Sand Canyon Road and Robinson Ranch Road. From the furthest (easternmost) project entrance on Robinson Ranch Road, site evacuation traffic would need to travel approximately 0.6 miles west on Robinson Ranch Road to reach the closest secondary disaster route (Sand Canyon Road).

During project construction, temporary lane closures may be necessary on Robinson Ranch Road, and construction equipment and vehicles may block Robinson Ranch Road and/or slow traffic on Sand Canyon Road. Potential road closures and slower traffic during construction could interfere with emergency response activities, including evacuations. However, construction would be temporary and would affect only a small portion of identified disaster routes at any one time. Additionally, the Los Angeles County Sheriff's Department guidance for the City's planned

response to extraordinary emergency situations would continue. However, the impact to identified disaster routes during project construction would be **potentially significant**.

During project operations, it is anticipated that all project streets and area roads would remain open at all times and the project would therefore not conflict with any approved emergency response or evacuation plan. Project impacts during operations would therefore be **less than significant**.

Threshold FIRE-2. ***Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

Construction and operation of the proposed project would involve the use of flammable materials, tools, and equipment capable of generating a spark and igniting a wildfire. Additionally, increased vehicle traffic and human presence in the project area could increase the potential for wildfire ignitions during operations. The potential for the project to result exacerbate wildfire risks under construction and operations phases is discussed below.

Construction

The proposed project area is located within a VHFHSZ and heat or sparks from construction equipment, and vehicles, as well as the use of flammable hazardous materials, have the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds. The following construction-related equipment has the potential to generate heat or sparks that could result in wildfire ignition:

- Earth-moving and excavating equipment – Heated exhausts or sparks may result in ignition
- Chainsaws and other small gas-powered equipment/tools – may result in vegetation ignition from overheating, spark, fuel leak, etc.
- Tractors, graders, mowers, bulldozers, backhoes, cranes, excavators, trucks, and vehicles – heated exhaust in contact with vegetation may result in ignition
- Welders – Open heat source may result in metallic sparks coming into contact with vegetation
- Woodchippers – Include flammable fuels and hydraulic fluid that may overheat and spray onto vegetation with a hose failure
- Grinders – Sparks from grinding metal components may land on a receptive fuel bed
- Torches – Heat source, open flame, and resulting heated metal shards may come in contact with vegetation

The potential risk of wildfire ignition and spread associated with construction of the proposed project can be managed and pre-planned so that the potential for vegetation ignition is reduced. In addition, pre-planning and construction personnel fire awareness, reporting, and suppression training not only results in lower probability of ignition, but also in higher probability of fire control and extinguishment in its incipient stages. Data indicate that 95% of all wildfire ignitions are controlled during initial attack (Smalley 2008).

For projects located within a VHFHSZ, the City requires the following conditions of approval in order to reduce fire hazard impacts during construction activities (Tebo 2017):

- All proposed development on the site shall comply with applicable state, City, and County of Los Angeles code and ordinance requirements for fire protection.

- The project applicant shall prepare and submit a Fuel Modification Plan (which includes a landscape plan and irrigation plan) as required for projects located within a VHFHSZ. The Fuel Modification Plan shall be submitted and approved by the Los Angeles County Fire Department prior to final map clearance. The Fuel Modification Plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision.
- Brush clearance shall be conducted prior to initiation of construction activities in accordance with Los Angeles County Fire Department requirements.

However, given that the project site is located within a VHFHSZ, **potentially significant impacts** during construction could occur by exposing construction workers to high fire risks.

Operation

Given its location in a VHFHSZ, the proposed project is subject to building and fire code requirements for structural hardening, access, water supply, and fuel modification. Following construction, the proposed project would be maintained according to these fire protection standards and the risk of ignitions would be reduced. However, maintenance of the proposed project would necessitate the use flammable materials and powered tools and equipment periodically, all of which have the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds. This would result in a **potentially significant impact**.

Threshold FIRE-3. ***Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

Given its location within a VHFHSZ, the proposed project would require installation and routine maintenance of fuel modification zones surrounding project structures. The proposed project will also need to comply with all applicable building and fire code requirements for development in a VHFHSZ, including, but not limited to, specific requirements for structural hardening (e.g., Class A roof systems), water supply and flow, hydrant and standpipe spacing, signage, and fire department access. Power lines would be installed belowground and would not pose an ongoing wildfire risk during project operations. None of the project development features required for development in a VHFHSZ are expected to exacerbate wildfire risk or result in additional temporary or permanent impacts beyond those identified in this Draft Environmental Impact Report. For these reasons, impacts to the environment resulting from installation and maintenance of infrastructure necessary for development in a VHFHSZ would be **less than significant.**

Threshold FIRE-4. ***Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

As presented in Section 4.6, Geology and Soils, compliance with existing regulations would not result in any significant impacts related to soil erosion during the construction phase. Post-development stormwater flows would be directed to storm drain features, resulting in no contact with bare soil surface. The project would also conform to design requirements associated with proper site preparation and grading practices and would implement geotechnical recommendations outlined in MM-GEO-1. These recommendations include cut- and fill-slope design and construction specifications, as well as stability fills to be constructed over several cut slopes.

With respect to debris flows, this condition could potentially be exacerbated in a post-fire landscape where surface vegetation has been removed (burned) and erosion potential increases. However, the recommendations identified

in MM-GEO-1 include construction of structures or devices to control and impound potential debris material (e.g., debris walls, berms, or basins) in such cases. Implementation of the measures outlined in Section 4.6 and in MM-GEO-1 are also expected to minimize potential flooding, runoff, or slope instability impacts that may occur post-fire. Nonetheless, impacts would be **potentially significant**.

4.17.5 Mitigation Measures

The following mitigation measures (MMs) would reduce wildfire impacts to a less than significant level.

MM-FIRE-1 **Emergency Vehicle Access Plan.** To avoid impeding emergency vehicle and evacuation traffic around construction vehicles and equipment, the project applicant, in consultation with the City of Santa Clarita, shall develop an Emergency Vehicle Access Plan that includes the following:

- Evidence of advanced coordination with emergency service providers, including but not necessarily limited to police departments, fire departments, ambulance services, and paramedic services
- Notification of emergency service providers regarding the locations, nature, timing, and duration of any proposed project construction activities, and consultation for advice about any road access restrictions that could impact their response effectiveness
- Project construction schedules and routes designed to avoid restricting movement of emergency vehicles to the best extent possible. Provisions to be ready at all times to accommodate emergency vehicles. Provisions could include the use of platings over excavations, short detours, and/or alternate routes

MM-FIRE-2 **Developer Fee Program.** Concurrent with the issuance of building permits, the project applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department and/or City of Santa Clarita.

MM-FIRE-3 **Emergency Access**. Throughout the duration of construction, the construction contractor shall ensure that adequate access to all buildings on the project site be provided for emergency vehicles during all building construction phases.

MM-FIRE-4 **Water Supply Availability**. Adequate water availability shall be provided to service all construction activities during all phases.

MM-FIRE-5 **Fuel Modifications, Landscaping and Irrigation.** The construction contractor shall ensure the implementation of all construction-phase fuel modification, landscape, and irrigation plan component prior to combustible building materials being delivered to the site.

MM-FIRE-6 **Construction Fire Prevention Plan.** The project applicant shall develop a Construction Fire Prevention Plan that addresses training of construction personnel and provides details of fire-suppression procedures and equipment to be used during construction. Information contained in

the plan shall be included as part of project-related environmental awareness training. At minimum, the plan shall include the following:

- Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions
- Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days
- Fire coordinator role and responsibility
- Worker training for fire prevention, initial attack firefighting, and fire reporting
- Emergency communication, response, and reporting procedures
- Coordination with local fire agencies to facilitate agency access through the project site
- Emergency contact information
- Demonstration of compliance with applicable plans and policies established by state and local agencies

MM-FIRE-7 **Compliance with Code Requirements.** The project applicant shall ensure that on-site development shall comply with the applicable Los Angeles County and City of Santa Clarita code requirements for construction, access, water mains, fire flows, and fire hydrants, as stipulated by the Los Angeles County Fire Department or the City of Santa Clarita through project approvals or building plan reviews.

MM-FIRE-8 **Los Angeles County Fire Department Approvals.** Prior to the issuance of building permits, the project applicant, or responsible party, shall obtain the necessary clearances from and shall comply with all applicable conditions imposed by Los Angeles County Fire Department, including but not limited to those from the Planning Division, Land Development Unit, Forestry Division, or Fuel Modification Unit.

MM-FIRE-9 **Landscape Plan Filing.** The project applicant, or responsible party, shall file all landscape plans with the Los Angeles County Fire Department Fuel Modification Unit to ensure compliance with the High Fire Hazard Severity Zone.

MM-FIRE-10 **Operations Fire Prevention Plan.** The project applicant shall develop an Operations Fire Prevention Plan that addresses policies and procedures for minimizing wildfire potential. At minimum, the plan shall include the following:

- Procedures for minimizing potential ignition during maintenance activities
- Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days
- Fuel modification zone and landscape area maintenance procedures, including timing of work to reduce the likelihood of ignition and/or fire spread
- Communication and reporting procedures with Los Angeles County Fire Department
- Fire safety coordinator role and contact information
- Other information as provided by responsible and commenting agencies, as applicable

MM-FIRE-11 **Post-Fire Field Assessment.** Following any wildfire that burns onto the proposed project site, a post-fire field assessment shall be conducted by an engineering geologist to identify any areas that may

be subject to increased risk of post-fire flooding, landslide, or erosion. Any recommendations identified by the geologist to mitigate such risk shall be implemented by the project applicant.

4.17.6 Level of Significance After Mitigation

Threshold FIRE-1. ***Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

MM-FIRE-1 requires the project applicant, in consultation with the City, to develop an Emergency Vehicle Access Plan. This would reduce the impact to identified disaster routes during project construction to **less than significant with mitigation incorporated**.

Threshold FIRE-2. ***Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

Construction

Mitigation measures that would help reduce construction-related wildfire impacts to a less than significant level include having adequate water available to service construction activities; implementing a construction-phase fire prevention plan; providing proper wildfire awareness, reporting, and suppression training to construction personnel; and requiring that all construction-phase components of the fuel modification, landscape, and irrigation plans be fulfilled prior to delivery of combustible materials to the project site. Implementation of the applicable General Plan goals and policies, conditions of approval, and MM-FIRE-2 through MM-FIRE-6 would reduce impacts to **less than significant with mitigation incorporated**.

Operation

Development and implementation of an operations-phase fire prevention plan (MM-FIRE-10) along with implementation of the applicable General Plan goals and policies, conditions of approval, and MM-FIRE-7 through MM-FIRE-9 would reduce operations-phase impacts to **less than significant with mitigation incorporated**.

Threshold FIRE-4. ***Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

Implementation of the measures outlined in Section 4.6 and in MM-GEO-1 are expected to minimize potential flooding, runoff, or slope instability impacts that may occur post-fire. When combined with the post-fire inspection assessment identified in MM-FIRE-11, potential impacts associated with post-fire flooding, runoff, or slope instability would be **less than significant with mitigation incorporated**.

