



THE CITY OF SAN DIEGO

ENVIRONMENTAL IMPACT REPORT

Project No. 652519
SCH No. 2020039006

SUBJECT: Trails at Carmel Mountain Ranch: Project proposes a GENERAL PLAN AMENDMENT; COMMUNITY PLAN AMENDMENT to redesignate from Private Recreation-Golf-Course to Low-Medium Density Residential (6-9 dwelling units per acre) and Medium Density Residential (30-43 units per acre), Open Space, and Other Open Space in the Carmel Mountain Ranch Community Plan; REZONE from AR-1-1, RS-1-12, RS-1-14, RM-1-1, RM-2-5 and RM-3-7 to RM-1-1, RM-1-3, RM-2-4, RM-2-5, RM-2-6, and RM-3-7, OP-1-1, CC-2-1, from RS-1-14 to AR-1-1 and RM-2-5, from RM-2-5 to AR-1-1, from RS-3-7 to AR-1-1, and from RM-1-1 to AR-1-1; VESTING TENTATIVE MAP to create new legal lots; MASTER PLANNED DEVELOPMENT PERMIT with Design Guidelines; SITE DEVELOPMENT PERMIT; NEIGHBORHOOD DEVELOPMENT PERMIT; RESCISSION OF CONDITIONAL USE PERMIT No. 87-0568; and various EASEMENT VACATIONS to redevelop the existing 18-hole golf course with 1,200 multi-family residential units and a mix of open space and recreational areas. More specifically, the project would include 451 townhomes, 629 market-rate apartments, and 120 affordable apartments. Within the CC-2-1 zone the project proposes future development of an approximately 6,000 square feet of community commercial amenities that could include an art studio, a café/restaurant/banquet area with kitchen, and a caretaker unit. Approximately 111 acres of various recreational amenities would be provided that comprised of a publicly accessible multi-use trail system that would circulate throughout the project site and connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets, parkland, and open space. The project also proposes allowable deviations from the development regulations pertaining to height, minimum side yard and rear yard setbacks, minimum lot depth, minimum lot width, minimum lot area, and minimum street frontage. The project would also construct various site improvements, including associated hardscape, landscaping, infrastructure (e.g., off-site utility connections of water, sewer), storm drain, and access. The approximate 164.5-acre 18-hole Carmel Mountain Golf Course is located at 14050 Carmel Ridge Road. The General Plan designates the project site as Park, Open Space, and Recreation; the Carmel Mountain Ranch Community Plan designates the site as Private Recreation-Golf Course and is zoned AR-1-1, RS-1-13, RS-1-14, RM-1-1, RM-2-5, and RM-3-7. Additionally, the site is within the Airport Land Use Compatibility Overlay Zone for Marine Corps Air Station (MCAS) Miramar, the Airport Influence Area (AIA) for MCAS Miramar (Review Area 2), Very High Fire Hazard Severity Zone (Very High), Residential Tandem Parking Overlay Zone, parking Standards Transit Priority Area, and Transit Priority Area. (APNs: 313-043-09, 313-040-60, 313-040-62, 313-031-28, 313-040-71, 313-541-10, 313-660-43, 313-704-01, 313-704-02, 313-040-79, 313-040-80, 313-031-32, 313-043-01, 313-043-02, 313-043-03, 313-653-40, 313-621-29, 313-512-43, 313-523-13, 313-040-85, 313-040-71, 313-690-26, 313-690-25, 313-041-09, and 313-340-26). Applicant: : NUW12-CMR, LLC.

ENVIRONMENTAL DETERMINATION:

This document has been prepared by the City of San Diego's Environmental Analysis Section under the direction of the Development Services Department and is based on the City's independent analysis and conclusions made pursuant to 21082.1 of the California Environmental Quality Act (CEQA) Statutes and Sections 128.0103(a), 128.0103(b) of the San Diego Land Development Code.

Based on the analysis conducted for the project described above, the City of San Diego, as the Lead Agency, has prepared the following Environmental Impact Report. The analysis addressed the following issue area(s) in detail: **Land Use, Transportation/Circulation, Air Quality, Biological Resources, Energy, Geologic Conditions, Greenhouse Gas Emissions, Health and Safety, Historical Resources, Hydrology, Noise, Paleontological Resources, Population and Housing, Public Services and Facilities, Public Utilities, Tribal Cultural Resources, Visual Effects/Neighborhood Character, Water Quality, Wildfire** and **Cumulative**. The EIR concluded that the project would result in significant but mitigated environmental impacts to **Biological Resources, Historical Resources, Noise, Tribal Cultural Resources, and Public Utilities**; whereas significant and unmitigated impacts to **Transportation, Population and Housing, and Public Services and Facilities** were concluded. All other impacts analyzed in the Draft EIR were either determined to have no impact or be less than significant.

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the draft Environmental Impact Report and were invited to comment on its accuracy and sufficiency.

Federal Government

MCAS Miramar Air Station (13)

U.S. Fish & Wildlife Service (23)

State of California

Caltrans, District 11 (31)

Department of Fish and Wildlife (32)

Department of Toxic Substance Control (39)

California Regional Water Quality Control Board (44)

State Clearinghouse (46)

California Transportation Commission (51)

California Department of Transportation (51A)

California Department of Transportation (51B)

State of California - continued

California Native American Heritage Commission (56)

California Highway Patrol (58)

City of San Diego

Mayor's Office (91)

Councilmember LaCava, District 1 (MS 10A)

Councilmember Campbell, District 2 (MS 10A)

Councilmember Whitburn, District 3 (MS 10A)

Councilmember Montgomery, District 4 (MS 10A)

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Park Planning

Fire-Rescue Department

San Diego Police Department

Transportation Development - DSD (78)

Development Coordination (78A)

Fire and Life Safety Services (79)

San Diego Fire – Rescue Department Logistics (80)

Historical Resources Board (87)

San Diego Housing Commission (88)

Tom Tomlinson, Facilities Financing (93B)

City Attorney (93C)

Other Interested Organizations, Groups and Individuals

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City of Poway, Jon M. Canavan, Fire Chief

Other Interested Organizations, Groups and Individuals - continued

San Diego Association of Governments (108)

San Diego Regional County Airport Authority (110)

San Diego Transit Corporation (112)

Metropolitan Transit Systems (115)
Poway Unified School District (124)
Rancho Santa Ana Botanic Garden at Claremont (161)
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San Diego Audubon Society (167)
Mr. Jim Peugh (167A)
California Native Plant Society (170)
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Carmen Lucas (206)
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Save Our Heritage Organization (214)
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Clint Linton (215B)
Frank Brown – Inter-Tribal Cultural Resources Council (216)
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Kumeyaay Cultural Heritage Preservation (223)
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RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.
- () Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.



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Program Manager
Development Services Department

Analyst: Shearer-Nguyen

December 23, 2020
Date of Draft Report

Date of Final Report

DRAFT

**Trails at Carmel Mt. Ranch
Environmental Impact Report**

Project No. 652519 / State Clearinghouse No. 2020039006

Prepared for:

**City of San Diego
Development Services Department
Land Development Review**

1222 First Avenue, MS501
San Diego, California 92101-4155

DECEMBER 2020

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACM	asbestos-containing material
ACOE	U.S. Army Corps of Engineers
AERMOD	American Meteorological Society/EPA Regulatory Model
ALUCP	airport land use compatibility plan
amsl	above mean sea level
APE	Area of Potential Effect
AST	aboveground storage tank
BMP	best management practice
BMZ	TBD
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Health and Safety Administration
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAL-NAGPRA	California Native American Graves Protection and Repatriation Act
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	California Fire Code
cfs	cubic feet per second
CGS	California Geological Survey
CNEL	community noise equivalent level
CNRA	California Natural Resources Agency
CO ₂ e	carbon dioxide equivalent
CPA	Community Planning Area
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
dB	decibels
dBA	A-weighted decibels
DEH	Department of Environmental Health
DSD	Development Services Department

Acronym/Abbreviation	Definition
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EISA	Energy Independence and Security Act
EMMA	Emergency Management Mutual Aid
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
ESL	Environmentally Sensitive Lands
EV	electric vehicle
FAA	Federal Aviation Administration
FFLMR	fire fuel load modeling report
FHSZ	Fire Hazard Severity Zone
GHG	greenhouse gas
GWP	global warming potential
HCFC	hydrochlorofluorocarbon
HERO	Human and Ecological Risk Office
HFC	hydrofluorocarbon
HMCP	hazardous materials contingency plan
HOV	high-occupancy vehicle
HRA	health risk assessment
HVAC	heating, ventilation, and air-conditioning
I	Interstate
IFC	International Fire Code
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
L _{dn}	day-night average sound level
L _{eq}	equivalent sound level
L _{max}	maximum sound level
LOS	level of service
LUST	leaking underground storage tank
MCAS	Marine Corps Air Station
MDL	method detection limit
mg/kg	milligrams per kilogram
MHMP	Multi-Jurisdictional Hazard Mitigation Plan
MHPA	Multi-Habitat Planning Area
MLD	Most Likely Descendant
MMT	million metric ton
MRZ	Mineral Resource Zone

Acronym/Abbreviation	Definition
MS4	municipal separate storm sewer system
MSCP	Multiple Species Conservation Program
MT	metric ton
MTS	Metropolitan Transit System
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic Safety Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSLU	noise-sensitive land use
OEHHA	Office of Environmental Health Hazard Assessment
OPLA-PRP	Omnibus Public Lands Act–Paleontological Resources Preservation
OSHA	Occupational Safety and Health Administration
PFC	perfluorocarbon
Phase I ESA	Phase I environmental site assessment
PPV	peak particle velocity
PRG	preliminary remediation goal
PUSD	Poway Unified School District
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
REC	recognized environmental condition
RFS	Renewable Fuel Standard
RHNA	regional housing needs assessment
RPS	Renewables Portfolio Standard
RSL	regional screening level
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SAM	Site Assessment and Mitigation
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SCS	sustainable communities strategy
SDFRD	City of San Diego Fire–Rescue Department
SDG&E	San Diego Gas and Electric
SDNHM	San Diego Natural History Museum
SDPD	San Diego Police Department
SF ₆	sulfur hexafluoride
SLCP	short-lived climate pollutant
SR	State Route

Acronym/Abbreviation	Definition
SSC	species of special concern
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TPA	Transit Priority Area
TPH	total petroleum hydrocarbons
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VOC	volatile organic compound
Westec	Westec Services Inc.
WL	watch list
ZEV	zero emission vehicle
HOA	homeowner's association

Executive Summary

This Environmental Impact Report (EIR) has been prepared for The Trails at Carmel Mountain Ranch (project). This document analyzes the potential environmental effects associated with implementation of the project. The EIR was prepared under the direct of the City of San Diego's (City's) Environmental Analysis Section and reflects the independent judgment of the City as lead agency pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC), Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.). This EIR was prepared to evaluate the environmental effects of the project.

ES.1 Purpose and Scope of the EIR

This EIR has been prepared in accordance with, and complies with the all criteria, standards, and procedures of CEQA (Public Resources Code, Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the City's EIR Preparation Guidelines. Per Section 21067 of CEQA and Sections 15367 and 15050 through 15053 of the CEQA Guidelines, the City is the lead agency under whose authority this document has been prepared. As an informational document, this EIR is intended for use by City decision-makers and members of the general public in evaluating the potential environmental effects of the project.