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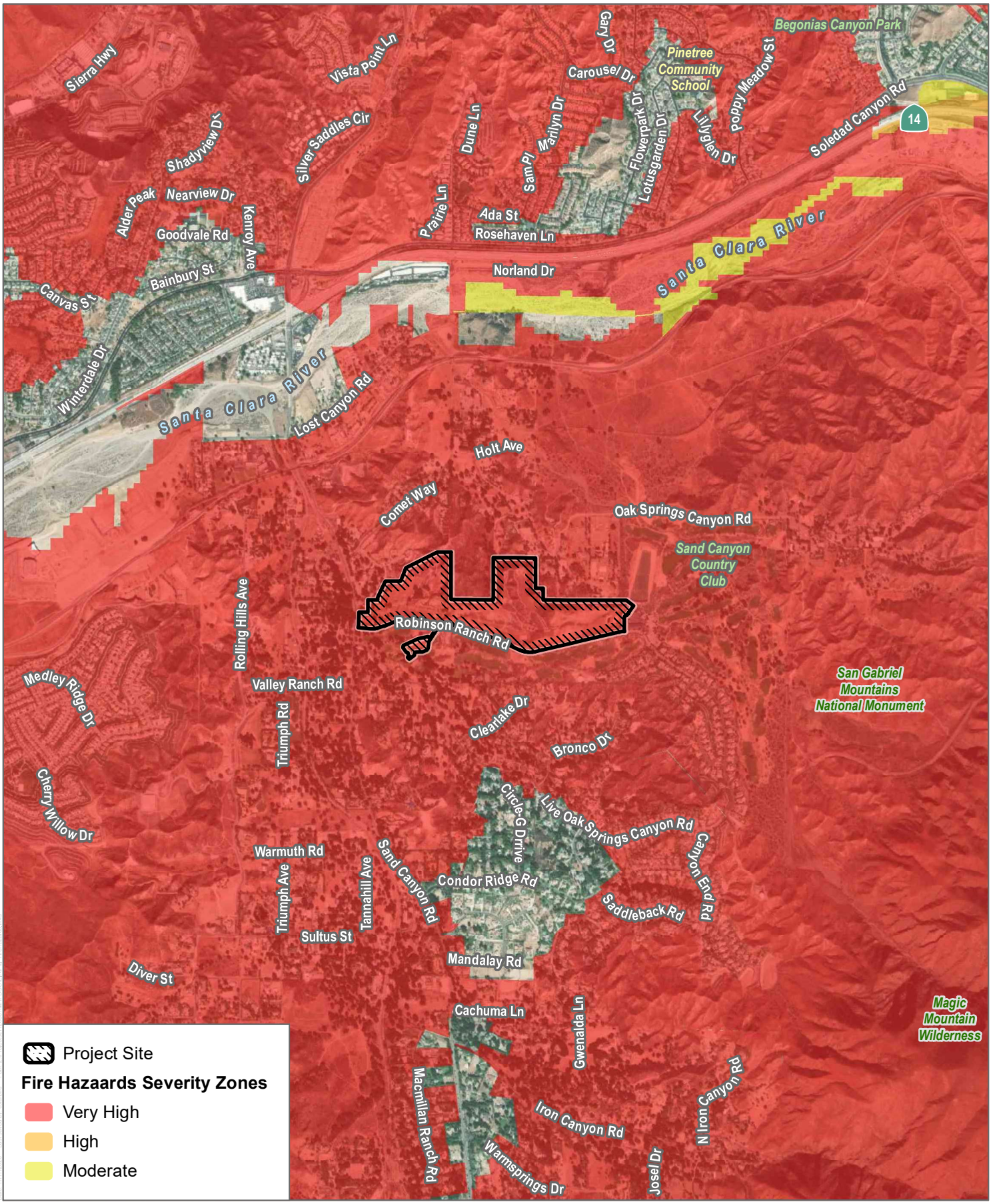

SOURCE: CalFire 2020

DUDEK

0 1,000 2,000 Feet

FIGURE 4.17-1

Fire Hazard Severity Zones

Sand Canyon Resort Project

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5 Cumulative Effects

5.1 Introduction

Although the environmental effects of an individual project may not be significant when that project is considered independently, the combined effects of several projects may be significant when considered collectively. Such impacts are cumulative impacts. Section 15355 of the California Environmental Quality Act (CEQA) Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Section 15130 of the CEQA Guidelines provides guidance for analyzing significant cumulative impacts in an environmental impact report (EIR). According to this section of the CEQA Guidelines, the discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness." The discussion should also focus only on significant effects resulting from the project's incremental effects and the effects of other projects. According to Section 15130(a)(1), "an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR."

Cumulative effects can occur from the interactive effects of a single project. For example, the combination of noise and dust generated during construction activities can be additive and can have a greater impact than either noise or dust alone. However, substantial cumulative effects more often result from the combined effect of past, present, and future projects located in proximity to the project under review. Therefore, it is important for a cumulative impacts analysis to be viewed over time and in conjunction with other related past, present, and reasonably foreseeable future developments whose impacts might compound or interrelate with those of the project under review.

5.2 Cumulative Methodology

Section 15130(b)(1)(A) of the CEQA Guidelines allows for the preparation of a list of past, present, and reasonably anticipated future projects as a viable method of determining cumulative impacts. This discussion uses the following approach: an initial list and description of all related (cumulative) projects is presented, followed by a discussion of the effects that the proposed Sand Canyon Resort Project (project) may have on each environmental category of concern. Consistent with CEQA (California Public Resources Code, Section 21000 et seq.), this discussion is guided by the standards of practicality and reasonableness.

5.3 Cumulative Projects

Other than air quality, greenhouse gas (GHG) emissions, noise, and transportation/traffic, cumulative impacts for all other environmental issue areas are based on a list of projects within the proposed project's study area, which is generally within a 1-mile radius, that either have applications submitted or approved, are under construction, or have recently been completed. Based on information provided by the City of Santa Clarita (City), three cumulative projects were considered in this analysis. The cumulative projects identified in the study area are listed in Table 5-1, and the numbers correspond to the numbers shown on Figure 3-11, Related Projects.

Table 5-1. Cumulative Projects List

No.	Project Name	Status[a]	Project Type	DUs/TSF	
1	Vista Canyon	In construction	Residential	834	DU
			Business Park	78	TSF
			Retail	40	TSF
2	Sand Canyon Plaza	Pending	Residential	580[b]	DU
			Commercial Retail	60	TSF
3	Mancara	Pending	Residential	109	DU

Source: Appendix K, Traffic Impact Analysis, See Figure 2-7 for related project locations.
Notes: DU = dwelling unit, TSF = thousand square feet.
[a] The number of residential units is estimated based on the City's General Plan allowable land use density.
[b] 580 dwelling units = 119 single-family, 461 multi-family, 140-bed assisted living.

5.4 Cumulative Impact Analysis

The discussion below evaluates the potential for the project to contribute to an adverse cumulative impact on the environment. For issues addressed in this EIR, the thresholds used to determine significance are those presented in each of the sections of Chapter 4, Environmental Impact Analysis. For each resource area, an introductory statement is made regarding what would amount to a significant cumulative impact in that resource area. Discussion is then presented regarding the potential for the identified cumulative projects to result in such a cumulative impact, followed by discussion of whether the project's contribution to any cumulative impact would be cumulatively considerable.

5.4.1 Aesthetics

As stated in Section 4.1, Aesthetics, impacts associated with a scenic vista or scenic resource, degradation of existing visual character or quality and compliance with regulations governing scenic quality, and contribution to new sources of light or glare would all be less than significant with no mitigation required. A significant cumulative impact to aesthetics would occur if the development of the cumulative projects would degrade the visual quality or character of an area, if projects would combine to block important views, or if projects would cumulatively result in a new source of light or glare. The geographic scope for analyzing cumulative impacts related to aesthetics focuses on lands in proximity to the project area and within the surrounding viewshed that would have views of the site from public locations (e.g., public roadways).

The list of cumulative projects identified in Table 5-1 would be located within an established urban setting; however, some of cumulative projects would be developed on vacant land and would contribute to the overall character and quality of the City once developed. Building materials, bulk, scale, and setbacks for each cumulative project would be required to comply with the General Plan, Municipal Code, and any applicable specific plans as they relate to design standards and scenic quality, thus minimizing potential impacts due to incompatibility with existing character or quality.

Given that all project aesthetic impacts are less than significant, the potential for the project to result in cumulative aesthetic impacts is **less than significant**.

5.4.2 Air Quality

In analyzing cumulative impacts from a proposed project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the South Coast Air Basin is designated as nonattainment for selected air pollutants under the California Ambient Air Quality Standards and National Ambient Air Quality Standards.

If the proposed project does not exceed thresholds and is determined to have a less-than-significant project-specific impact, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

As discussed in Section 4.2, Air Quality, implementation of the proposed project would generate emissions of oxides of nitrogen, volatile organic compounds, carbon monoxide, sulfur oxides, particulate matter with an aerodynamic diameter equal to or less than 10 microns, and particulate matter with an aerodynamic diameter equal to or less than 2.5 microns during construction and operation.

Construction Emissions

Daily construction emissions would not exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds for all criteria air pollutants during construction. Furthermore, construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. In addition, the project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering the active sites approximately two times daily, depending on weather conditions. Impacts would be **less than significant**. As such, the combined impact of the project and other projects is insignificant and the project's incremental effect is not cumulatively considerable.

Operational Emissions

The combined daily area, energy, and vehicular source emissions would not exceed the SCAQMD operational thresholds for all criteria air pollutants. Therefore, the project would have a **less-than-significant** cumulative air quality impact during operation. As such, the combined impact of the project and other projects is insignificant and the project's incremental effect is not cumulatively considerable.

5.4.3 Biological Resources

The proposed project would result in less-than-significant impacts on special-status plant species and wildlife movements. The proposed project would not have any direct or indirect impacts on adopted habitat conservation plans. The project would have potentially significant impacts on special-status wildlife, riparian habitat and other sensitive natural communities, wetlands, and a local tree preservation ordinance. However, with mitigation measures identified in Section 4.3, Biological Resources, potentially significant impacts to riparian habitat and other sensitive natural communities would be reduced to less-than-significant levels.

Cumulative projects identified in Table 5-1 above that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts to biological resources. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources; however, there is a potential for nesting birds to be present in ornamental landscaping or on existing buildings. The combined construction of projects within the vicinity of the proposed project could deprive some species of a significant amount of habitable space. However, it is anticipated that species that are potentially affected by related projects would also be subject to the same requirements of CEQA as the project. These determinations would be made on a case-by-case basis and the effects of cumulative development on nesting birds would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements.

Therefore, for the reasons described above, cumulative adverse effects on biological resources would be **less than significant.** The combined impact of the project and other projects is insignificant and the project's incremental effect is not cumulatively considerable.

5.4.4 Cultural and Tribal Cultural Resources

The proposed project would not have any impacts on historical resources; however, as stated in Section 4.4, Cultural and Tribal Cultural Resources, impacts associated with the potential to uncover archaeological resources, unknown human remains, and tribal cultural resources were determined to be potentially significant.

The proposed project's impacts to cultural and tribal cultural resources would be reduced to less than significant through mitigation measures that include monitoring of grading activities. Cumulative projects would be subject to similar mitigation measures.

Cumulative projects identified in Table 5-1 would be required to complete similar evaluation of potential unknown archaeological, unknown human remains, and tribal cultural resources in the vicinity of their respective project sites. Specifically, for tribal cultural resources, if required, these future foreseeable projects would also have to conduct Assembly Bill 52 notification and consultation prior to initiating a project. This process would determine if mitigation measures need to be applied in order to reduce potential impacts, both directly and cumulatively. Since all cumulative projects would be required to implement any necessary mitigation to prevent potential impacts to tribal cultural resources, impacts would not be cumulatively considerable and impacts would be **less than significant**.