This EIR provides decision-makers, public agencies, and the public in general with detailed information about the potential significant adverse environmental impacts of the project. By recognizing the environmental impacts of the project, decision makers will have a better understanding of the physical and environmental changes that would accompany the project should it be approved. The EIR includes recommended mitigation measures which, when implemented, would provide the lead agency with ways to substantially lessen or avoid significant effects of the project on the environment, whenever feasible. Alternatives to the project are presented to evaluate alternative development scenarios that can further reduce or avoid significant impacts associated with the project.

ES.2 Project Location and Setting

The proposed project is located within the City of San Diego (City), in the Carmel Mountain Ranch Community. The project proposes to redevelop the closed Carmel Mountain Ranch Country Club and associated 18-hole golf course. The project site is located west of the City of Poway, east of the community of Rancho Peñasquitos, north of the community of Sabre Springs, and south of the community of Rancho Bernardo (Figure 2-1, Regional Location). The project site is bounded by Ted Williams Parkway to the south, Carmel Mountain Road to the north, Interstate 15 (I-15) to the west, and the boundary with the City of Poway to the east. The project site consists of approximately 164.5 acres and currently has an address of 14050 Carmel Ridge Road, San Diego, California 92128.

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

The majority of native habitat in the project area is associated with Chicarita Creek along the western boundary of the project area (adjacent to holes 3, 4, and 5), and along the eastern boundary adjacent to a parcel owned by the City of Poway (adjacent to hole 15).

ES.3 Project Objectives

The following are the goals and objectives of the project:

1. Provide multi-family housing units with a range of housing types that are compatible with the adjacent established residential communities.
2. Assist the City of San Diego (City) in meeting state and local housing goals by providing opportunities for high-quality, new, market-rate and deed-restricted housing to meet the needs of current and future City residents on vacant land centrally located near existing jobs, transit, commercial, and industrial development.
3. Preserve the majority of the project site as open space, avoid areas of native vegetation or potentially suitable habitat for special-status plant species, and avoid areas of sensitive habitat including jurisdictional areas and their associated 100-foot buffers.
4. The project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-tolerant, native landscaping.
5. Create a wide-range of active and passive public recreational opportunities above and beyond what is required by City regulations.
6. Establish a multi-use trail system for pedestrians and bicyclists with connections to major amenities and adjacent neighborhoods. Establish a public system of trails and paths for community-wide use, thereby providing enhanced neighborhood connectivity.
7. Ensure new uses are compatible with the existing community by establishing 50-foot setbacks, design regulations and guidelines, best practices, and performance standards to ensure that the project is cohesive and respectful of existing properties.

ES.4 Project Description

The proposed project would allow for a total of 1,200 multi-family homes and a mix of open space and recreational uses.

The project would develop distinct residential neighborhoods with a diversity of housing types and open space amenities and with a unique character and sense of place which would be accomplished through implementation of project-specific design guidelines. Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood, providing a sense of place and arrival. Homes would be clustered and oriented around private open spaces and community amenities, providing a sense of neighborhood identity. Buildings would be oriented and relate directly to internal streets, paseos, greenways, and common open space amenities and generally create an attractive presence and “eyes on the street.”

Residential land uses would be developed as infill residential neighborhoods consistent with the policies and regulations established in the Trails at Carmel Mountain Ranch Design Guidelines (Appendix B). The residential development would occur on approximately 52.9 acres ranging in density from 13 to 37 dwelling units per acre. The proposed project would allow up to 1,200 residential dwelling units with heights ranging from 37 to 48 feet (inclusive of all building appurtenances such as solar panels, chimneys and mechanical equipment). All proposed new residential structures would be set back 50 feet from existing residential development.

The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.4 acres.

Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Building designs would establish a pattern and hierarchy of building massing and forms to help reduce the visual bulk of the development and would incorporate smaller-scale architectural elements, such as bay windows, porches, projecting eaves, awnings, and similar elements, to add visual interest and reduce the scale and mass of buildings.

Development of the residential neighborhoods would be implemented through City-wide zoning with allowable deviation from the development standards described in the Design Guidelines (Appendix B). The Design Guidelines provide guidance and direction on site planning, building design, and landscape design, brush management. See Table 3-1 and 3-2, below for a breakdown of zoning, density, and height limits allowed by the applicable City-wide zoning. The Design Guidelines also provide objective criteria for long-term maintenance of open space and trails.

Areas zoned RM-1-1 and RM-1-3 would include two- and three-story townhomes, with two or three bedrooms. Areas zoned RM-2-4 through RM-3-7 would include three- and four-story apartments, with studios, one, two, and three bedrooms.

In addition, the project proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library. This gallery may include up to 6,000 square feet in one or two buildings to house gallery space, studio space with an indoor kiln, and a bathroom/kitchen. In addition, this amenity could include an up-to-2,000-square-foot outdoor open shed structure to house a wood-burning ceramic kiln, wood storage, and a washing area. A 3,000-square-foot café/restaurant/banquet area is proposed with 2,000 square feet of dining space and a 1,000-square-foot kitchen. An additional caretaker unit up to 1,200 square feet would also be proposed. This Community Plan Land Use proposed is Community Commercial and the zone would be CC-2-1.

ES.5 Summary of Significant Impacts and Mitigation Measures that Reduce or Avoid Significant Impacts

Tables ES-1, located at the end of this section, summarizes the results of the environmental analysis completed for the project pursuant to the CEQA Guidelines Section 15123(b)(1). Table ES-1 identifies the significant impacts, mitigation measures to reduce and/or avoid significant environmental effects, and concludes if the impact would be mitigated to below a level of significance with implementation of mitigation measures. The mitigation measures listed in Table ES-1 are also discussed within each relevant topic area and fully contained in Mitigation Monitoring and Reporting Program.

As shown in Table ES-1, impacts related to transportation/circulation, biological resources, historical resources, noise, population and housing, and tribal cultural resources were found to be significant without mitigation. However, following implementation of mitigation measures, impacts related to biological resources, historical resources, and tribal cultural resources would be reduced to a level below significance.

Significant impacts related to transportation/traffic circulation, public services (libraries), and population and housing would remain significant and unavoidable. Additionally, cumulative impacts associated with transportation/traffic circulation and population and housing would be significant and unavoidable.

ES.6 Areas of Controversy

Pursuant to CEQA Section 15123(b)(2), an EIR shall identify areas of controversy known to the lead agency, including issues raised by the agencies, and the public, and issues to be resolved. The NOP for the EIR was distributed on March 3, 2020, for a 30-day public review and comment period, and a scoping meeting was held virtually on [Date]. Public comments were received on the NOP that reflect controversy on several environmental issues.

Issues of controversy raised include concerns related to land use, transportation/circulation, biological resources, visual effects and neighborhood character, noise, air quality and odor, greenhouse gases, health and safety, hydrology and water quality, and cumulative impacts. The NOP, comment letter, and public scoping meeting transcript are included in this EIR as Appendix A.

ES.7 Issues to be resolved by the Decision-Making Body

The City Council must review the project and this EIR and determine if the project or one of the alternatives presented in Chapter 8 should be adopted and implemented. If the project is selected for adoption, the City Council will be required to certify the EIR, determine whether and how to mitigate significant impacts, and adopt associated Findings of Fact pursuant to CEQA Guidelines Section 15091 for the following significant impacts identified in the EIR:

- Biological Resources

- Historical Resources
- Noise
- Public Utilities
- Tribal Cultural Resources

Furthermore, a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 would be required for those impacts found to be to be significant and unmitigable identified in the EIR:

- Transportation/Circulation
- Public Services (Libraries)
- Population and Housing

ES.8 Project Alternatives

CEQA requires that environmental impact reports (EIRs) contain an analysis of alternatives to the project that would avoid or substantially lessen environmental impacts. Section 15126.6(a) of the CEQA Guidelines states that an EIR should “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” (14 CCR 15000 et seq.). The selection of alternatives is governed by a “rule of reason” that requires an EIR to evaluate only those alternatives necessary to permit a reasoned choice (Section 15126.6(f)). The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons for that determination (Section 15126.6(c)). Additionally, CEQA requires discussion of a No Project Alternative to give decision makers the ability to compare impacts of approving the project with those of not approving the project (Section 15126.6(e)).

Pursuant to the CEQA Guidelines, a range of alternatives for the Trails at Carmel Mountain Ranch is considered in this EIR. These alternatives were developed in the course of project planning, environmental review, and public input. The discussion in this section provides a description of alternatives considered and an analysis of whether the alternatives meet most of the objectives of the project.

Per CEQA Guidelines, Sections 15126.6 (b) and (c), the focus of this analysis is to determine (1) whether alternatives are capable of avoiding or substantially lessening the significant environmental effects of the project, (2) the feasibility of alternatives, and (3) whether an alternative meets all or most of the basic project objectives. This chapter focuses on those alternatives that are capable of reducing or eliminating significant environmental impacts, even if they would impede the attainment of some project objectives or would be more costly. In accordance with Section 15126(f)(1) of the CEQA Guidelines, the factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site.

ES.8.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the project would not be implemented and the site would remain in its current condition.

ES.8.2 Reduced Density Alternative

This alternative would have the same footprint of the proposed project, but the density would be reduced. This would reduce the number of multi-family homes proposed from 1,200 to 825 (353 4-story apartments, and 472 3-story for-sale townhomes). This alternative would also reduce the estimated number of people anticipated to occupy the new development from 3,180 people to 2,186.

The same discretionary actions as would be required for the project would be required for this alternative, including a General Plan Amendment, Community Plan Amendment, Rezone, Vesting Tentative Map, and Master Planned Development Permit.

The intent of this alternative is to reduce the severity of impacts associated with population and housing, and traffic/transportation. Based on the analysis below, while this alternative would slightly reduce population and housing, and traffic/transportation impacts, they would nonetheless remain significant and unavoidable. Further, based on the analysis below, this alternative would reduce the following impacts identified as less than significant with or without mitigation under the proposed project, but would not avoid impacts: air quality, energy, greenhouse gas emissions, noise, public utilities, public services, and visual effects/neighborhood character.

ES.8.3 Reduced Footprint Alternative

The Reduced Footprint Alternative would result in the elimination of development on Units 1 and 2, and increase density on Unit 9. This would remove 66 dwelling units from Unit 1 and 87 dwelling units from Unit 2. These dwelling units would then be added to Unit 9, which would increase the number of dwelling units on Unit 9 from 300 to 453. In order to accommodate an additional 153 dwelling units on Unit 9, buildings would have to be 4 to 6 stories in height (48 to 68 feet tall). The height deviation request would need to be increased in comparison to the proposed project. The project is requesting a height deviation of up to 48 feet while the Reduced Footprint Alternative would request a height deviation of up to 68 feet in order to accommodate in the increase in dwelling units on Unit 9.

The same discretionary actions as required for the project would also be required for this alternative, including a General Plan Amendment, Community Plan Amendment, Rezone, Vesting Tentative Map, and Master Planned Development Permit.