Similarly, because the proposed project and those projects identified within the cumulative impact study area are primarily mitigated by the monitoring of grading activities, adequate mitigation has occurred and the proposed project would not contribute to a cumulatively significant impact to cultural resources. Cumulative impacts would be **less than significant.** The combined impact of the project and other projects is insignificant and the project's incremental effect is not cumulatively considerable.

5.4.5 Energy

A significant cumulative impact to energy resources would result if wasteful, inefficient or unnecessary consumption of energy resources were to occur, or if the project would, in combination with other cumulative projects, conflict or obstruct state or local plans for renewable energy or energy efficiency. Implementation of the proposed project, as well as cumulative development in the surrounding area, would result in an increased energy demand. As stated in Section 4.5, Energy, prior to project approval, the City would ensure that the project would meet Title 24

requirements applicable at that time, as required by state regulations through their plan review process. For these reasons, the electricity consumption of the project would not be considered inefficient or wasteful.

All other cumulative projects considered in this analysis would be required to meet the mandatory energy standards, current California Code of Regulations Title 24, Part 6, California Energy Code, and Part 11, California Green Building Standards. Compliance with these policies and other energy reduction strategies would ensure that energy use as a result of cumulative development would not be wasteful, inefficient, or unnecessary, and cumulative impacts would be **less than significant**. The combined impact of the project and other projects is insignificant and the project's incremental effect is not cumulatively considerable.

5.4.6 Geology and Soils

Potential cumulative impacts on geology and soils would result from projects that combine to create geologic hazards, including unstable geologic conditions, or substantially contribute to erosion. Most geology and soil hazards associated with development on surrounding projects would be site specific and could be mitigated on a project-by-project basis. Such hazards include exposure of people or structures to rupture of an earthquake fault, liquefaction, landslides, unstable geologic units, and expansive soils. Individual project mitigation for these hazards would ensure that there are no residual cumulative impacts. Proper engineering design, utilization of standard construction practices, and implementation of the recommendations found in the site-specific geotechnical reports would ensure that the potential for cumulatively considerable geological impacts resulting from the project would be less than significant. Since geologic hazards are site-specific and not necessarily cumulative in nature, the proposed project would not have a cumulatively considerable impact.

Excavation and ground-disturbing activities during construction of the proposed project and cumulative projects could potentially leave loose soil exposed to the erosive forces of rainfall and high winds, which would increase the potential for soil erosion and loss of topsoil. Adequate drainage on project sites is critical in reducing potential soil erosion or the loss of topsoil. The project sites would be graded and maintained such that surface drainage is directed away from structures, in accordance with 2016 California Building Code, Chapter 18, Soils and Foundations, or other applicable standards. Earth-disturbing activities associated with construction would be temporary and in compliance with the General Construction Permit and best management practices outlined in the Stormwater Pollution Prevention Plan. Therefore, impacts related to soil erosion and the loss of topsoil would not be cumulatively considerable and impacts would be **less than significant**.

5.4.7 Greenhouse Gases

GHG emissions are a cumulative impact resulting from past, current, and future projects, and the cumulative projects listed in Table 5-1 would likely contribute to this widespread cumulative impact given the cumulative nature of GHG emissions. Given the global scope of climate change, as discussed in detail in Section 4.7, Greenhouse Gases, it is not anticipated that a single project would have an individually discernible effect on global climate change. It is more appropriate to conclude that if a project is anticipated to result in a substantial increase in GHG emissions, it would combine with global emissions to cumulatively contribute to global climate change.

As stated in Section 4.7, Greenhouse Gas Emissions, and as shown in Table 4.7-4, the estimated annual project-generated GHG emissions in 2023 would be approximately 2,389 metric tons of carbon dioxide equivalent (MT CO_2e) per year as a result of project operations. Estimated annual project-generated emissions in 2023 from area, energy, mobile, solid waste, and water/wastewater sources and amortized project construction emissions would be

approximately 2,394 MT CO_2e per year. The project would not exceed the SCAQMD significance threshold of 3,000 MT CO_2e per year. Furthermore, the project would be consistent with applicable GHG reduction measures found within the Scoping Plan and Assembly Bill 32, the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), and the City's Climate Action Plan. Therefore, because the project would result in less-than-significant GHG impacts, the project would not conflict with an applicable GHG reduction plan and the project's contribution to cumulative GHG impacts would be **less than significant**.

5.4.8 Hazards and Hazardous Materials

Cumulative impacts related to hazards and hazardous materials would result from projects that combine to increase exposure to hazards and hazardous materials, which could result in potential impacts to the public or the environment. The potential for cumulative impacts to occur is limited since the impacts from hazardous materials use on a project site are site specific. As stated in Section 4.8, Hazards and Hazardous Materials, the proposed project would result in less-than-significant impacts with compliance to local, state, and federal regulations. However, as stated in Section 4.8, project construction may result in temporary lane closures on Robinson Ranch Road and may slow traffic on Sand Canyon Road. This impact has the potential to affect a small portion of identified disaster routes. As such, the introduction of Mitigation Measure (MM) FIRE-1 requires the project applicant, in consultation with the City, to develop an Emergency Vehicle Access Plan, which would reduce the impact to less than significant.

Although each related project identified in the cumulative projects list (Table 5-1) has potentially unique hazardous materials considerations, it is expected that future development within the area will comply with federal, state, and local statutes and regulations applicable to hazardous materials. As such, given that all potential hazards and hazardous materials impacts associated with the proposed project can be reduced to a less-than-significant level, the project would not result in or contribute to cumulatively significant hazards and hazardous materials impacts. Impacts would be **less than significant**.

5.4.9 Hydrology and Water Quality

The geographic scope of cumulative effects on hydrology and water quality is typically watershed based, whereby projects contributing flow to the same water bodies as the project would be considered. Groundwater basins typically serve localized areas; therefore, any cumulative impacts related to groundwater would generally be localized.

As stated in Section 4.9, Hydrology and Water Quality, stormwater treatment best management practices have been proposed as part of the project in addition to compliance with state, regional, and local regulations, which would result in less-than-significant impacts to water quality and groundwater quality, groundwater supplies, potential soil erosion, surface runoff, stormwater capacity, flood potential, and conflict with applicable water quality management and groundwater management plans. The proposed project was determined to not require mitigation to reduce potentially significant impacts.

On a cumulative scale, the proposed project, in conjunction with other future projects, would be required to comply with applicable federal, state, and local regulations for stormwater and construction discharges, including the application of appropriate site-specific best management practices, which would help to reduce cumulative water quality and hydrology impacts. As such, due to required compliance with state, regional, and local regulations designed to protect surface and groundwater quality, the combined impact of the proposed project and related projects would be cumulatively **less than significant**.

5.4.10 Land Use and Planning

Cumulative land use impacts would result from projects that contribute to development inconsistent with applicable plans or incompatible with existing or planned uses or would combine to physically divide a community. Cumulative projects identified in Table 5-1 would be required to comply with the local General Plan and to be consistent with the goals and policies identified therein. Projects are also required to comply with the SCAG RTP/SCS.

As stated in Section 4.10, Land Use and Planning, and as shown in Table 4.10-1, Table 4.10-2, and Table 4.10-3, the proposed project would be partially consistent with the goals and policies outlined in the City's General Plan, the SCAG RTP/SCS, and applicable specific plans which would implement land use standards and guidelines. Section 4.10 also states that the project would not physically divide an established community. However, the project would result in the permanent loss of 32.4 acres of open space, which is inconsistent with goals and policies within the City's General Plan Conservation and Open Space Element and SCAG's RTP/SCS.

While the proposed project would result in the permanent loss of open space, none of the other identified related projects would result in the permanent loss of open space. Additionally, each of the projects would be subject to evaluation of consistency with the City's General Plan and SCAG's RTP/SCS. So, while the proposed project does result in project-specific impacts, the project would not contribute to a cumulatively considerable net loss in open space acreage. As such, cumulative impacts would be **less than significant**.

5.4.11 Noise

The geographic extent for the analysis of cumulative impacts related to noise is generally limited to areas within approximately 0.25 miles of the project site. This is because noise impacts are generally localized, mainly within approximately 500 feet from any noise source; however, it is possible that noise from different sources within 0.25 miles of each other could combine to create a significant impact to receptors at any point between the projects. At distances greater than 0.25 miles, construction noise would be briefly audible and steady construction noise from the project would generally dissipate into quiet background noise levels. As such, non-transportation noise sources (e.g., those associated with project operation) do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

As discussed in Section 4.11, Noise, on-site noise-generating activities associated with all phases of the project would include short-term construction and long-term operational noise. All phases of the project would also generate off-site traffic noise along various roads in the area. On-site noise-generating activities would be minimized through implementation of mitigation measures. However, as discussed in Section 4.11, project construction would have the potential to result in temporary noise levels above 90 A-weighted decibels (dBA) at existing vicinity residences. The proposed project would introduce MM-NOI-1; however, the mitigation would not reduce impacts to a less-than-significant level and, thus, impacts would be **significant and unavoidable**.

In addition, project construction and the use of heavy equipment would result in construction related vibration levels of up to approximately 73 87 vibration decibels. These levels would exceed the Federal Transit Administration's vibration impact threshold of 72 vibration decibels for residences where people normally sleep. Due to the proximity of residences to the project site and the potential for construction vibration to be an annoyance, construction-related vibration is considered a potentially significant impact. To the extent feasible, MM-NOI-2(a) through (c) would reduce construction vibration impacts upon adjacent residences by requiring construction equipment be in good working order to minimize vibration, locating heavy pieces of construction equipment away from residences, and

strictly adhering to the daytime only construction schedule to avoid sleep disturbance. Implementation of these mitigation measures would reduce impacts, but not to less-than-significant levels. As such, construction vibration impacts would be **significant and unavoidable**.

The cumulative context for traffic noise is the traffic volume increases resulting from the project along with buildout of the General Plan and the anticipated increase in traffic volumes along local roadways. The traffic analysis considered the addition of vehicle trips from cumulative projects as identified by the City and included in the traffic model.

The analysis of off-site project-related traffic noise levels included an evaluation of traffic volumes and resulting roadway traffic noise levels from cumulative projects. Cumulative traffic-generated noise impacts have been assessed based on the contribution of the project to the Future With Project (2040) volumes on the roadway segments in the project vicinity. As shown in Table 5-2, when comparing 2040 With Project Community Noise Equivalent Level (CNEL) values and Existing (2018) CNEL values, the project would contribute to a significant increase in cumulative roadway noise levels. Cumulative traffic noise levels for the year 2040 would increase by a maximum of 3.8 dBA CNEL for the roadway segment of Sand Canyon Road north of Lost Canyon Road and 3.0 dBA CNEL at Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road.

Table 5-2. Future Roadway Noise Levels

Roadway	Roadway Segment	dBA CNEL				
		Existing (2018)	*2040 Without Project*	*2040 With Project*	*Project Net Increase*	*Cumulative Net Increase*
Sand Canyon Road	North of Lost Canyon Road	68.2	71.5	72.0	*0.5*	*3.8*
	Between Lost Canyon Road and Robinson Ranch Road	66.9	69.0	69.9	*0.9*	*3.0*
	South of Robinson Ranch Road	65.4	67.6	67.6	*0.0*	*2.2*

Notes:
Traffic data: Sand Canyon Plaza Traffic Impact Analysis, Stantec Consulting Services, Inc., November 2015. Noise levels calculated from the nearest receptor location to the roadway centerline.
Calculations provided in Appendix I to this EIR.
Source: Appendix I.