The intent of this alternative is to reduce the amount of land disturbance than what would occur under the project. Less land contouring would be necessary to construct the building pads, driveways, retaining walls, and on-site drainage facilities, and thus, this alternative would reduce, impacts to historical resources, paleontological resources, and tribal cultural resources. However, notably, impacts to these resources were already less than significant under the proposed project. This alternative would not reduce the project's significant and unavoidable impacts associated with transportation/traffic and population/housing.

ES.8.4 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. The context of an environmentally superior alternative is based on consideration of several factors, including the proposed project's objectives and the ability to fulfill the goals while reducing potential impacts to the environment.

The No Project/No Development Alternative would have the fewest impacts. Under this alternative, however, none of the project objectives would be met. As previously identified, 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." Thus, the environmentally superior alternative, as identified in the analysis above, would be the Reduced Density Alternative.

However, this alternative would not avoid any of the project's significant and unavoidable impacts to traffic/transportation and population/housing. The following issue areas that would be less than significant with or without mitigation under the proposed project, would be slightly reduced under the Reduced Density Alternative: air quality, energy, greenhouse gas emissions, noise, transportation/circulation, public utilities, public services and facilities, population and housing, and visual effects and neighborhood character. In addition, this alternative would meet most of the project objectives.

ES.9 Summary of Significant Impacts and Mitigation

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
Transportation/Circulation		
It is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions. Accordingly, the project would have a significant impact (Impact TRA-1) relative to VMT.	As shown, the residential component of the project has a significant VMT transportation impact. The project will utilize participation in the Complete Communities, Mobility Choices program for mitigation for Impact TRA-1. The City of San Diego's Complete Communities, Mobility Choices Program requires VMT reducing amenities or payment of an in-lieu fee depending on a project's location. Compliance with the Mobility Choices Program can be used as mitigation for a significant VMT transportation impact. The City prepared an EIR for the Mobility Choices Program and disclosed that even with implementation of the regulations there would still be significant and unavoidable VMT impacts. Projects that utilize the	With the incorporation of MM-TRA-1 impacts would remain significant and unavoidable .

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>Mobility Choice Program to provide mitigation for VMT transportation impacts are able to tier from the City's EIR, which was certified on November 9, 2020 by the City Council.</p> <p>The Mobility Choices Program allows a project that has a significant impact to use compliance with the regulation as full, and compliance with the Program along with other available mitigations can be determined to be mitigation "to the extent feasible" for a significant and unavoidable transportation VMT impact. The requirements of the Mobility Choices Program are based on where a project is located in the City. The City is divided into four mobility zones. If a project is in mobility zones 1, 2, or 3 then the project is required to include VMT reducing amenities on or adjacent to the project site. If a project is located in mobility zone 4, the project is required to pay an in-lieu fee that would be used to construct VMT reducing infrastructure in mobility zones 1, 2, or 3. Based on the Mobility Choices Program map, a portion of the project is located in mobility zone 2, and a portion is in mobility zone 4.</p> <p>MM-TRA-1: Since the regulations define mobility zone 2 as any premises located either partially or entirely in a Transit Priority Area, VMT reduction guidelines for mobility zone 2 were applied to the entire project. The project will include VMT reduction measures totaling at least 5 points in accordance with <i>Land Development Manual, Appendix T</i> as mitigation.</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation												
	<p>The project includes several features that qualify for points per Appendix T. Table 5.2-2 describes the specific measures and demonstrates that the project meets the required 5 points. These VMT reducing measures will be identified on the detailed site plans for each Unit as they move forward after the tentative map process, and will be called out on the overall project site plan for the discretionary process.</p> <p>Table 5.2-2. The Trails VMT Reduction Measures</p> <table> <tr> <th>VMT Reduction Measures</th><th>Location within the Project</th><th>Points for Measure</th></tr> <tr> <td><i>Appendix T Measure 12. Providing on-site bicycle repair station.</i></td><td>On-site bicycle repair stations will be located within Unit 9, Unit 10, and Unit 16.</td><td>4.5 (1.5 x 3 stations)</td></tr> <tr> <td><i>Appendix T Measure 16. Providing short-term bicycle parking spaces that are available to the public, at least 10% beyond the minimum requirements.</i></td><td>Each Unit will provide short-term bicycle parking 10% beyond the minimum requirements for public use. For the entire Project, approximately 600 short term bicycle parking spaces are required for residents; therefore, approximately 60 additional bicycle parking spaces will be dispersed throughout the Project Units for public use.</td><td>1.5</td></tr> <tr> <td colspan="2">Total Points</td><td>6</td></tr> </table> <p>Source: Fehr & Peers.</p>	VMT Reduction Measures	Location within the Project	Points for Measure	<i>Appendix T Measure 12. Providing on-site bicycle repair station.</i>	On-site bicycle repair stations will be located within Unit 9, Unit 10, and Unit 16.	4.5 (1.5 x 3 stations)	<i>Appendix T Measure 16. Providing short-term bicycle parking spaces that are available to the public, at least 10% beyond the minimum requirements.</i>	Each Unit will provide short-term bicycle parking 10% beyond the minimum requirements for public use. For the entire Project, approximately 600 short term bicycle parking spaces are required for residents; therefore, approximately 60 additional bicycle parking spaces will be dispersed throughout the Project Units for public use.	1.5	Total Points		6	
VMT Reduction Measures	Location within the Project	Points for Measure												
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Total Points		6												
Biological Resources														
Special-Status Wildlife Species	MM-BIO-1 Biological Resources (Protection During Construction)	With the incorporation of MM-BIO-1 impacts												

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
<p>Construction-related noise may impact breeding wildlife, including three MSCP-covered species—, least Bell’s vireo, coastal California gnatcatcher and Cooper’s hawk—as well as yellow warbler, if construction occurs during the breeding season (March 1 through August 15 for California gnatcatcher, January 15 through August 31 for Cooper’s hawk, and February 1 through September 15 for other breeding bird species). Impacts would be potentially significant (Impact BIO-1).</p>	<p>I. Prior to Construction</p> <p>A. Biologist Verification: The owner/permittee shall provide a letter to the City’s Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego’s Biological Guidelines (2018), has been retained to implement the project’s biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.</p> <p>B. Preconstruction Meeting: The Qualified Biologist shall attend the preconstruction meeting, discuss the project’s biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.</p> <p>C. Biological Documents: The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance (ESL), project permit conditions; California Environmental Quality Act (CEQA); endangered species acts (ESAs); and/or other local, state or federal requirements.</p> <p>D. BCME: The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general</p>	<p>would be reduced to less than significant.</p>

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.</p> <p>E. Avian Protection Requirements: To avoid any direct impacts to the least Bell's vireo, Cooper Hawk, and yellow warbler, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The survey area shall cover the limits of disturbance and 300 feet from the area of disturbance. The applicant shall submit the results of the pre-construction survey to City DSD for review and approval prior to initiating any construction activities. If nesting least Bell's vireo, Cooper Hawk, and yellow warbler are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e.</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of the least Bell's vireo, Cooper Hawk, and yellow warbler or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.</p> <p>F. Resource Delineation: Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including least Bell's vireo, Cooper Hawk, and yellow warbler) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.</p> <p>G. Education: Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).</p> <p>II. During Construction</p> <p>A. Monitoring: All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on “Exhibit A” and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSV). The CSV shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.</p> <p>B. Subsequent Resource Identification: The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc). If active nests of the least Bell’s vireo, Cooper Hawk, and yellow warbler or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.</p> <p>III. Post Construction Measures</p> <p>A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.	
Historical Resources		
Archaeology The survey conducted by Dudek as part of the cultural report confirmed that P-37-006082 is the only previously identified resource within the project APE that has not been completely obscured or destroyed by development of Carmel Mountain Ranch. As such, impacts to this resource resulting from the proposed project construction would be potentially significant (Impact HR-1) .	<p>MM-HR-1 Avoidance of Known Cultural Resources: Prior to beginning any construction related activity on-site associated with Phase 3 (Units 3, 4, 5, and 7), Owner/Permittee shall implement the conditions as detailed in MM-HR-2 Historical Resources (Construction Monitoring).</p> <p>MM-HR-2 Construction Monitoring:</p> <p>The following monitoring program shall be implemented to protect unknown archaeological or tribal cultural resources that may be encountered during construction and/or maintenance-related activities.</p> <p>I. Prior to Permit Issuance</p> <p>A Entitlements Plan Check</p> <p>1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.</p> <p>B. Letters of Qualification</p>	With the incorporation of MM-HR-1 and MM-HR-2 impacts would be reduced to less than significant .

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<ol style="list-style-type: none"> 1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation. 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG. 3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program. <p>II. Prior to Start of Construction</p> <p>A. Verification of Records Search</p> <ol style="list-style-type: none"> 1. The PI shall provide verification to MMC that a site-specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed. 	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<ol style="list-style-type: none"> 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities. 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius. <p>B. PI Shall Attend Preconstruction (Precon) Meetings</p> <ol style="list-style-type: none"> 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor. <ol style="list-style-type: none"> a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring. 2. Identify Areas to be Monitored <ol style="list-style-type: none"> 1. Prior to the start of any work that requires monitoring, the 	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.</p> <p>2. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).</p> <p>3. When Monitoring Will Occur</p> <p>a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.</p> <p>b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.</p> <p>III. During Construction</p> <p>A. Monitor(s) Shall be Present During Grading/Excavation/Trenching</p> <p>1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.</p> <p>2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.</p> <p>4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.</p> <p>B. Discovery Notification Process</p> <p>1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.</p> <p>2. The Monitor shall immediately notify the PI</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>(unless Monitor is the PI) of the discovery.</p> <p>3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.</p> <p>4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.</p> <p>C. Determination of Significance</p> <p>1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.</p> <p>a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.</p> <p>b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.</p> <p>c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.</p> <p>IV. Discovery of Human Remains</p> <p>If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec.</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:</p> <p>A. Notification</p> <ol style="list-style-type: none"> 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process. 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone. <p>B. Isolate discovery site</p> <ol style="list-style-type: none"> 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains. 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance. 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin. 	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>C. If Human Remains ARE determined to be Native American</p> <ol style="list-style-type: none"> 1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call. 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information. 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes. 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods. 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if: <ol style="list-style-type: none"> a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR; b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance 	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN</p> <p>c. To protect these sites, the landowner shall do one or more of the following:</p> <p>(1) Record the site with the NAHC;</p> <p>(2) Record an open space or conservation easement; or</p> <p>(3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.</p> <p>V. Night and/or Weekend Work</p> <p>A. If night and/or weekend work is included in the contract</p> <p>1. When night and/or weekend work is included in the contract package, the extent and timing</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>shall be presented and discussed at the precon meeting.</p> <p>2. The following procedures shall be followed.</p> <p>a. No Discoveries: In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day:</p> <p>b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.</p> <p>c. Potentially Significant Discoveries: If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV- Discovery of Human Remains shall be followed.</p> <p>d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>Section III-B, unless other specific arrangements have been made.</p> <p>B. If night and/or weekend work becomes necessary during the course of construction</p> <ol style="list-style-type: none"> 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin. 2. The RE, or BI, as appropriate, shall notify MMC immediately. <p>C. All other procedures described above shall apply, as appropriate.</p> <p>VI. Post Construction</p> <p>A. Preparation and Submittal of Draft Monitoring Report</p> <ol style="list-style-type: none"> 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for 	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>submittal of monthly status reports until this measure can be met.</p> <p>a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.</p> <p>b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms- DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.</p> <p>2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.</p> <p>3. The PI shall submit revised Draft Monitoring Report to MMC for approval.</p> <p>4. MMC shall provide written verification to the PI of the approved report.</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.</p> <p>B. Handling of Artifacts</p> <p>1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued</p> <p>2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.</p> <p>3. The cost for curation is the responsibility of the property owner.</p> <p>C. Curation of artifacts: Accession Agreement and Acceptance Verification</p> <p>1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.</p> <p>2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>submitted to the RE or BI and MMC.</p> <p>3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.</p> <p>D. Final Monitoring Report(s)</p> <p>1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.</p> <p>2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.</p>	
Religious or Sacred Uses	See (MM-HR-2(IV)), above.	With implementation of MM-HR-2 , as

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Impact	Mitigation Measures	Level of Significance After Mitigation
No existing religious or sacred uses are located on the project site. However, prior to mitigation (MM-HR-2(IV)), impacts would be potentially significant (Impact HR-2) .		described above, impacts would be reduced to less than significant .
Noise		
<p>Short-Term Construction</p> <p>Given the nature of the project site being interspersed with and in proximity to existing residential land uses, construction operations associated with the proposed project have the potential to exceed the City's 75 dBA 12-hour average property line noise level threshold, resulting in a potentially significant impact (Impact NOI-1).</p> <p>Residential Mechanical Noise</p> <p>As stated above, assuming an attenuation rate of 6 dB per doubling of distance and shielding that would break the line of site to the outdoor HVAC equipment, the noise level at the nearest receiving property line would be</p>	<p>MM-NOI-1</p> <p>Construction Noise Reduction Techniques. Prior to issuance of demolition, grading, or building permits, Mitigation Monitoring Coordination shall verify that construction activity occurring as a result of proposed project implementation within 175 feet of noise-sensitive receivers includes noise-reduction measures to ensure construction activities do not exceed the 75 dBA CNEL and comply with City of San Diego Noise Standards (San Diego Municipal Code Section 59.5.0401, Sound Level Limits, and Section 59.5.0404, Construction Noise), as follows:</p> <ul style="list-style-type: none"> A. Construction operations and related activities associated with the proposed project shall be performed during daytime hours, as outlined within the San Diego Municipal Code, between 7:00 a.m. and 7:00 p.m., with the exception of the days and holidays identified in the Municipal Code. B. Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. 	With implementation of MM-NOI-1 through MM-NOI-3 impacts would be reduced to less than significant .

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
<p>approximately 44.5 dBA during continuous operation, exceeding the San Diego Municipal Code residential noise level standard of 40 dBA between 10:00 p.m. and 7:00 a.m., resulting in a potentially significant impact (Impact NOI-2).</p> <p><i>Outdoor Recreation and Gathering Spaces</i></p> <p>Sound levels associated with the outdoor recreation activities and events would have the potential to exceed San Diego Municipal Code non-transportation noise standards, resulting in a potentially significant impact (Impact NOI-3).</p>	<p>Internal combustion powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed manufacturer specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function and minimization of noise.</p> <p>C. Portable and stationary site support equipment (such as generators, compressors, rock crushers, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.</p> <p>D. Impact tools shall have the working area/impact area shrouded or shielded, with intake and exhaust ports on power equipment muffled or suppressed. This may necessitate the use of temporary or portable, application specific noise shields or barriers if construction noise levels exceed the San Diego Municipal Code property line sound level threshold.</p> <p>E. Construction equipment shall not be idled for extended periods (e.g., 15 minutes or longer) of time in the immediate vicinity (i.e., within 25 feet) of noise-sensitive receptors.</p> <p>F. A disturbance coordinator shall be designated by the general contractor, which will post contact information in a conspicuous location near the entrance of the project construction site, prior to</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>start of any construction activities so that it is clearly visible to nearby receivers most likely to be disturbed. The coordinator shall manage complaints resulting from the construction noise, by instituting modifications to the construction operations, construction equipment or work plan to ensure compliance with the San Diego Municipal Code standards, where complaints are valid and substantive. Recurring disturbances shall be evaluated by a qualified acoustical consultant retained by the project proponent to ensure compliance with applicable standards.</p> <p>MM-NOI-2 Mechanical Equipment Noise Reduction Measures. Prior to issuance of building permit, Mitigation Monitoring Coordination shall verify that mechanical noise levels are minimized to meet applicable City of San Diego (City) noise thresholds through equipment selection, project-site design, and construction of localized barriers or parapets. Selection of mechanical equipment shall consider radiated outdoor sound pressure levels and efficiency as the primary criteria. Outdoor residential mechanical equipment shall be located so that line-of-site from the equipment to the adjacent noise-sensitive receiving property line is blocked by intervening building elements or structures. Should the selection and placement of mechanical equipment that inherently complies with the City's criteria not be possible, localized noise barriers for equipment located at</p>	

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>grade, or rooftop parapets, shall be constructed around the heating, ventilation, and air-conditioning equipment so that line-of-site from the noise source to the property line of the adjacent noise-sensitive receptors is blocked. To ensure compliance with the San Diego Municipal Code, efficacy of the mechanical equipment location or intervening barrier shall be demonstrated through a noise analysis performed by a qualified acoustical consultant that shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.</p> <p>MM-NOI-3 Outdoor/Recreational and Gathering Space Noise Reduction Measures. Prior to issuance of a building permit, Mitigation Monitoring Coordination shall verify that sound levels associated with outdoor recreation activities and community events through application of project-site design and limitations on event capacity, allowable equipment, and operational hours (i.e., 7:00 a.m. to 7:00 p.m.) are minimized to meet applicable City of San Diego (City) noise thresholds. Proposed recreational activity areas shall be located in a manner to minimize noise exposure at surrounding noise-sensitive receptors. Use of recreational areas adjacent to noise-sensitive receptors shall be limited to daytime hours (7:00 a.m. to 7:00 p.m.), with the exception of temporary use permits granted by the City Manager. Community events using areas of the property immediately adjacent to noise-sensitive receptors</p>	

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Impact	Mitigation Measures	Level of Significance After Mitigation
	<p>shall be limited to daytime and evening hours (7:00 a.m. to 10:00 p.m.). The use of outdoor amplified sound systems shall be prohibited unless a detailed noise evaluation demonstrates such systems would be in compliance with San Diego Municipal Code. To ensure compliance with the San Diego Municipal Code, further noise analysis shall be performed for proposed recreational outdoor activity areas and community event venues by a qualified acoustical consultant with appropriate specifications provided for sound controls to meet applicable code requirements; the detailed noise analysis and controls shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.</p>	
Public Services		
<p>The project will provide a fair share contribution toward potential future improvements to the Carmel Mountain Ranch Library to address the impact caused by the project's population increase. However, no capital improvement program exists to redevelop the library site and no fee program has been established to fund such an project. Therefore, impacts to</p>	<p>No feasible mitigation measures.</p>	<p>Impacts would be significant and unavoidable.</p>

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
library facilities would be significant and unavoidable (Impact PUB-1).		
<i>Population and Housing</i>		
The project would directly induce substantial population growth to the area based on the currently adopted Housing Element (City of San Diego 2013) and impacts would be potentially significant (Impact PH-1).	No feasible mitigation measures.	Impacts would be significant and unavoidable .
<i>Public Utilities</i>		
The project proposes a fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station (MM-UTL-1). This fair-share contribution would be made prior to the issuance of the first building permit for Unit 9. Prior to implementation of MM-UTL-1, impacts would be potentially significant (Impact UTL-1).	MM-UTL-1: A fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station would be required prior to the issuance of the first building permit for Unit 9.	With implementation of MM-UTL-1 impacts would be reduced to less than significant .
<i>Tribal Cultural Resources</i>		
<i>Tribal Cultural Resources</i>	MM-TCR-1 Prior to issuance of any construction permits, such as Demolition, Grading or Building, or beginning any	With implementation of MM-TCR-1 impacts

Table ES-1. Summary of Significant Environmental Impacts and Mitigation

Impact	Mitigation Measures	Level of Significance After Mitigation
There is a potential for TCR to be impacted by project implementation. Impacts would be considered significant (Impact TCR-1) .	construction related activity on-site, Owner/Permittee shall implement the conditions as detailed in MM-HR-2 Historical Resources (Construction Monitoring).	would be reduced to less than significant .

1 Introduction

This chapter provides the purpose and legal authority for this Environmental Impact Report (EIR), the EIR scope and process, and an explanation of how the EIR is organized.

1.1 EIR Purpose

The purposes of an EIR are to:

- Inform governmental decision makers and the general public of the potentially significant environmental effects of the proposed project.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Reduce environmental impacts by identifying changes in the proposed project through the use of alternatives or mitigation measures.
- Streamline environmental review for subsequent projects consistent with the project.

1.1.1 EIR Legal Authority

The City is the Lead Agency as defined by Section 21063 of the California Environmental Quality Act (CEQA) Statutes, is “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.” This document complies with the criteria, standards, and procedures of CEQA (California Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Title 14 Section 15000 et seq.). Further, this document has been prepared as a project EIR pursuant to Section 15161 of the State CEQA Guidelines

This EIR has been prepared in accordance with the City’s EIR Guidelines (December 2005) and the City’s CEQA Significance Determination Thresholds (2016a). This document has been prepared as a Project EIR pursuant to Section 15161 of the State CEQA Guidelines, and it represents the independent judgment of the City as Lead Agency (State CEQA Guidelines Section 15050).

1.1.2 Intended Use of the EIR

The EIR is an informational document that will provide decision makers, responsible or trustee agencies (as defined under CEQA), other interested public agencies or jurisdictions, and members of the general public with information about (1) the potential for significant adverse environmental impacts that would result from the development of the proposed project, (2) possible ways to minimize any significant environmental impacts, and (3) feasible alternatives to the proposed project (California Public Resources Code, Section 21002.1[a]; 14 CCR 15121[a]). Responsible agencies will use this EIR to fulfill their legal authority to issue permits for the proposed project.

The EIR is informational in nature and is intended for use by City decision makers; other responsible, trustee, or interested agencies; and the general public in evaluating the potential environmental effects, mitigation measures, and alternatives of the project. This EIR provides detailed information about the potential significant adverse environmental impacts of the project. By recognizing the environmental impacts of the project, decision makers will have a better understanding of the physical environmental

changes that would accompany the approval of the project. The EIR includes recommended mitigation measures which, when implemented, would substantially lessen or avoid significant effects of the project on the environment, whenever feasible. Alternatives to the project are presented to evaluate alternative development scenarios that can further reduce or avoid significant impacts associated with the project.

1.2 EIR Legal Authority

1.2.1 Lead Agency

The City is the lead agency, defined in CEQA Guidelines Sections 15050 and 15367 as the “public agency which has the principal responsibility for carrying out or approving a project.” This EIR is intended to analyze the environmental impacts associated with the discretionary actions that require ultimate approval by the San Diego City Council.