As described previously, a significant impact would occur when noise levels increase by more than 3 dBA CNEL where future noise levels exceed acceptable levels (i.e., 70 dBA CNEL for residential areas). Although the project would only contribute a maximum increase of 0.9 dBA CNEL for future 2040 traffic noise levels, **cumulative impacts would be considered significant** for the following roadway segments along Sand Canyon Road because cumulative increases would exceed 3.0 dBA: Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road.

5.4.12 Population and Housing

Planned projects identified in Table 5-1 could combine to create substantial population growth in the City. However, as stated in Section 4.12, Population and Housing, construction employment would not induce substantial population growth in the area. In addition, while, the project would provide employment opportunities to the local and regional area for an extended period, the employment growth caused by the project falls well within current projections for employment growth in the City and Los Angeles County. For these reasons, the proposed project would not induce substantial unplanned population growth and impacts would be less than significant. Therefore, it is not anticipated

that the proposed project, in combination with other future foreseeable projects, would create a cumulatively considerable impact. Cumulative impacts would be **less than significant.**

5.4.13 Public Services

As detailed in Section 4.13, Public Services, the proposed project would not involve the construction of new homes; however, the proposed project would lead to increased employment of the site and visitors to the City, which, as discussed in Section 4.12, would not induce substantial unplanned population growth. Implementation of the proposed project could increase demand for fire and police protection services and generate demand for school and library facilities. The proposed project involves the redevelopment of a former nine-hole golf course with a hotel and resort and associated recreational amenities. The proposed project does not include development of a public park to serve City residents. As such, impacts related to parks would not occur. The development of new commercial facilities within a community can attract new employees to move to the area, but the increase in citywide population would be minimal and is ultimately not expected to increase demand for any of these services or facilities beyond their current capacity.

The proposed project would be subject to the payment of a Development Impact Fee (DIF), which would be used exclusively for future public facility improvements necessary to ensure that the development contributes its fair share of the cost of facilities and equipment determined to be necessary to adequately accommodate new development in the City. The DIF amount is determined through evaluation of the need for new public service facilities as it relates to the level of service demanded by new development, which varies in proportion to specific land uses.

Regarding schools, the proposed project would result in the need for new or physically altered school facilities, and the project would be required to pay school fees pursuant to Senate Bill 50, which would constitute full mitigation for any impacts, should they occur. Impacts related to school facilities would be less than significant and no mitigation is required. The local school district developed a student generation factor that identifies the number of students per housing unit and provides a link between residential construction projects and projections of enrollment. As such, related projects would be required to comply with the same standards as the proposed project to reduce impacts to a less-than-significant level.

The cumulative projects identified in Table 5-1 would also be required to contribute a fair share contribution of the cost of facilities and equipment determined to be necessary to adequately accommodate new development in the City based on the projected demand each project would have on public services and facilities (e.g., housing developments would have a greater impact on public services and facilities than a hospital). Therefore, since each project would be required to contribute to the DIF program, or expand or construct new facilities, if determined to be necessary, impacts would not be cumulatively considerable and would be **less than significant**.

5.4.14 Recreation

As stated in Section 4.14, Recreation, the proposed project would not result in the increased demand for or use of existing parks or recreational facilities such that new or physically altered park facilities would be required. Similarly, the cumulative projects identified above in Table 5-1 would be required to contribute to a fair share contribution of the cost of facilities based on standards such as the minimum parkland-to-population ratio developed by the City. As discussed in Section 4.14, cumulative impacts associated with the construction of the recreational components of the proposed project would result in significant impacts. However, operational impacts associated with the recreational components of the project would be less than significant. Since each project would be required to

contribute to the DIF program, or expand or construct new facilities, if determined to be necessary, impacts would not be cumulatively considerable and would be **less than significant**.

5.4.15 Transportation

The proposed project's cumulative contribution has been analyzed under Interim Year (2028) and Long Range (2040) General Plan Buildout analyses under Threshold TRA-1 in Section 4.15, Transportation. The project is consistent with the applicable goals in the SCAG RTP/SCS and would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities under cumulative conditions.

Per the OPR Technical Advisory, "a project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa" (OPR 2018). Per the City's transportation guidelines, "a less than significant impact under Existing/Baseline conditions would also result in a less than significant cumulative impact as long as the project is consistent with the SCAG RTP/SCS" (City of Santa Clarita 2020). Based on the VMT analysis in Section 4.15, since the proposed project would have a per-employee VMT above 15% of existing/base year VMT, it would continue to have a **significant and unavoidable** cumulative impact on VMT.

No hazardous design features would be part of the project's roadway improvements under cumulative conditions. The proposed project would provide adequate access to the project site, including access for emergency vehicles, with implementation of mitigation measures related to emergency access and evacuation plans described in Section 4.17, Wildfires, under cumulative conditions. The proposed project's impacts related to hazardous design features and emergency would be less than significant under cumulative conditions.

5.4.16 Utilities and Service Systems

As discussed in Section 4.16, Utilities and Service Systems, adequate capacity exists to provide water, wastewater, solid waste, electricity, natural gas, and telecommunications services to the proposed project. A cumulative utilities and service systems impact would occur if the proposed project, in combination with the three identified related projects included in Table 5-1, would result in the need to provide new or expanded utilities services. Given that adequate facilities exist to serve the proposed project and that each identified related project would be subject to ensuring adequate services can be provided, the project's contribution to cumulative utilities and service impacts would be less than significant, and cumulative impacts would be **less than significant**.

5.4.17 Wildfire

As stated in Section 4.17, Wildfire, the proposed project is located entirely within a Very High Fire Hazard Severity Zone. As a result, MM-FIRE-1 has been incorporated to reduce impacts to emergency evacuation plans to below a level of significance. In regards to potential cumulative impacts to disaster routes, similar measures may be introduced in coordination with the City that would consider cumulative impacts for implementation measures related to emergency vehicle access plans.

Additionally, mitigation measures have been incorporated to help reduce construction-related wildfire impacts to a less-than-significant level. These include having adequate water available to service construction activities;

implementing a construction-phase fire prevention plan; providing proper wildfire awareness, reporting, and suppression training to construction personnel; and requiring that all construction-phase components of the fuel modification, landscape, and irrigation plans be fulfilled prior to delivery of combustible materials to the project site. Implementation of the applicable General Plan goals and policies, conditions of approval, and MM-FIRE-2 through MM-FIRE-6 would reduce impacts associated with factors exacerbating wildfire risk to a less-than-significant level. During operations, the proposed project would be subject to Building and Fire Code requirements; however, maintenance of the proposed project would necessitate the use flammable materials and powered tools and equipment periodically, all of which have the potential to ignite adjacent vegetation and start a fire. Development and implementation of an operations-phase fire prevention plan (MM-FIRE-10) along with implementation of the applicable General Plan goals and policies, conditions of approval, and MM-FIRE-7 through MM-FIRE-9 would reduce operations-phase impacts to a less-than-significant level.

Potential cumulative impacts would result from projects that combine to exacerbate wildfire risk. Factors associated with the exacerbation of wildfire risk would be site-specific and can be mitigated on a project-by-project basis. Individual project mitigation would ensure that there are no residual cumulative impacts. Proper engineering design, utilization of standard construction practices, and implementation of the recommendations found in the site-specific geotechnical reports would ensure that the potential for cumulatively considerable impacts resulting from the project would be less than significant. Since wildfire risk is site-specific and managed on a project-by-project basis, the proposed project would not result in or contribute to a cumulatively considerable impact. Cumulative wildfire impacts would be **less than significant**.

5.5 References Cited

City of Santa Clarita. 2020. "Addendum to the City Guidelines and Procedures for Implementation of the California Environmental Quality Act Relating to Adopting Vehicle Miles Traveled Thresholds Pursuant to Senate Bill 743." Resolution No. 20-51. June 23, 2020. http://santaclaritacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=2178&MediaPosition=7063.360&ID=2931&CssClass=.

OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed June 2020. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

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6 Other CEQA Considerations

This chapter discusses other issues for which the California Environmental Quality Act (CEQA) requires analysis in addition to the specific issue areas discussed in Chapter 4, Environmental Impact Analysis. These additional issues include (1) effects found not to be significant, (2) significant effects that cannot be avoided, (3) significant irreversible environmental changes that would be caused by the proposed Sand Canyon Resort Project (project) should it be implemented, and (4) growth-inducing impacts.

6.1 Effects Found Not to Be Significant

CEQA Guidelines Section 15128 requires that an Environmental Impact Report (EIR) contain a statement indicating the reasons why various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Given the nature of the proposed project, location of the project site, and current uses of the project site, the following issue areas were not discussed in detail in the EIR. As such, below are statements indicating the reasons why the proposed project would not result in significant impacts to agricultural resources and mineral resources.

6.1.1 Agricultural Resources

The project site is currently developed with an unused golf course on a site designated entirely as Open Space (OS). No agricultural activities or resources exist on the project site, and the site is not zoned for such activities. As such, implementation of the proposed project would not result in impacts to agricultural resources.

6.1.2 Mineral Resources

The project site is currently developed with an unused golf course on a site designated entirely as Open Space (OS). No mineral extraction activities or resources occur on the project site, and the site is not zoned for such activities. As such, implementation of the proposed project would not result in impacts to mineral resources.

6.2 Significant Effects that Cannot be Avoided

Section 15126.2(c) of the CEQA Guidelines requires an EIR to identify significant environmental effects that cannot be avoided if a project is implemented (14 CCR 15000 et seq.). As discussed in Chapter 4 of this EIR, implementation of the project would result in significant impacts to construction noise and vibration and transportation related to operational vehicle miles travelled (VMT). Project implementation would also result in cumulative impacts to construction noise and vibration and operational transportation. Where significant impacts were identified for other issues, mitigation measures were developed that would reduce those impacts to less than significant.

6.2.1 Noise

Construction Noise

The project's temporary construction noise levels would exceed exterior daytime noise standards at the identified sensitive receptors. As noted previously, the project would be consistent with the City of Santa Clarita's Noise Code,

specifically Section 11.44.080. In addition, Mitigation Measure (MM) NOI-1 (a) through (g) would serve to reduce construction noise levels to the maximum extent feasible. Nevertheless, the project's temporary construction noise levels would be significant and unavoidable.

Construction Vibration

The project's temporary construction vibration levels would exceed human annoyance thresholds at the identified sensitive receptors. MM-NOI-2 (a) through (c) would serve to reduce construction vibration levels to the maximum extent feasible. Nevertheless, the project's temporary construction vibration (human annoyance) would be significant and unavoidable.

Cumulative Traffic Noise

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the project, ambient growth, and related projects/cumulative development within the study area; cumulative traffic noise level increases would be considered significant on Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road. Although the project would only contribute a maximum increase of 0.9 A-weighted decibels community noise equivalent level to future 2040 traffic noise levels, cumulative traffic noise level increases would be considered significant along Sand Canyon Road north of Lost Canyon Road and Sand Canyon Road between Lost Canyon Road and Robinson Ranch Road. As no feasible mitigation is available to reduce this impact, cumulative traffic noise impacts would be considered significant and unavoidable.

6.2.2 Transportation

Project operation would generate a VMT rate of 15% above the City of Santa Clarita (City) baseline VMT. Even with implementation of MM-TRA-1 through MM-TRA-5, as identified in Section 4.15, Transportation, VMT reductions that could result from implementation of the mitigation measures would not reduce the project's VMT to 15% below Citywide baseline VMT for home-based work VMT per employee (per the applicable threshold of significance). Hence the proposed project would be inconsistent with CEQA Guidelines Section 15064.3(b), and impacts would be significant and unavoidable.

6.3 Significant Irreversible Changes

CEQA Guidelines Section 15126.2(d) requires evaluation of the following (14 CCR 15000 et seq.):

> Uses of nonrenewable resources during the initial and continued phases of the project [that] may be irreversible since a large commitment of such resources makes removal or non-use thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Approval of the project would cause irreversible environmental changes consisting of the following:

- Alteration of the human environment as a consequence of development of the project site with a new resort hotel and associated amenities. The project would irreversibly alter the previously undeveloped portions of the site; the project would also convert approximately 32.4 acres of land designated as Open Space (OS) to Community Commercial (CC). This would constitute a permanent change. Once construction occurs, reversal of the land to its original condition is highly unlikely.
- Increased requirements of public services and utilities by the project, representing a permanent commitment of these resources. Service providers have adequate supply of resources to serve the project (see Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems).
- Use of various new raw materials, such as lumber and forest products, metals (such as iron and steel), sand and gravel, asphalt, petrochemicals, and other materials for construction. Some of these resources are already being depleted worldwide. The energy consumed in developing and maintaining the site may be considered a permanent investment that would incrementally reduce existing supplies of fossil fuels, natural gas, and gasoline (see Section 4.5, Energy).

6.4 Growth-Inducing Impacts

Section 15126.2(e) of the CEQA Guidelines requires a discussion of how the potential growth-inducing impacts of a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Induced growth is distinguished from the direct employment, population, and/or housing growth of a project (14 CCR 15000 et seq.). If a project has characteristics that "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively," then these aspects of a project must be discussed. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of that project. Typically, the growth-inducing potential of a project would be considered significant if it stimulates population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities, such as the Southern California Association of Governments (SCAG).

The CEQA Guidelines also indicate that growth should not be assumed to be either beneficial or detrimental (14 CCR 15126.2[d]). According to Section 15126.2(e) of the CEQA Guidelines, a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- The project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- The project would encourage and facilitate other activities that could significantly affect the environment.

To construct a premier golf and resort destination in northern Los Angeles County, the applicant is proposing to replace existing open space that was formerly part of the Mountain Course of the Robinson Ranch Golf Course with a new resort and spa consisting of a three-story Main Hotel; a Spa Garden Inn within three three-story buildings; villas associated with the hotel (23 buildings); three restaurants; a spa/gym/salon; conference/ballroom space; a grand ballroom; junior ballroom; meeting rooms; outdoor recreation consisting of two pools, one tennis court, two pickleball courts, 2 miles of on-site pedestrian pathways, and a nine-hole miniature golf course; and parking for a

total of 400 parking stalls with 18 parking spaces in villa garages. The overall development would include approximately 460,000 square feet of resort hotel amenities and support services.

The project does not propose any new housing or residential units, and therefore would not result in a direct increase in population. The project would provide a range of resort hotel and spa services in the City. The project would also require approximately 500 additional employees to serve the project at buildout. However, developing the new resort hotel would not necessarily generate an increase in residential population, as employees could come from within the City itself. Indirectly, the project could result in an added attractive community asset that is currently not in existence, and add additional jobs to the area. However, the project is not expected to result in population or employment growth above City General Plan forecasts, as discussed below.

According to the SCAG Growth Forecast (SCAG 2016), the City is expected to undergo an increase in 10,200 jobs between 2012 and 2020 (the City had approximately 73,500 jobs in 2012 and is expected to have approximately 83,700 jobs in 2020). By 2035, SCAG estimates that the City will have an additional 7,600 jobs for a total of 91,300 jobs within the City. The 500 increase in employment at full buildout of the project would represent approximately 6.6% of the anticipated increase in the number of jobs within the City according to the SCAG Growth Forecast for 2040. Therefore, the project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities.

Indirect growth can also occur by a project installing infrastructure that can support further growth. The project site is served by existing public services and utilities, and no new utilities would be needed to serve the project. Therefore, indirect growth inducement as a result of the extension of these facilities into a new area would not occur.

Overall, the project would indirectly stimulate population growth through the addition of new employees and the temporary increase in the number of occupants in the City within the hotel resort. However, the growth would be consistent with employment growth envisioned in local and regional land use plans and in projections made by regional planning authorities because the planned growth of the project site and its land use intensity have been factored into the underlying growth projections of the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy.

6.5 References Cited

SCAG (Southern California Association of Governments). 2016. *Demographics & Growth Forecast, Appendix to 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted April 2016. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf.

7 Alternatives

7.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) is required to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project" (14 CCR 15126.6[a]). An EIR "must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (14 CCR 15126.6[a]). This alternatives discussion is required even if these alternatives "would impede to some degree the attainment of the project objectives, or would be more costly" (14 CCR 15126.6[b]).

The CEQA Guidelines further provide that the range of alternatives is guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are included (14 CFR 15126.6[f]). The EIR need only examine alternatives that could feasibly attain most of the basic objectives of the project. Per CEQA Guidelines Section 15126.6(c), "Among the factors that may be taken into account when addressing feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries . . ., and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

Beyond these factors, the CEQA Guidelines require the analysis of a "no project" alternative and an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the "no project" alternative, then the EIR shall identify an environmental superior alternative among the other alternatives.

7.2 Project Objectives

In developing the alternatives to be addressed in this chapter, consideration was given to the ability to meet the basic objectives of the proposed Sand Canyon Resort Project (project) and eliminate or substantially reduce the identified significant environmental impacts. As stated in Chapter 3, Project Description, of this Draft EIR, the project objectives against which the alternatives were analyzed include the following:

- Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.
- Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.
- Provide additional dining, spa, and commercial sports and recreational opportunities for Santa Clarita residents.
- Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.

- Provide publicly accessible open spaces, including natural and active open space areas and pedestrian pathways within the project.
- Provide a publicly accessible pedestrian network through the project site.
- Incorporate environmental sustainability features into the project design, including the installation of solar panels and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.
- Improve upon and expand high-quality meeting and conference spaces within the City of Santa Clarita.

Pursuant to the CEQA Guidelines, as well as the project objectives, a range of alternatives to the project are considered and evaluated in this Draft EIR. To summarize these project alternatives, as suggested in CEQA Guidelines Section 15126.6(d), a matrix was prepared to summarize and compare the impacts of each project alternative (Table 7-1).

Table 7-1. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project	Alternative 2 Reduced Project	Alternative 3 Land Use Consistency
Aesthetics	Less than Significant	▼	▼	▲
Air Quality	Less than Significant with Mitigation	▼	▼	▲
Biological Resources	Less than Significant with Mitigation	▼	▼	=
Cultural and Tribal Cultural Resources	Less than Significant with Mitigation	▼	▼	=
Energy	Less than Significant	▼	▼	▲
Geology and Soils	Less than Significant with Mitigation	▼	▼	=
Greenhouse Gas Emissions	Less than Significant	▼	▼	▲
Hazards/Hazardous Materials	Less than Significant with Mitigation	▼	▼	=
Hydrology/Water Quality	Less than Significant	▼	=	=
Land Use and Planning	Less than Significant with Mitigation	▼	▼	▼
Noise	Significant and Unavoidable (construction and cumulative operations)	▼	▼	▲
Population and Housing	Less than Significant	▼	=	=
Public Services	Less than Significant	▼	▼	=
Recreation	Less than Significant with Mitigation	▼	▼	▲
Transportation	Significant and Unavoidable (operational vehicle miles traveled)	▼	▼	▲

Table 7-1. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project	Alternative 2 Reduced Project	Alternative 3 Land Use Consistency
Utilities and Service Systems	Less than Significant	▼	▼	=
Wildfire	Less than Significant with Mitigation	▼	▼	=

Notes: = = Alternative is likely to result in similar impacts to issue when compared to project; ▼= Alternative is likely to result in reduced impacts to issue when compared to project; ▲= Alternative is likely to result in greater impacts to issue when compared to project.

7.3 Alternatives Considered but Rejected

As set forth in CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate an alternative from detailed consideration are the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. The following discussion presents information on alternatives to the project that were considered but rejected. These alternative are not discussed in further detail and has been eliminated from further consideration.

7.3.1 Alternative Site

The objectives of the proposed project are closely tied to converting the existing abandoned golf course into a family-oriented destination resort hotel. Consideration of the potential to development the proposed project on another site within the City of Santa Clarita (City) was given. However, the project applicant already owns this site, and the site is underutilized as an abandoned golf course. The construction and operation of the proposed project on this site would allow resort guests to have access to the existing parking facilities and remaining golf courses, thereby minimizing the need to provide additional parking and increasing the amount of recreational resources available to the guests. For these reasons this alternative was eliminated from further consideration.

7.3.2 Residential Use

The project site is located within the Sand Canyon community within the City. Surrounding the project site to the north, and further south of the existing golf course, are residential uses. Consideration was given to developing the project site with residential uses; however, with implementation of a permanent residential population at this location, environmental impacts would be more intense and there would be an increased permanent demand for services within the City. Residential uses would generate more transportation impacts, thereby increasing air quality, energy, greenhouse gas emissions, and noise impacts. Additionally, developing the site with residential uses would not achieve the project objectives of introducing a family-oriented destination resort hotel or providing more meeting and conference space in the City. For these reasons this alternative was eliminated from further consideration.

7.4 Alternatives Under Consideration

This section discusses the alternatives to the project, including the No Project Alternative, under consideration. The No Project (No Development) Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if the project were not to proceed and no development activities were to occur. The other alternatives are discussed as part of the "reasonable range of alternatives" selected by the lead agency. The following alternatives are addressed in this section, followed by a more detailed discussion of each:

- Alternative 1 – No Project
- Alternative 2 – Reduced Project
- Alternative 3 – Land Use Consistency

7.4.1 Alternative 1 – No Project

Under Alternative 1, development of the project site would not occur as discussed in Chapter 3 of this Draft EIR. While no activity is currently occurring at the project site, it can be reasonably expected that the 75-acre portion of the project site north of Robinson Ranch Road could be re-landscaped and reopen as a golf course, as is currently allowed under existing conditions.

7.4.1.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, Aesthetics, of this EIR, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Reopening the golf course would not result in any changes to scenic vistas or scenic resources, would not change the visual character of the site, and would not introduce new nighttime lighting. As such, because no changes to visual character would occur and no new nighttime lighting would be added to the site, Alternative 1 would result in **fewer** overall aesthetic impacts when compared to the proposed project.