1.2.2 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by responsible and trustee agencies. A Responsible Agency, defined pursuant to State CEQA Guidelines Section 15381, includes all public agencies other than the Lead Agency that have discretionary approval power over the project. A Trustee Agency is defined in Section 15386 of the CEQA Guidelines as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California. Implementation of the project would require consultation with the following responsible and trustee agencies, as described below.

There are no United States Army Corps of Engineer or California Department of Fish and Wildlife regulated impacts that would occur as part of the proposed project.

1.3 EIR Type

1.3.1 Type of EIR

This EIR has been prepared as a project EIR, as defined in Section 15161 of the CEQA Guidelines. A project EIR should “focus primarily on the changes in the environment that would result from the development project.” Furthermore, a project EIR should “examine all phases of the project including planning, construction and operation.” The proposed project and other related actions are described in Chapter 4, Project Description.

1.3.2 Notice of Preparation

In reviewing the application for the Project, the City concluded that the Project could result in potentially significant environmental impacts. As Lead Agency, the City prepared a Scoping Letter, which was distributed with the Notice of Preparation (NOP) on July 12, 2016 to all responsible and trustee agencies, as well as various governmental agencies, including the Office of Planning and Research’s State Clearinghouse (SCH), and interested individuals. The City had planned to hold a scoping meeting in accordance with Section 21083.9 of CEQA; however, due to Executive Order N-37-20, the City determined that no scoping meeting would be required.

In reviewing the application for the Project, the City concluded that the Project could result in potentially significant environmental impacts. As Lead Agency, the City distributed the Notice of Preparation (NOP) on March 3, 2020 to all responsible and trustee agencies, as well as various governmental agencies, including the Office of Planning and Research's State Clearinghouse (SCH), and interested groups and individuals. The scope of analysis for this EIR was determined by the City as a result of initial project review and consideration of comments received in response to the NOP. The NOP and public comments received are included as Appendix A of this EIR. Through these scoping activities, two issue areas were determined not to be significant: agricultural resources and mineral resources, as described in Chapter 7, Effects Found Not To Be Significant. The proposed project was determined to have the potential to result in significant environmental impacts to the following subject areas:

- Air Quality
- Biological Resources
- Energy
- Geologic Conditions
- Greenhouse Gas Emissions
- Health and Safety
- Historical Resources
- Hydrology
- Land Use
- Noise
- Paleontological Resources
- Population and Housing
- Public Services and Facilities
- Public Utilities
- Transportation
- Tribal Cultural Resources
- Visual Effects and Neighborhood Character
- Water Quality
- Wildfire

Verbal and written comments received during the scoping process have been taken into consideration during the preparation of this EIR. An outline of the issues noted during the scoping process is contained in the *Areas of Controversy/Issues to be Resolved* discussion in the Executive Summary section. The environmental conditions evaluated as the baseline in this EIR are those that existed at the time the NOP was circulated as described in Chapter 2, *Environmental Setting*.

1.3.3 EIR Organization

The content and format of this project EIR are in accordance with the most recent guidelines and amendments to CEQA and the State CEQA Guidelines. Technical studies have been summarized within individual environmental issue sections, and the full technical studies have been included in the appendices.

The following is a brief overview of the chapters of this EIR:

- **Executive Summary.** This chapter provides a summary of the EIR; a brief description of the proposed project; an identification of areas of controversy; and a summary table identifying significant impacts, proposed mitigation measures, and the significance of impacts after mitigation. A summary of the proposed project alternatives and a comparison of the potential impacts of the alternatives with those of the proposed project are also provided.
- **Chapter 1, Introduction.** This chapter contains an overview of the legal authority, purpose, and intended uses of the EIR, as well as its scope and content. It also provides a discussion of the CEQA environmental review process, including public involvement.
- **Chapter 2, Environmental Setting.** This chapter describe the precise location of the project with an emphasis on the physical features of the site and the surrounding areas. In addition, the section

provides a local and regional description of the environmental setting of the project, as well as the zoning and General Plan/Community Plan land use designations of the site and its contiguous properties, area topography, drainage characteristics, and vegetation.

- **Chapter 3, Project Description.** This chapter provides a detailed discussion of the proposed project, including background, objectives, and key features.
- **Chapter 4, History of Project Changes.** This chapter outlines the history of the project and any physical changes that were made to the project in response to environmental concerns identified during the review of the project (i.e., in response to City's review of the project, the notice of preparation, public scoping meeting, or during the public review period for the Draft EIR).
- **Chapter 5, Environmental Analysis.** This chapter provides a detailed evaluation of the potential environmental impacts associated with the proposed project. The topics analyzed in this section include: land use, transportation/circulation, visual effects/neighborhood character, air quality, greenhouse gas emissions, energy, noise, paleontological resources, hydrology and water quality, geology and soils, health and safety, public utilities, and public services and facilities. The analysis of each issue begins with a discussion of the existing conditions, regulatory framework, and a statement of the specific thresholds used to determine the significance of impacts, followed by an evaluation of potential impacts and identification of specific mitigation measures to avoid or reduce significant impacts (if any). A statement regarding the significance of the impact after mitigation is also provided.
- **Chapter 6, Cumulative Impacts.** This chapter analyzes the proposed project in addition to other cumulative projects in the surrounding area to determine potential impacts as a result of all the projects all being implemented.
- **Chapter 7, Effects Found Not to Be Significant.** This chapter describes issue areas that were determined to be less than significant during the initial study phase for the proposed project and were not analyzed in detail as part of the EIR.
- **Chapter 8, Alternatives.** This chapter provides a description of the alternatives to the proposed project, including the No Project/No Build Alternative.
- **Chapter 9, Mandatory Discussion Areas.** This chapter evaluates the potential influence the proposed project may have on economic or population growth within the project vicinity and the region, either directly or indirectly. It identifies all of the issues determined in the scoping and preliminary environmental review process to not be significant, and briefly summarizes the basis for these determinations. It also identifies impacts that are significant and unavoidable, or irreversible, as well as describes mandatory findings of significance.
- **Chapter 10, Mitigation Monitoring and Reporting Program.** This chapter identifies significant impacts and the mitigation measures that would help to reduce such impacts. Required in this chapter are the following: (1) the department responsible for monitoring, (2) the monitoring and reporting schedule, and (3) the completion requirements.
- **Chapter 11, References Cited.** This chapter lists all of the references cited in the EIR.
- **Chapter 12, Individuals Consulted/Preparers.** This chapter identifies all the agencies, organizations, and individuals responsible for the preparation of the EIR.

Technical Appendices

Technical reports, used as a basis for much of the environmental analysis in the EIR, have been summarized in the EIR outlined in Section 15147 of the CEQA Guidelines, and are included as appendices to this EIR. The technical reports prepared for the proposed project and their location in the EIR are listed in the table of contents.

Incorporation by Reference

As permitted by CEQA Guidelines Section 15150, this EIR references several technical studies and reports. Information from these documents is briefly summarized in this EIR, and their relationship to this EIR is described in the respective chapters. All reference materials are included in Chapter 11, References Cited, and are hereby incorporated by reference.

1.4 Public Review Process

The City, as lead agency, is responsible for the preparation and review of this EIR. The EIR review process occurs in two basic stages. The first stage is the Draft EIR, which offers the public the opportunity to comment on the document, and the second stage is the Final EIR, which will be considered by the decision-maker when it evaluates the proposed project.

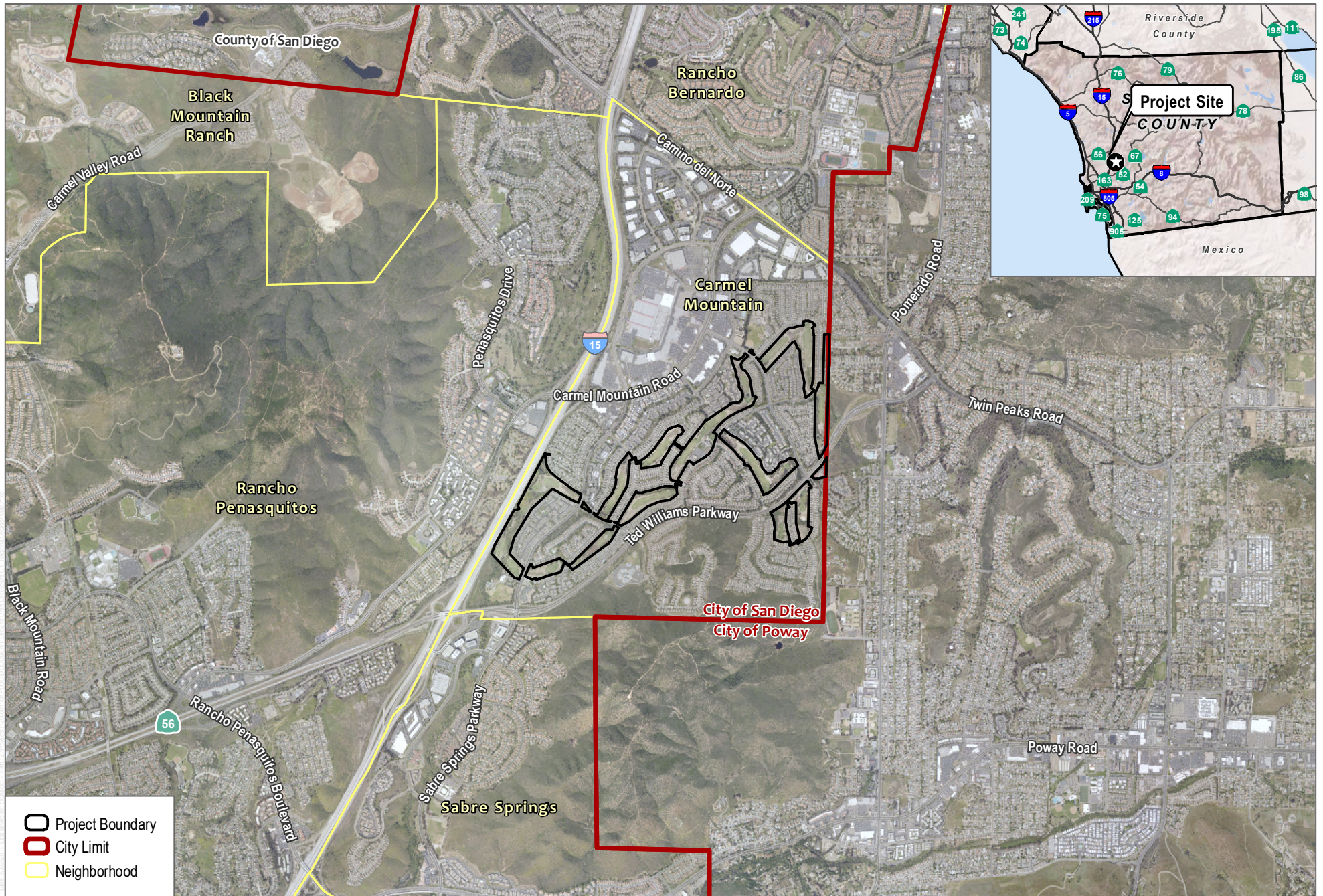
1.4.1 Draft EIR

In accordance with CEQA Guidelines Section 15105, the Draft EIR is distributed for review to the public and interested and affected agencies for a review period of 45 days. The purpose of the review period is to allow the public an opportunity to provide comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided and mitigated” (14 CCR 15204). In accordance with CEQA Guidelines Sections 15085 and 15087(a)(1), upon completion of the Draft EIR, a notice of completion will be filed with the State Clearinghouse and a notice of availability of the Draft EIR will be issued in a newspaper of general circulation in the area. The public review period will be from XXXX, 2020 to XXXX, 2020. The EIR and all supporting technical studies and documents are available for review at the City of San Diego, Development Services Department, 1222 First Avenue, Fifth Floor, San Diego, 92101-4153. An electronic copy of the EIR and the technical appendices are posted on the City’s website at www.sandiego.gov/ceqa/draft.