Air Quality

As discussed in Section 4.2, Air Quality, of this EIR, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation, would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and operational air quality impacts would primarily be associated with vehicle trips. As discussed in Section 4.15,

Transportation, of this EIR, the proposed project would generate an average of 921 daily vehicle trips. Using Institute of Engineers Trip Generation Rates for a golf course, Alternative 1 would generate between 273 and 281 average daily trips, which ranges between 641 and 648 fewer trips than the proposed project. Because construction and operational activities would be less intense for Alternative 1, and because operational vehicle trips would be notably reduced under Alternative 1, overall air quality impacts would be **reduced** when compared to the proposed project.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this EIR, with implementation of mitigation, impacts to special-status wildlife species, nesting birds, riparian habitat, and wetlands would be less than significant. Impacts to special-status plant species would be less than significant without the need for mitigation.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Because the site would remain undeveloped, and because no trees would be removed or wetlands would be affected, **fewer** overall impacts to biological resources would occur under Alternative 1 when compared to the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4, Cultural and Tribal Cultural Resources, of this EIR, impacts to historical resources would be less than significant. Impacts to archaeological resources, human remains, and tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Because the site would remain undeveloped, and because no earthwork would be required, the potential for disturbing any historic, archaeological, or tribal cultural resources, as well as human remains, would be minimal. As such, Alternative 1 would result in **fewer** overall impacts to cultural and tribal cultural resources when compared to the proposed project.

Energy

As discussed in Section 4.5, Energy, of this EIR, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Because the site would remain undeveloped and require minimal amounts of energy to operate, energy consumption would be **reduced** under Alternative 1 when compared to the proposed project.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, of this EIR, geology and soils impacts and potential impacts to paleontological resources can be reduced to less-than-significant levels with implementation of mitigation.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Because the site would remain undeveloped, no new structures would be built on site, and no earthwork would be required, no impacts to geology and soils and

paleontological resources would occur. As such, geology and soils impacts under Alternative 1 would be **reduced** when compared to the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, Greenhouse Gas Emissions, of this EIR, all greenhouse gas (GHG) emission impacts would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and operational GHG impacts would only be generated by modest increases in vehicle trips to the golf course site. Because construction and operational activities would be less intense for Alternative 1, overall GHG impacts would be **reduced** when compared to the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, Hazards and Hazardous Materials, of this EIR, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with an adopted emergency response plan or emergency evacuation plan and wildfire risks. With implementation of Mitigation Measure (MM) FIRE-1 through MM-FIRE-11, as included within both Section 4.8 and Section 4.17, Wildfire, of this EIR, potential emergency response and evacuation plan impacts can be reduced to less-than-significant levels.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures creating potential risks for emergency response and emergency evacuation plans. Given that Alternative 1 would introduce less intense land uses and that there would be fewer potential impacts associated with emergency response and emergency evacuation plans, Alternative 1 would result in **fewer** overall hazards and hazardous materials impacts when compared to the proposed project.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this EIR, hydrology, water quality, and drainage impacts would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures, creating fewer changes to the existing site drainage patterns. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes to existing hydrology and drainage patterns at the site, Alternative 1 would result in **fewer** overall hydrology and drainage impacts when compared to the proposed project.

Land Use and Planning

As discussed in Section 4.10, Land Use and Planning, of this EIR, land use and planning impacts would be potentially significant, associated with the permanent loss of 32.4 acres of open space. However, with

implementation of MM-LU-1, requiring the purchase and dedication of an equivalent amount of open space acreage, impacts would be reduced to a less-than-significant level.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures, resulting in less potential for generating environmental impacts. Additionally, the 32.4 acres of open space that would be lost under the proposed project would remain as open space under Alternative 1. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes to the project site, Alternative 1 would result in **fewer** overall land use and planning impacts when compared to the proposed project.

Noise

As discussed in Section 4.11, Noise, of this EIR, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short term and limited to construction activities. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation; however, cumulative mobile source noise impacts would occur from traffic increases on local roadways such that project operations would contribute to significant and unavoidable cumulative traffic noise impacts.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures. Because construction noise and vibration impacts would be considered significant and unavoidable under the proposed project, and because fewer construction activities would be required to re-landscape and reopen the golf course, Alternative 1 would reduce and avoid these significant impacts. During operations, the open space use would remain and minimal noise-generating activities would occur on the project site, thereby reducing Alternative 1's potential to contribute to a cumulatively significant noise impact. As such, Alternative 1 would result in **fewer** noise and vibration impacts when compared to the proposed project.

Population and Housing

As discussed in Section 4.12, Population and Housing, impacts related to population and housing would be less than significant, and no mitigation is be required. The proposed project does not include the displacement of any people, housing, or businesses, nor the development of residential dwelling units that would induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be approximately 500 employees, which would likely draw from the existing community.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures, resulting in the potential for fewer impacts associated with population and housing. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes regarding population and housing, Alternative 1 would result in **fewer** overall population and housing impacts when compared to the proposed project.

Public Services

As discussed in Section 4.13, Public Services, of this Draft EIR, impacts related to police, fire, schools, parks, and other public services would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures, resulting in the potential for fewer impacts associated with police, fire schools, parks, and other public services. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes regarding police, fire schools, parks, and other public services, Alternative 1 would result in **fewer** overall public services impacts when compared to the proposed project.

Recreation

As discussed in Section 4.14, Recreation, of this Draft EIR, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which in combination with the proposed hotel components of the resort could result in construction and operational impacts. The construction noise and vibration impacts would be temporary in nature and attributed to the entire project, not just the recreational component, and operational transportation impacts are associated with the overall resort and not the recreational components of the resort, since the recreational components of the project are primarily meant for resort guests.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures resulting in the potential for generating environmental impacts. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes to the project site, Alternative 1 would result in **fewer** overall recreation impacts when compared to the proposed project.

Transportation

As discussed in Section 4.15, the proposed project would result in a total of 921 new daily vehicle trips, with 125 trips occurring in the AM Peak Hour and 161 trips occurring in the PM Peak Hour. The vehicle miles traveled (VMT) analysis demonstrated that the proposed project would exceed the established VMT threshold, thereby resulting in significant and unavoidable transportation impacts.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and operational air quality impacts would primarily be associated with vehicle trips. As in Table 7-2 below, the proposed project would generate an average of 921 daily vehicle trips. Using Institute of Engineers Trip Generation Rates for a golf course, Alternative 1 would generate between 273 and 281 average daily trips, which ranges between 641 and 648 fewer trips than the proposed project. Because construction and operational activities would be less intense for Alternative 1, and because operational vehicle trips would be notably reduced under Alternative 1, transportation impacts would be **reduced** when compared to the proposed project.

Table 7-2. Alternative 1 vs. Proposed Project Trip Generate Rate Comparison

	Generation Rate	Quantity	Trip Count	Proposed Project Trip Count	Trip Count Difference
Trips per Hole					
Daily Trips	30.38	9	273	921	648
AM Peak Hour	1.76	9	16	125	109
PM peak hour	2.91	9	26	161	135
Trips per Acre					
Daily Trips per Acre	3.74	75	281	921	641
AM Peak Hour per Acre	0.19	75	14	125	111
PM Peak Hour per Acre	0.28	75	21	161	140

Source: ITE 2017.

Utilities and Service Systems

As discussed in Section 4.16, Utilities and Service Systems, of this Draft EIR, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures resulting in the potential for generating environmental impacts. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes to the project site, Alternative 1 would result in **fewer** overall utilities and service system impacts, specifically water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas impacts, when compared to the proposed project.

Wildfire

As discussed in Section 4.17, with implementation of mitigation measures, potential impacts associated with wildfires would be less than significant.

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, construction impacts would be minimal, and during operations, Alternative 1 would introduce less intense land uses and fewer structures resulting in the potential for exposure to dangers associated with wildfires. Given that Alternative 1 would introduce less intense land uses and would result in fewer changes to the project site, Alternative 1 would result in **fewer** overall wildfire impacts when compared to the proposed project.

7.4.1.2 Relationship to Project Objectives

Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Table 7-3 provides a list of the project objectives and whether Alternative 1 meets each objective.

Table 7-3. Summary of Alternative 1 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.	**Yes**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. As such, Alternative 1 would meet this project objective.
Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.	**No**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. No new hotel would be constructed. Alternative 1 would not meet this project objective.
Provide additional dining, spa, and commercial sports and recreational opportunities for Santa Clarita residents.	**No**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. No new dining, spa, or commercial sports or recreational opportunities would be developed. Alternative 1 would not meet this project objective.
Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.	**No**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. Alternative 1 would merely reinstate the previous use of the site and would not meet this project objective.
Provide publicly accessible open spaces, including natural and active open space areas and pedestrian pathways within the project.	**Yes**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. This alternative would maintain the open space use and designation of the site, including both natural and active open space areas. Alternative 1 would meet this project objective.
Provide a publicly accessible pedestrian network through the project site.	**No**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. No new pedestrian pathways would be provided. Alternative 1 would not meet this project objective.
Incorporate environmental sustainability features into the project design, including the installation of solar panels and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.	**No**. Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. No new sustainable design features would be incorporated into the reopened golf course. Alternative 1 would not meet this project objective.
Improve upon and expand high quality meeting and conference spaces within the City of Santa Clarita.	**No.** Under Alternative 1, no new development would occur on the project site, and instead, it would be reasonably expected that the golf course would be re-landscaped and reopened. No new meeting or conference space would be developed. Alternative 1 would not meet this project objective.

7.4.2 Alternative 2 – Reduced Project

Under Alternative 2, the Reduced Project Alternative, the project would be similar to the proposed project described within Chapter 3 of this EIR; however, the Oak Villas component of the project, located in the most western portion of the project site, would not be constructed. As such, Alternative 2 would result in nine fewer single-story villa units and 18 fewer parking spaces than the proposed project, and would increase the amount of open space by 5.4 acres, for a total of 47.9 acres. As such, Alternative 2 would consist of the components shown in Table 7-4.

Table 7-4. Alternative 2 Components

Use	Building Area (square feet)
Main Hotel (three-story building with 241 rooms)	165,000
Function Building • Restaurants (3) • Ballrooms (2) • Meeting rooms • Pre-function space • Children's Center • Snack bar • Celebration garden • Kitchen and back-of-house	64,000
Spa Building • Spa • Gym • Salon	35,000
Spa Garden Inn (three three-story buildings with 81 rooms)	67,500
View Villas Community (14 buildings with 56 units)	98,000
Outdoor recreation including: • Two outdoor pools • One tennis court • Two pickleball courts • Chip and putt golf course • Children's play area • On-site pedestrian pathways (approximately 2 miles)	—
Open Space	47.9 acres
Parking (382 proposed parking spaces plus 319 existing parking spaces)	701

7.4.2.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. However, the remainder of the project would be constructed as proposed. Because open space is generally viewed as aesthetically pleasing, and because Alternative 2 would include more open space than the proposed project, Alternative 2 would result in fewer changes to visual character of the site, less new nighttime lighting, and overall **fewer** aesthetic impacts when compared to the proposed project.

Air Quality

As discussed in Section 4.2, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation, would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. By constructing and operating nine fewer units that under the proposed project, Alternative 2 would result in incrementally **fewer** construction and operational air quality impacts when compared to the proposed project.

Biological Resources

As discussed in Section 4.3, with implementation of mitigation, impacts to special-status wildlife species, nesting birds, riparian habitat, and wetlands would be less than significant. Impacts to special-status plant species would be less than significant without the need for mitigation.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped, and because fewer trees would be removed, **fewer** overall impacts to biological resources would occur under Alternative 2 when compared to the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4 of this EIR, impacts to historical resources would be less than significant. Impacts to archaeological resources, human remains and tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped, and because less earthwork would be required, the potential for disturbing any historic, archaeological, or tribal cultural resources, as well as human remains, would be minimal. As such, Alternative 2 would result in **fewer** overall impacts to cultural and tribal cultural resources when compared to the proposed project.