1.4.2 Final EIR

Comments addressing the scope and adequacy of the environmental analysis will be solicited during the Draft EIR public review. Following the end of the public review period, the City, as the lead agency, will provide written responses to comments received on the Draft EIR per CEQA Guidelines Section 15088. All comments and responses will be considered in the review of the EIR. Responses to the comments received during public review, a mitigation monitoring and reporting program, findings of fact, and a statement of overriding considerations for any impacts identified in the Draft EIR as significant and unmitigable will be prepared and compiled as part of the EIR finalization process. The Final EIR will be available for public review at least 10 days for responsible agencies according to CEQA, and at least 14 days in accordance with the City’s Land Development Code, Section 128.031(c) prior to the first hearing. The culmination of this process is a public hearing where the decision-maker will determine whether to certify the Final EIR and adopt the mitigation monitoring and reporting program, findings of fact, and, if necessary, statement of overriding considerations as being complete and in accordance with CEQA.

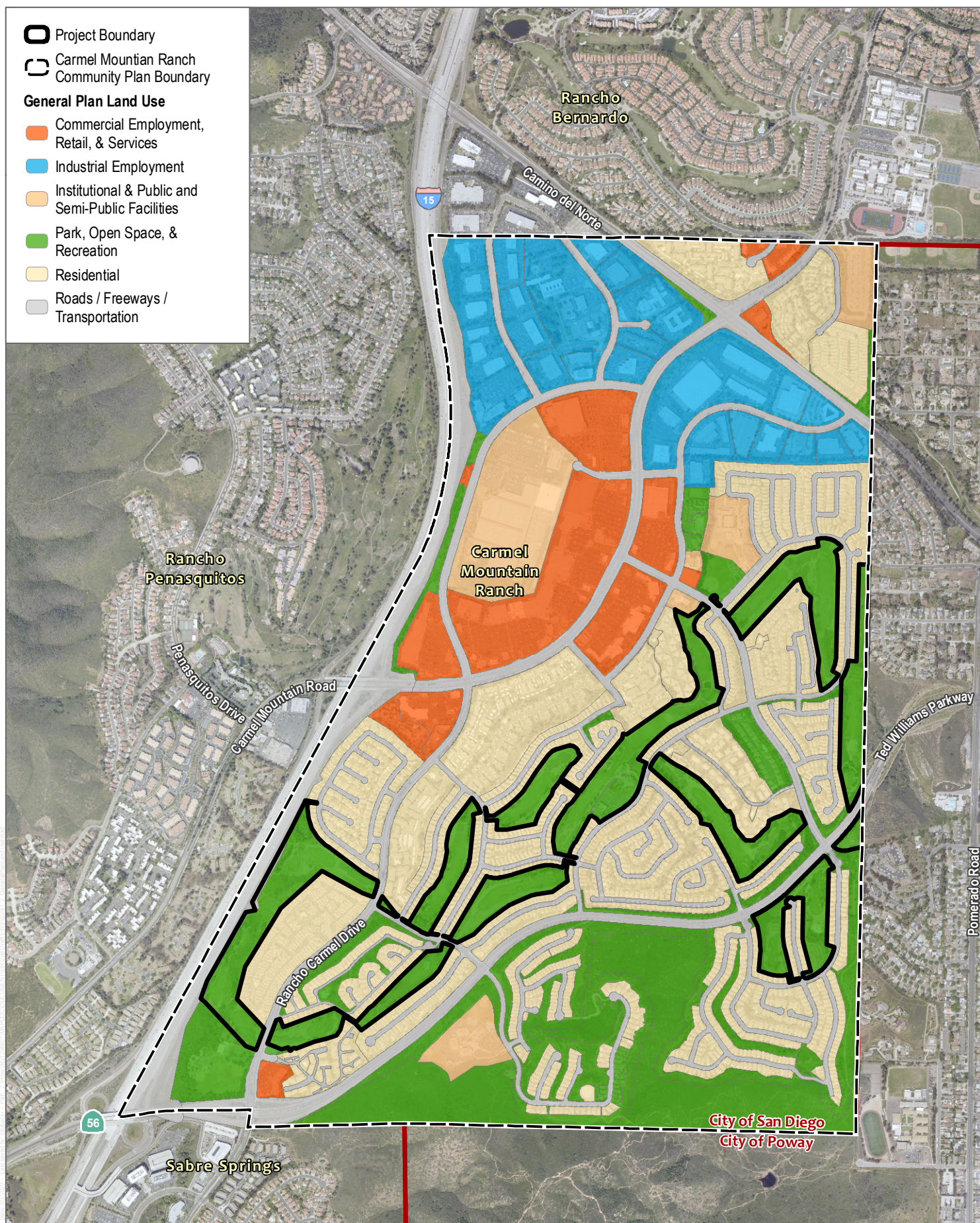
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SOURCE: SanGIS 2017, 2020; Open Street Map 2019

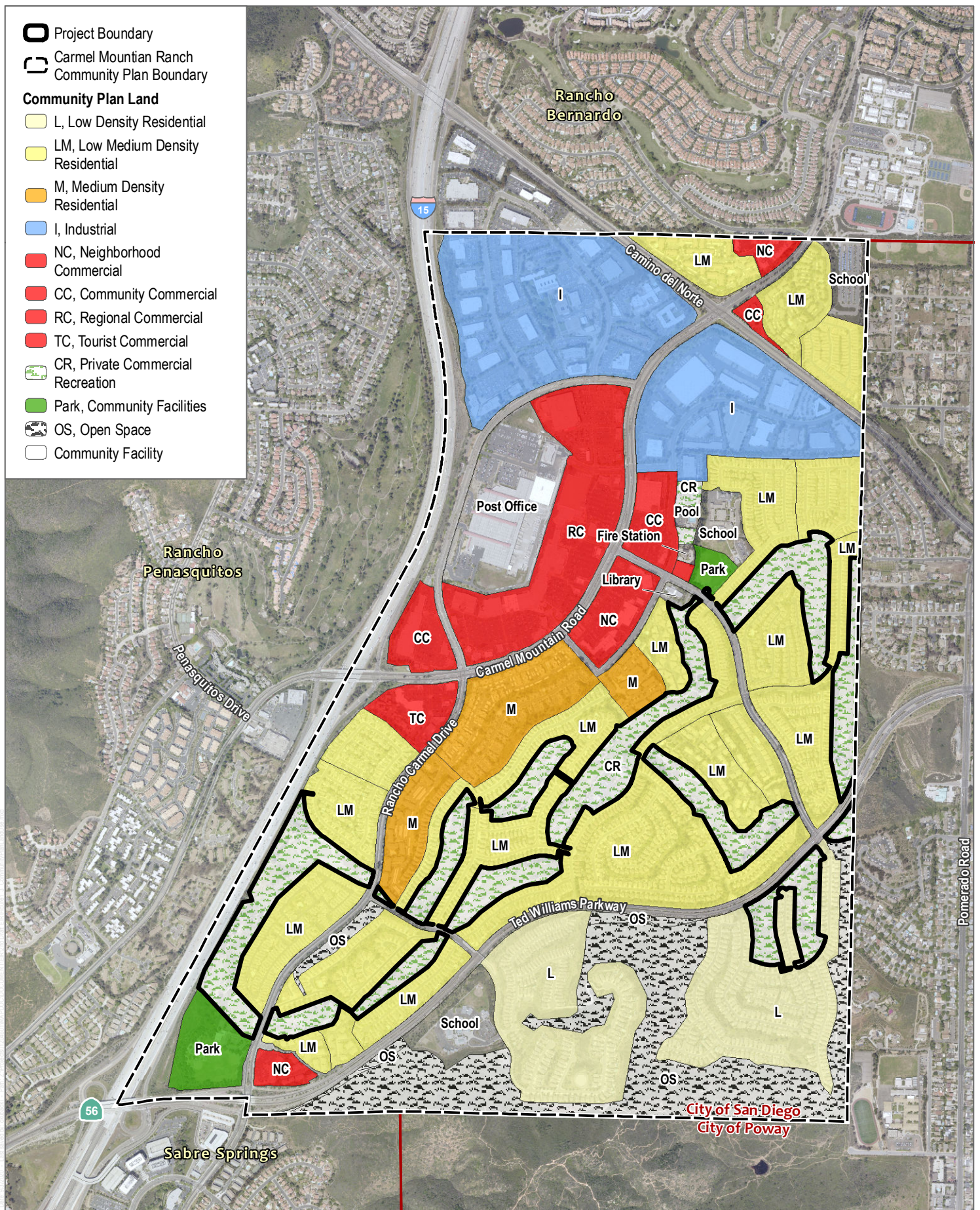
FIGURE 1-1
Regional Location Map
Trails at Carmel Mountain Ranch

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SOURCE: SanGIS 2017, 2020; Open Street Map 2019

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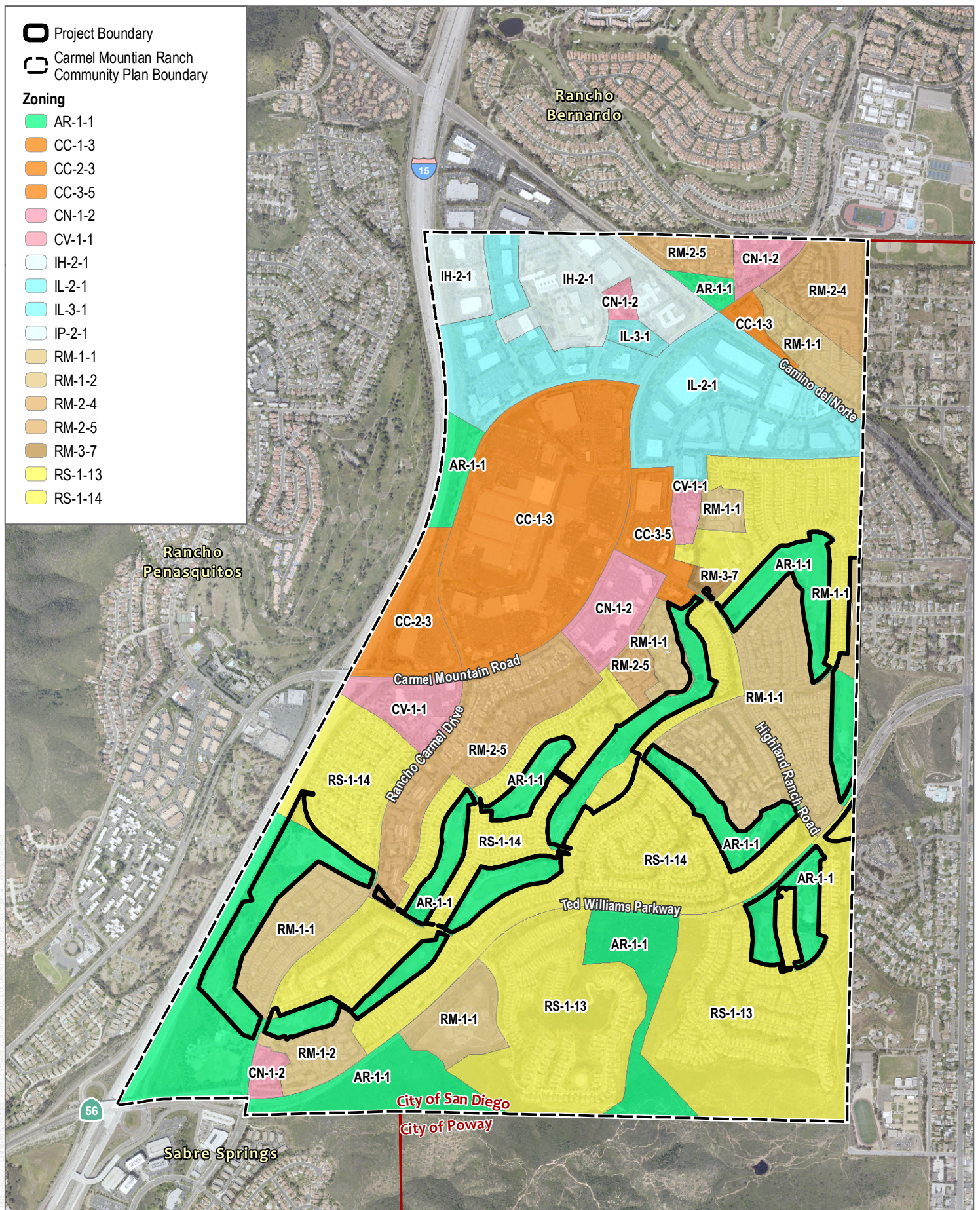
SOURCE: SanGIS 2017, 2020; Open Street Map 2019; City of San Diego Planning Department 1999

FIGURE 1-3

Community Plan Land Use

Trails at Carmel Mountain Ranch

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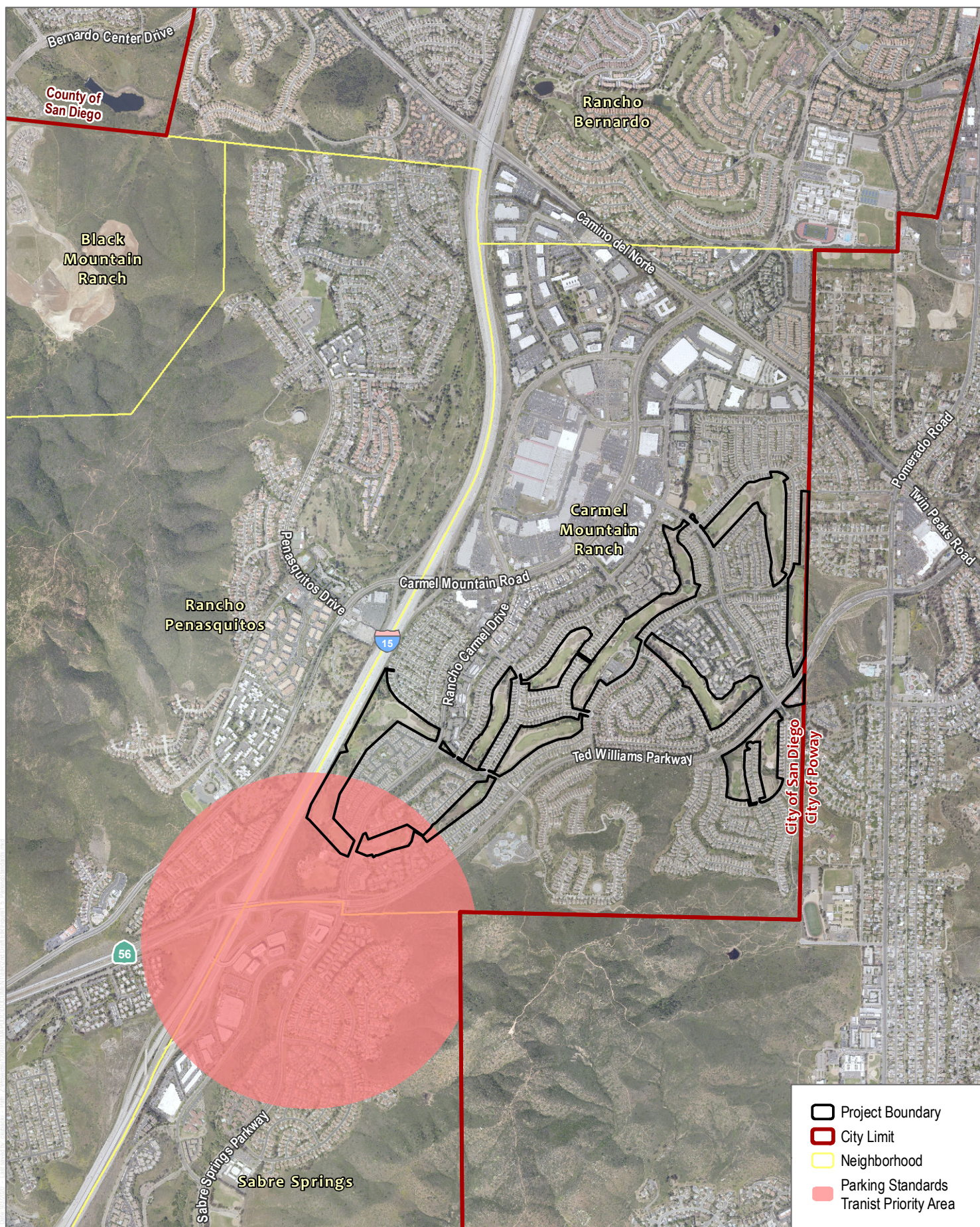
SOURCE: SanGIS 2017, 2020; Open Street Map 2019; City of San Diego Planning Department 1999

FIGURE 1-4

Existing Zoning

Trails at Carmel Mountain Ranch

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SOURCE: SanGIS 2017, 2020; Open Street Map 2019; City of San Diego 2019

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2 Environmental Setting

This chapter provides a description of existing site conditions for the proposed Trails at Carmel Mountain Ranch Project (project). The existing setting addresses the project site and provides an overview of the local and regional environmental setting, per Section 15125 of the California Environmental Quality Act (CEQA) Guidelines.

2.1 Project Location

The proposed project is located within the City of San Diego (City), in the Carmel Mountain Ranch Community. The project proposes to redevelop the closed Carmel Mountain Ranch Country Club and associated 18-hole golf course. The project site is located west of the City of Poway, east of the community of Rancho Peñasquitos, north of the community of Sabre Springs, and south of the community of Rancho Bernardo (Figure 2-1, Regional Location). The project site is bounded by Ted Williams Parkway to the south, Carmel Mountain Road to the north, Interstate 15 (I-15) to the west, and the boundary with the City of Poway to the east. The project site consists of approximately 164.5 acres and currently has an address of 14050 Carmel Ridge Road, San Diego, California 92128.

2.2 Environmental Setting

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

The majority of native habitat in the project area is associated with Chicarita Creek along the western boundary of the project area (adjacent to holes 3, 4, and 5), and along the eastern boundary adjacent to a parcel owned by the City of Poway (adjacent to hole 15).

2.2.1 Surrounding Environment

The surrounding development consists of mostly residential development (single-family and multi-family). Multi-family homes exist to the north of the project site, including the Carmel Terrace apartment complex, the Carmel Summit apartment complex, and the Jefferson at Carmel Mountain Ranch complex. Multi-family homes are also located to the east off Tivoli Park Row, Highland Ranch Road, and Provencal Place. In addition, a new multi-family residential development is being constructed, Pacific Village, immediately west of I-15, which borders the western portion of the project site. The project site is located within a Transit Priority Area (TPA) due to the proximity of a portion of the site (holes 4, 5 and 6) to the Metropolitan Transit System Sabre Springs Transit Station approximately 0.5 miles south of the project site.

Approximately 0.25 mile north of hole 16 and 17 is a variety of commercial and employment uses. The Carmel Mountain Plaza is north of the project site and includes a number of grocery stores, clothing stores,

restaurants, home improvement centers, other commercial amenities, and office uses. Office developments are located south of the project site adjacent to the Sabre Springs Transit Station, and north of the Carmel Mountain Plaza. Approximately 0.25 mile east of hole 7 is Shoal Creek Elementary School, and approximately 0.25 mile north of hole 16 is Highland Ranch Elementary School.

The project site is near four elementary schools, two middle schools, and one high school, all within the Poway Unified School District boundary.

2.2.2 Surrounding Roadway Network

Regional access to the project area is provided by I-15, which runs north-south adjacent to the project area, allowing for vehicular and transit access to the larger San Diego region as well as Riverside County to the north. State Route 56 runs east-west where it transitions from Ted Williams Parkway to I-5, also providing regional vehicular access to points west of the project area. The existing roadway network within and immediately surrounding the project area is summarized herein. See Section 5.15, Transportation, for further details.

Ted Williams Parkway (State Route 56) is classified as a Six-Lane Expressway between the I-15 ramps and Rancho Carmel Drive and a Six-Lane Primary Arterial east of Rancho Carmel Drive to the Carmel Mountain Ranch Community Plan (Community Plan) boundary. It is currently built as a six-lane roadway divided by a raised centered median from I-15 to Pomerado Road with a curb-to-curb width of 102 feet. The posted speed limit is 50 miles per hour (mph) and on-street parking is prohibited on either side of the street. Class II bike lanes and sidewalks are provided on both sides of the street from Rancho Carmel Drive to Pomerado Road. Bus stops are not provided within the project area.

Rancho Carmel Drive is classified as a Four-Lane Major Street from Ted Williams Parkway to Carmel Mountain Road. It is currently built as a four-lane roadway separated by a raised median with a curb-to-curb width of 78 feet. The posted speed limit is 45 mph and parking is prohibited within the project area. Class II bike lanes and sidewalks are provided on both sides of the street. Bus stops are not provided on either side of the street.

Carmel Mountain Road is classified as a Six-Lane Primary Arterial and is currently built as a six-lane roadway with a curb-to-curb width that ranges from 98 feet to 102 feet. It has three travel lanes in each direction separated by a raised median from just west of I-15 to Camino Del Norte. The posted speed limit is 35 mph and parking is prohibited within the project area. Class II bike lanes and sidewalks are provided on both sides of the street. Bus stops are provided on Carmel Mountain Road.

Highland Ranch Road is classified as a Four-Lane Major Street. It is currently built as a four-lane roadway divided by a raised median with a curb-to-curb width of 78 feet from Carmel Mountain Road to Ted Williams Parkway. The posted speed limit is 40 mph and parking is prohibited within the project area. Class II bike lanes and sidewalks are provided on both sides of this roadway. Bus stops are not provided on either side of the street.