Energy

As discussed in Section 4.5, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped and fewer overall units would be constructed, energy consumption would be **reduced** under Alternative 2 when compared to the proposed project.

Geology and Soils

As discussed in Section 4.6, geology and soils impacts and potential impacts to paleontological resources can be reduced to less-than-significant levels with implementation of mitigation.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped and fewer overall units would be constructed, potential impacts to geology and soils as well as paleontological resources would be **reduced** under Alternative 2 when compared to the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, all GHG emission impacts would be less than significant, and no mitigation is required.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped and fewer overall units would be constructed, GHG impacts would be **reduced** under Alternative 2 when compared to the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with an adopted emergency response plan or emergency evacuation plan and wildfire risks. With implementation of MM-FIRE-1 through MM-FIRE-11, as included in both Section 4.8 and Section 4.17 of this EIR, potential emergency response and evacuation plan impacts can be reduced to less-than-significant levels.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped and fewer structures would be constructed in an area prone to wildfire hazards, hazards impacts would be **reduced** under Alternative 2 when compared to the proposed project.

Hydrology and Water Quality

As discussed in Section 4.9, hydrology, water quality, and drainage impacts would be less than significant, and no mitigation is required.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and would remain as undeveloped open space; however, the same drainage basin improvements would be undertaken. Because hydrology and water quality conditions would continue to be altered in much the same manner as the proposed project, Alternative 2 would result in **similar** hydrology and water quality impacts when compared to the proposed project.

Land Use and Planning

As discussed in Section 4.10, land use and planning impacts would be potentially significant, associated with the permanent loss of 32.4 acres of open space. However, with implementation of MM-LU-1, requiring the purchase and dedication of an equivalent amount of open space acreage, impacts would be reduced to a less-than-significant level.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space, thereby reducing the overall amount of open space that would be converted under Alternative 2 to 27 acres. Given that Alternative 2 would retain 47.9 acres of open space and only convert 27 acres of open space, Alternative 2 would result in **fewer** overall land use and planning impacts when compared to the proposed project.

Noise

As discussed in Section 4.11, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short term and limited to construction activities. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation; however, cumulative mobile source noise impacts would occur from traffic increases on local roadways such that project operations would contribute to significant and unavoidable cumulative traffic noise impacts.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. As such, construction impacts would be less intense and concentrated more in the center of the project site during construction. During operations, Alternative 2 would introduce less intense land uses and fewer overall structures, especially in the western portion of the project site. Because construction noise and vibration impacts would be considered significant and unavoidable under the proposed project, and because slightly less intense construction and operational activities would occur under Alternative 2, thereby reducing the amount of operational noise contributing to the area's cumulatively significant noise impacts, Alternative 2 would result in **fewer** noise and vibration impacts when compared to the proposed project.

Population and Housing

As discussed in Section 4.12, impacts related to population and housing would be less than significant, and no mitigation is required. The proposed project does not include the displacement of any people, housing, or businesses, nor the development of residential dwelling units that would induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be approximately 500 employees, which would likely draw from the existing community.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. As with the proposed project, Alternative 2 would not include the displacement of any people, housing, or businesses, nor the development of residential dwelling units that would induce population growth. Additionally, construction and operational jobs would be likely to be filled by existing City and Los Angeles County residents. As such, Alternative 2 would result in **similar** impacts to the proposed project relative to population and housing.

Public Services

As discussed in Section 4.13, impacts related to police, fire, schools, parks, and other public services would be less than significant, and no mitigation is required. The project could be adequately served by the existing public service infrastructure and facilities in the City.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Given that Alternative 2 would be slightly reduced in intensity compared to the proposed project, and that adequate services exist to serve the proposed project, adequate services would exist to serve the reduced density Alternative 2. With the incrementally smaller development under Alternative 2, public service demands and impacts would be incrementally reduced, thereby resulting in **fewer** public services impacts than the proposed project.

Recreation

As discussed in Section 4.14, impacts related to recreation would be less than significant with implementation of the mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which in combination with the proposed hotel components of the resort could result in construction and operational impacts. The construction noise and vibration impacts would be temporary in nature and attributed to the entire project, not just the recreational component, and operational transportation impacts are associated with the overall resort and not the recreational components of the resort, since the recreational components of the project are primarily meant for resort guests.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. As such, construction impacts would be reduced when compared to the proposed project, and during operations, Alternative 2 would introduce less intense land uses and fewer structures resulting in the potential for generating environmental impacts. Given that Alternative 2 would introduce less intense land uses and would result in fewer changes to the project site, Alternative 2 would result in **fewer** overall recreation impacts when compared to the proposed project.

Transportation

As discussed in Section 4.15, the proposed project would result in a total of 921 new daily vehicle trips, with 125 trips occurring in the AM Peak Hour and 161 trips occurring in the PM Peak Hour. The VMT analysis demonstrated that the proposed project would exceed the established VMT threshold, thereby resulting in significant and unavoidable transportation impacts.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. As such, construction impacts would be incrementally less than those of the proposed project, and during operation, Alternative 2 would result in slightly fewer vehicle trips, and therefore, a slighted reduced VMT impact. Because construction and operational activities would be slightly less intense for Alternative 2, and because operational vehicle trips would be slightly reduced under Alternative 2, transportation impacts would be **reduced** when compared to the proposed project.

Utilities and Service Systems

As discussed in Section 4.16, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Given that Alternative 2 would be slightly reduced in intensity compared to the proposed project, and that adequate services exist to serve the proposed project, adequate services would exist to serve the reduced density Alternative 2. With the incrementally smaller development under Alternative 2, utility and service system demands and impacts would be incrementally reduced, thereby resulting in **fewer** utility and service system impacts than the proposed project.

Wildfire

As discussed in Section 4.17, with implementation of mitigation measures, potential impacts associated with wildfires would be less than significant.

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Because the additional portions of the site would remain undeveloped and fewer structures would be constructed in an area prone to wildfire hazards, impacts would be **reduced** under Alternative 2 when compared to the proposed project.

7.4.2.2 Relationship to Project Objectives

Under Alternative 2, a similar resort project would be constructed; however, the nine proposed Oak Villas would not be developed. With the elimination of the nine Oak Villas, the westernmost component of the project would not be constructed and an addition 5.4 acres would remain as undeveloped open space. Table 7-5 provides a list of the project objectives and whether Alternative 1 meets each objective.

Table 7-5. Summary of Alternative 2 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would redevelop the currently-abandoned golf course and would meet this project objective.
Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would provide a five-star family-oriented destination and would meet this project objective.
Provide additional dining, spa and commercial sports and recreational opportunities for Santa Clarita residents.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would enhance dining, spa, and commercial sports and recreational opportunities for residents and would meet this project objective.
Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would involve the development of a destination resort facility that is architecturally and visually compatible with the surrounding landscape and would meet this project objective.
Provide publicly accessible open spaces, including natural and active open space areas and pedestrian pathways within the project.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site thereby increasing the amount of available open space. As such, Alternative 2 would meet this project objective.
Provide a publicly accessible pedestrian network through the project site.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would provide a pedestrian network through the site and would meet this project objective.
Incorporate environmental sustainability features into the project design, including the installation of solar panels and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would incorporate environmentally sustainable features into the project design and would meet this project objective.
Improve upon and expand high quality meeting and conference spaces within the City of Santa Clarita.	**Yes**. Under Alternative 2, a new resort hotel and spa would be constructed; however, 9 fewer villas would be introduced at the project site. As such, Alternative 2 would improve upon and expand available meeting and conference spaces and would meet this project objective.

7.4.3 Alternative 3 – Land Use Consistency

Under Alternative 3, Land Use Consistency Alternative, instead of constructing the resort on the project site, an outdoor soccer facility would be constructed, as allowed under existing general and plan and zoning designations for the project site. The soccer facility would not require a zone change from Open Space, as this zone allows public and private parks, conservancy lands, nature preserves, wildlife habitats, water bodies and adjacent riparian habitat, wetlands areas dedicated to open space use, drainage easements, cemeteries, golf courses, and other open space areas dedicated for public or private use. Typical uses include recreation, trails, trailheads, paseos, horticulture, limited agriculture, animal grazing, and habitat preservation. Development of a recreational outdoor soccer facility would be consistent with the site's existing Open Space zoning.

The outdoor soccer facility would be built on approximately 58 acres of land and would include up to eight soccer fields, two multi-purpose fields, associated field maintenance buildings, associated restrooms, and soccer equipment storage facilities. Half of the fields would contain lighting to support evening or nighttime recreational activities. The soccer facility would also include 953 parking spaces and overflow parking to accommodate increased vehicle trips to the site. The outdoor soccer facility could be utilized by school/community users on weekdays, with youth and/or adult league and club play on evenings and weekends. Typical hours of operation for the outdoor soccer facility would be from approximately 8:00 a.m. to 11:00 p.m. daily.

7.4.3.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. As part of the soccer complex, nighttime lighting would be introduced to provide field lighting on up to 5 of the 10 fields. The new nighttime lighting for the fields would be located atop lighting poles, taller than the structures associated with the proposed project, with lights casting down to the fields. As such, Alternative 3 has the potential to result in **increased** nighttime lighting impacts when compared to the proposed project.

Air Quality

As discussed in Section 4.2, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation, would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Construction of Alternative 3 would result in site grading in order to create precisely level playing fields, following by installation of utilities and landscaping. As such, construction air quality impacts would be similar to those of the proposed project.

During operations, as shown in Table 7-7, Alternative 3 would result in fewer overall vehicle trips during the weekdays; however, during on weekend days, approximately 4,300 new vehicle trips would be generated, which far surpasses the approximately 921 trips that would be generated by the proposed project. Given that vehicle trips are the primary source for operational air quality emissions and air quality impacts, Alternative 3 would result in increased operational air quality impacts when compared to the proposed project.

As such, Alternative 3 would result in **increased** air quality impacts when compared to the proposed project.

Biological Resources

As discussed in Section 4.3, with implementation of mitigation, impacts to special-status wildlife species, nesting birds, riparian habitat, and wetlands would be less than significant. Impacts to special-status plant species would be less than significant without the need for mitigation.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts to biological resources.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4 of this EIR, impacts to historical resources would be less than significant. Impacts to archaeological resources, human remains and tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts to cultural and tribal cultural resources.

Energy

As discussed in Section 4.5, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. While the new resort would not be built, a sports complex attracting users throughout the day and generating substantially more vehicle trips (see Table 7-7) than the proposed project would be constructed. The energy consumption and impacts associated with construction under Alternative 3 would be comparable to those associated with the proposed project.

During operations, energy demands from lighting would be reduced when compared to overall energy demands associated with the proposed project. However, the use of gasoline powered vehicles, which contribute to overall energy impacts, would be substantially increased under Alternative 3 when compared to the proposed project, as shown in Table 7-7- below. As such, Alternative 3 would result in **increased** energy impacts when compared to the proposed project.

Geology and Soils

As discussed in Section 4.6, geology and soils impacts and potential impacts to paleontological resources can be reduced to less-than-significant levels with implementation of mitigation.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts associated with geology and soils.

Greenhouse Gas Emissions

As discussed in Section 4.7, all GHG emission impacts would be less than significant, and no mitigation is required.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Construction of Alternative 3 would result in site grading in order to create precisely level playing fields, following by installation of utilities and landscaping. As such, construction air quality impacts, which contribute to overall regional GHG emissions, would be similar to those of the proposed project.

During operations, as shown in Table 7-7, Alternative 3 would result in fewer overall vehicle trips during the weekdays; however, during on weekend days, approximately 4,300 new vehicle trips would be generated, which far surpasses the approximately 921 trips that would be generated by the proposed project. Given that vehicle trips are the primary source for operational air quality emissions, which equate to regional GHG emissions and impacts, Alternative 3 would result in increased operational GHG impacts when compared to the proposed project.

As such, Alternative 3 would result in **increased** GHG impacts when compared to the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with an adopted emergency response plan or emergency evacuation plan and wildfire risks. With implementation of MM-FIRE-1 through MM-FIRE-11, as included in both Section 4.8 and Section 4.17 of this EIR, potential emergency response and evacuation plan impacts can be reduced to less-than-significant levels.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts to hazards and hazardous materials, including wildfire hazards.

Hydrology and Water Quality

As discussed in Section 4.9, hydrology, water quality, and drainage impacts would be less than significant, and no mitigation is required.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts to hydrology and water quality.

Land Use and Planning

As discussed in Section 4.10, land use and planning impacts would be potentially significant, associated with the permanent loss of 32.4 acres of open space. However, with implementation of MM-LU-1, requiring the purchase and dedication of an equivalent amount of open space acreage, impacts would be reduced to a less-than-significant level.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would not require or result in any changes to the project site's existing general plan or zoning designations, and the 32.4 acres that would be lost under the proposed project would remain as open space. As such, given that Alternative 3 would be consistent with existing general plan and zoning designations and would retain open space, Alternative 3 would result in **fewer** land use and planning impacts when compared to the proposed project.

Noise

As discussed in Section 4.11, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short term and limited to construction activities. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation; however, cumulative mobile source noise impacts would occur from traffic increases on local roadways such that project operations would contribute to significant and unavoidable cumulative traffic noise impacts.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Construction of Alternative 3 would result in site grading in order to create level playing fields, following by installation of utilities and landscaping. As such, construction air quality impacts would be slightly less intense and reduced when compared to the proposed project.

During operations, as shown in Table 7-7 below, Alternative 3 would result in fewer overall vehicle trips during the weekdays; however, during on weekend days, approximately 4,300 new vehicle trips would be generated, which far surpasses the approximately 921 trips that would be generated by the proposed project. Additionally, activities associated with the fields would include cheering, revelry, and potential noise from car alarms in parked vehicles. Given that vehicle trips are a significant source for operational noise impacts and that noise associated with sports and sporting activities would be increased when compared to a resort hotel, Alternative 3 would result in increased operational noise impacts when compared to the proposed project.

As such, Alternative 3 would result in **increased** noise impacts when compared to the proposed project.

Population and Housing

As discussed in Section 4.12, impacts related to population and housing would be less than significant, and no mitigation is be required. The proposed project does not include the displacement of any people, housing, or businesses, nor the development of residential dwelling units that would induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be approximately 500 employees, which would likely draw from the existing community.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. The new facility construction under Alternative 3 would serve the existing City population and would not require a substantial number of new employees such that the City would experience population growth. As such, Alternative 3 would result in **comparable** impacts associated with population and housing when compared with the proposed project.

Public Services

As discussed in Section 4.13, impacts related to police, fire, schools, parks, and other public services would be less than significant, and no mitigation is required. The project could be adequately served by the existing public service infrastructure and facilities in the City.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Similar to the proposed project, demands for police and fire services would be expected to increase moderately. Demands for school, park, and library services would not be affected. As such, Alternative 3 would result in **comparable** public services impacts to those of the proposed project.

Recreation

As discussed in Section 4.14, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which in combination with the proposed hotel components of the resort could result in construction and operational impacts. The construction noise and vibration impacts would be temporary in nature and attributed to the entire project, not just the recreational component, and operational transportation impacts are associated with the overall resort and not the recreational components of the resort, since the recreational components of the project are primarily meant for resort guests.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. As such, Alternative 3 would involve the construction and operation of a recreational facility with the potential for resulting in environmental impacts. As discussed in the analysis within this section of the EIR (Section 7.4.3), Alternative 3 has the potential to result increased impacts to aesthetics (nighttime lighting), operational air quality, operational energy, operational GHG emissions, operational noise, and operational transportation, especially on weekend days. As such, because this recreational project would result in more overall environmental impacts, Alternative 3 would result in **increased** recreational impacts when compared to the proposed project.

Transportation

As discussed in Section 4.15, the proposed project would result in a total of 921 new daily vehicle trips, with 125 trips occurring in the AM Peak Hour and 161 trips occurring in the PM Peak Hour. The VMT analysis demonstrated that the proposed project would exceed the established VMT threshold, thereby resulting in significant and unavoidable transportation impacts.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Given that the soccer facility would be available for use between the hours of 8:00 a.m. and 11:00 p.m. daily, the potential for Alternative 3 to generate more overall vehicle trips is increased, as shown in Table 7-6.

Table 7-6. Alternative 3 Trip Generation Rates

Land Use	ITE Land Use	Rate	Weekday							Weekend			
				AM Peak Hour			*PM Peak Hour*				*Complex Peak Hour*		
			Daily	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*Daily*	*In*	*Out*	*Total*
Soccer Facility	488	per field	71.33	61%	39%	0.99	66%	34%	16.43	430	59%	41%	54
Soccer Facility													
Soccer Facility	10 fields		713	6	4	10	108	56	164	4,300	319	221	540

Source: ITE 2017.
Note: ITE = Institute of Transportation Engineers.

As shown in Table 7-6 above, during the weekdays, Alternative 3 would generate a total of approximately 713 daily trips, with approximately 10 trips in the AM peak hour and 164 during the PM peak hour. On the weekends, Alternative 3 would generate approximately 4,300 daily vehicle trips, with up to 540 trips during the busiest hour on the weekends. By comparison, the proposed project would generate approximately 921 daily trips, with 125 vehicle trips in the AM peak hour and 161 trips in the PM peak hour, as shown in Table 7-7 below. While daily weekday trips would be slightly higher under the proposed project when compared to Alternative 3, the bulk of the vehicle traffic generated under Alternative 3 would occur on weekends. The proposed project's weekend trips would be similar to those associated with the weekday trips and would therefore not result in substantial increases on weekend days. As such, Alternative 3 would result in **increased** overall transportation impacts when compared to the proposed project.

Table 7-7. Alternative 3 vs. Proposed Project Trip Generate Rate Comparison

Land Use	#	Unit	Weekday							Weekend			
				AM Peak Hour			*PM Peak Hour*				*Complex Peak Hour*		
			Daily	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*Daily*	*In*	*Out*	*Total*
Soccer Facility	10	fields	713	6	4	10	108	56	164	4,300	319	221	540
Hotel Resort	392	rooms	921	90	35	125	71	90	161	—	—	—	—

Utilities and Service Systems

As discussed in Section 4.16, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site and would not increase the need for or affect electricity, telecommunications, or natural gas when compared to the proposed project. Additionally, similar to the proposed project, water would be required for landscaping, irrigation, and for restroom facilities, and wastewater would be generated through water used within restroom facilities. While water use under Alternative 3 would be limited to landscaping and potable water use in restroom facilities, the intensity of this use due to extensive use of the facilities, especially on weekends, would likely create comparable water use, and therefore, wastewater generation, as the proposed project's resort and spa components. As such, impacts to utilities and services systems under Alternative 3 would be **comparable** to those of the proposed project.

Wildfire

As discussed in Section 4.17, with implementation of mitigation measures, potential impacts associated with wildfires would be less than significant.

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Alternative 3 would include construction and operational activities on approximately the same footprint as the project site. As such, Alternative 3 and the proposed project would result in **comparable** impacts associated with wildfires.

7.4.3.2 Relationship to Project Objectives

Under Alternative 3, instead of developing a resort hotel and spa, approximately 58 acres of the 77-acre project site would be developed with a soccer complex consisting of up to eight soccer fields, two multi-use fields, associated amenities, and parking. Table 7-8 provides a list of the project objectives and whether Alternative 3 meets each objective.

Table 7-8. Summary of Alternative 3 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Redevelop the currently-abandoned Mountain Course of the Sand Canyon Golf Course.	**Yes**. Alternative 3 would result in the redevelopment of the former golf course with a new soccer complex. As such, Alternative 3 would meet this project objective.
Provide a five-star family-oriented destination hotel in the southeastern portion of the City of Santa Clarita.	**No**. Alternative 3 would result in the development of a soccer complex and not a destination hotel. As such, Alternative 3 would not meet this project objective.

Table 7-8. Summary of Alternative 3 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
Provide additional dining, spa, and commercial sports and recreational opportunities for Santa Clarita residents.	**Partially**. Alternative 3 would result in the development of a soccer complex, thereby increasing the amount of sports and recreational space and opportunities for City residents. However, no new dining or spa opportunities would be created. As such, Alternative 3 would partially meet this objective.
Design a destination resort facility that is architecturally and visually compatible with the surrounding landscape.	**No**. Alternative 3 would result in the development of a soccer complex and not a destination resort. As such, Alternative 3 would not meet this project objective.
Provide publicly accessible open spaces, including natural and active open space areas, and pedestrian pathways within the project.	**Yes**. Alternative 3 would result in the redevelopment of the former golf course with a new soccer complex, thereby increasing the amount of active open space areas on the site. As such, Alternative 3 would meet this project objective.
Provide a publicly accessible pedestrian network through the project site.	**Yes**. Under Alternative 3 would result in the redevelopment of the former golf course with a new soccer complex, including pedestrian pathways. As such, Alternative 3 would provide a pedestrian network through the site and would meet this project objective.
Incorporate environmental sustainability features into the project design, including the installation of solar panels and provide shuttle connection between the resort and the nearby train station (which is currently under construction) at Vista Canyon.	**No**. Alternative 3 would result in the redevelopment of the former golf course with a new soccer complex. The installation of solar panels on rooftops would not occur, and a new grey water system would not be implement. As such, Alternative 3 would not meet this project objective.
Improve upon and expand high quality meeting and conference spaces within the City of Santa Clarita.	**No.** Alternative 3 would result in the redevelopment of the former golf course with a new soccer complex. No new meeting or conference space would be developed. Alternative 3 would not meet this project objective.

7.5 Evaluation of Alternatives

In accordance with the CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the project. Table 7-1 provides a summary of the comparison of the impacts of the alternatives with the project; an analysis of the Environmentally Superior Alternative is provided in Section 7.6.

7.6 Environmentally Superior Alternative

As indicated in Table 7-1, Alternative 1, the No Project Alternative, would result in the least environmental impacts, and therefore would be considered the Environmentally Superior Alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the Environmentally Superior Alternative is the No Project Alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

Of the remaining alternatives previously evaluated, Alternative 2 was found to be environmentally superior over the proposed project (see Table 7-1) because it had the most reductions in impacts from the proposed project. Alternative 2 was found to have fewer environmental impacts for all environmental issue areas, with the exceptions of hydrology and water quality and population and housing. For both of these issue areas, Alternative 2 would result in comparable impacts to the proposed project. As such, Alternative 2 would be the Environmentally Superior Alternative and would achieve the same primary objectives as the proposed project.

7.7 References Cited

ITE (Institute of Engineers). 2017. *Trip Generation Manual*, 10th Edition. September 2017.

8 List of Preparers

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