Stoney Peak Drive is classified as a Four-Lane Collector. It is currently built as a four-lane undivided roadway with a curb-to-curb width of 64 feet from Carmel Mountain Road to Seabridge Lane. The posted speed limit is 30 mph and parking is permitted on both sides of the roadway within the project area. Contiguous sidewalks are provided on both sides of this roadway. No bike lanes or bus stops are provided.

World Trade Drive is classified as a Four-Lane Collector. It is currently built as a four-lane undivided roadway from Stoney Peak Drive to Highland Ranch Road. From Highland Ranch Road it narrows to a two-lane roadway with a two-way left-turn lane to Conference Way. From Stoney Peak Drive to Conference Way, the curb-to-curb width is 64 feet. The posted limit is 30 mph and parking is permitted on both sides of the roadway intermittently within the project area. Contiguous sidewalks are provided on both sides of this roadway. No bike lanes or bus stops are provided.

Pomerado Road is classified as a Four-Lane Major Arterial. It is currently built as a four-lane roadway divided by a raised median north of Ted Williams Parkway to Twin Peaks Road. South of Ted Williams Parkway, it is built as a four-lane roadway divided by a two-way left-turn lane to Poway Road. From Twin Peaks Road to Poway Road, the curb-to-curb width ranges from 80 feet to 86 feet. The posted speed limit is 45 mph and parking is prohibited within the project area. Class II bike lanes and sidewalks are provided on both sides of the street. Bus stops are provided along Pomerado Road.

The two-lane local streets providing access to residential and commercial land uses within the project area include Shoal Creek Drive, Windcrest Drive, Boulton Avenue, Seabridge Land, Eastbourne Road and Carmel Ridge Road. Roadway widths on these streets range from 34 feet to 40 feet, while speed limits range from 25 mph to 30 mph. Contiguous sidewalks along these roadways are provided, while neither bike lanes nor bus stops are provided.

2.3 Planning Context

The following describes the plans, policies, and regulations that are applicable to the project.

2.3.1 General Plan

California requires each city to have a general plan to guide its future, and mandates that the general plan be updated periodically to ensure relevance and utility. The General Plan is comprised of 10 elements that provide a comprehensive slate of citywide policies and further the City of Villages smart growth strategy for growth and development. The various elements of the General Plan include: Land Use and Community Planning Element; Mobility Element; Urban Design Element; Economic Prosperity Element; Public Facilities, Services, and Safety Element; Recreation Element; Conservation Element; Noise Element; and Historic Preservation Element. . It recognizes and explains the critical role of the community planning program as the vehicle to tailor the “City of Villages” strategy for each neighborhood. It also outlines the plan amendment process and other implementation strategies and considers the continued growth of the City beyond 2020 (City of San Diego 2008). The project site is designated Park, Open Space, and Recreation in the General Plan (City of San Diego 2008) (Figure 2-2 General Plan Land Uses).

2.3.2 Carmel Mountain Ranch Community Plan

The Community Plan provides the framework for development of the Carmel Mountain Ranch community in conformance with the City's General Plan. The Community Plan Area consists of a 1,489-acre planned community located in the northeastern area of the City. It lies east of I-15 between the existing communities of Rancho Bernardo to the north and Sabre Springs to the south. It extends east to Crossrock Road and the City's boundary with Poway.

The Community Plan sets forth goals, policies, and proposals to guide future development within the Community Plan Area. The Community Plan was designed to serve as a guide for the establishment of a balanced community where daily trips to work, shopping, and services are internal, which would be achieved through the implementation of the following goals, as identified in the Community Plan (City of San Diego 1999):

- Development of industrial and commercial facilities, which is anticipated to provide total job opportunities in excess of total planned residential units.
- Provision of convenient commercial development to meet shopping, service and recreation needs.
- Accommodation of a variety of residential options through a diversity of product types and economic appeal.
- Incorporation of adequate means for multi-modal circulation within the community integrated with City and regional transportation planning.
- Incorporation of parks, recreation and open space linked by pedestrian and bike paths to meet the needs and desires of users. An 18-hole championship golf course will provide additional recreational opportunities, as well as visual open space, for the entire community.
- Provision for sensible accommodation of, and effective financing for, public facilities and services, concurrent with community growth.
- Inclusion of educational and religious institutions offering programs to meet local community needs.

In order to achieve the goals identified above, 11 Community Plan Elements were developed and included within the Community Plan in order to serve as a guide for development within the Community Plan Area. The 11 Community Plan Elements include the Land Use Plan Element; Commercial and Industrial Element; Housing Element; Parks and Open Space Element; School Element; Public Facilities and Services Element; Transportation Element; Social Needs Element; Community Environment, Conservation, and Design Element; Cultural Resources Element; and Implementation Element.

The overall land use plan for the Community Plan Area encompasses parcels designated for residential, commercial, industrial, recreation, open space, and support facilities. The project site is currently designated as Private Recreation–Golf Course, as identified within the Community Plan Land Use Map (City of San Diego 1999) (Figure 2-3 Community Plan Land Uses).

2.3.3 Zoning

Most of the parcels within the project site are zoned as AR-1-1 (Agriculture); permitted uses within the AR-1-1 zone include development of single-dwelling-unit homes at a required minimum of 10-acre lots. The smaller parcels (associated with the cart paths, cart tunnels, maintenance yard, and clubhouse) are zoned as RS-1-12, RS-1-14, RM-1-1, RM-2-5, and RM-3-7 (Residential) (Figure 2-4 Existing Zoning). Permitted uses within the RS zones include development of single-dwelling units that accommodate a variety of lot sizes and residential dwelling types and which promote neighborhood quality, character, and livability. Permitted uses within the RM zones include multiple-dwelling-unit development at varying densities. Each of the RM zones are intended to establish development criteria that consolidate common development regulations, accommodate specific dwelling types, and respond to locational issues regarding adjacent land uses.

The project site is subject to Airport Land Use Compatibility Overlay Zones (ALUCOZs). The site is located within the MCAS-Miramar Airport Influence Area (Review Area 2) as described in Section 3.3.5 below.

Transit Priority Area

A Transit Priority Area (TPA) is defined in California Senate Bill 743 as an area located within 0.5 miles of a major transit stop that is existing or planned, if the planned major transit stop is scheduled to be completed within the planning horizon included in a Regional Transportation Improvement Program. A major transit stop is defined in California Public Resources Code, Section 21064.3, as “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”

In March 2019, the City adopted Ordinance Number 21057 regarding zero minimum parking regulations for multi-family residential developments in Parking Standards TPAs. The Parking Standards TPA Regulations allow for more multi-family residential units to be built without parking to lower housing costs and encourage residents to use alternative modes of transportation such as walking, biking, and transit. The regulations establish the parking requirements for multiple dwelling unit residential development where all or a portion of the premises is located within a Parking Standards TPA, as defined in California Public Resources Code, Section 21099 or Section 21064.3 (City of San Diego 2019b) (Figure 2-5 Parking Standards TPA).

A portion of the project site is located within the TPA Overlay Zone, as shown on the City TPA map (City of San Diego 2019a). The portion of the project area within the designated TPA contains Unit 4 (open space), Unit 5 (affordable units) and Unit 6 (market rate/affordable), as shown on the site plan (Figure 2-5). The TPA portion of the site is located approximately 0.5 miles north of the Metropolitan Transit System Sabre Springs/Peñasquitos Transit Station. The remaining lots and units are located outside the TPA Overlay Zone and Parking Standards TPA. However, per Ordinance Number 21057, if a portion of the project is within the TPA (i.e., holes 4, 5, and 6), the designation and associated parking reductions would apply to the entire project site.

Environmentally Sensitive Lands

The City’s Environmentally Sensitive Lands (ESL) Regulations include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. The project site does not contain coastal beaches or sensitive coastal bluffs, or steep hillsides. It does contain wetlands and floodplains.

The ESL regulations require that development minimize impacts to certain sensitive biological resources including but not limited to lands identified as Multi-Habitat Planning Area (MHPA) lands in the San Diego Multiple Species Conservation Program (MSCP); wetlands and vernal pools in naturally occurring complexes; federal and State listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Specifically, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. Where impacts are unavoidable, deviation findings must be made in accordance with Section 143.0150 of the SDMC. In this instance, the on-site wetlands would not be impacted. Refer to Section 5.4, *Biological Resources*, for detailed discussion.

With regard to flood hazard areas, the ESL regulations contain restrictions relative to the floodway and flood fringe, intended to provide reasonable flood protection for regulatory purposes. Within the floodway, no structures may be attached to a foundation, development must be offset by other improvements to enable the passage of the base flood, and channelization is subject to a number of requirements. Within the flood fringe, permanent structures, roads, and other development may be allowed, provided that they meet applicable conditions. The reader is referred to Section 5.10, Hydrology and Section 5.18, Water Quality, for discussion of project compliance with applicable drainage requirements.

2.3.4 Regional Plans

In accordance with Section 15125(d) of the CEQA Guidelines, this environmental setting discussion includes statements relative to conformance with applicable regional plans. In addition to the City's General Plan, the following regional plans are assessed for consistency.

Regional Air Quality Plan

The San Diego Air Pollution Control District and San Diego Association of Governments (SANDAG) jointly developed the San Diego Regional Air Quality Strategy (RAQS) to identify feasible emissions control measures to achieve compliance with the state ozone standard. The RAQS addresses volatile organic compounds and oxides of nitrogen, which are the precursors to the photochemical formation of ozone. The current RAQS was initially adopted in 1991 and most recently revised in 2016 (SDAPCD 2016). The San Diego Air Pollution Control District has also developed the San Diego Air Basin's input to the State Implementation Plan, which is required under the federal Clean Air Act for areas that are in nonattainment of air quality standards. The RAQS relies on information from the California Air Resource Board and SANDAG, including mobile area source emissions and information regarding projected growth in the county to project future emissions. The RAQS then determines the strategies necessary for reduction of emissions through regulatory controls. The project would propose development that has been anticipated in local air quality plans. See Section 5.1, Air Quality, for further details.

Airport Land Use Compatibility Plan – Marine Corps Air Station Miramar

The Airport Authority, which serves as the state-designated Airport Land Use Commission for San Diego County, adopts airport land use compatibility plans (ALUCPs). ALUCPs serve as a tool for the Airport Land Use Commission when conducting reviews of proposed land uses in areas surrounding airports. The plans also assist the City, as an affected local land use jurisdiction, in the preparation or amendment of land use plans and ordinances, including its General Plan.

Adopted in October 2008, and amended in December 2010 and November 2011, the Marine Corps Air Station Miramar ALUCP provides for the orderly growth of the area surrounding the airport and safeguards the welfare of the public within the vicinity of the airport. The project site is located within Review Area 2 of the Airport Influence Area and the Marine Corps Air Station Miramar Real Estate Disclosure Area, according to the Marine Corps Air Station Miramar ALUCP. Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight notification area. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land use within Review Area 2.

Water Quality Control Plan for the San Diego Basin

The U.S. Environmental Protection Agency has delegated responsibility for implementation of portions of the Clean Water Act to the State Water Resources Control Board and the Regional Water Quality Control Boards (RWQCBs), including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System program. The National Pollutant Discharge Elimination System program is a set of permits designed to implement the Clean Water Act that apply to various activities that generate pollutants with potential to impact water quality.

The RWQCB adopted a Water Quality Control Plan (Basin Plan) for the San Diego Basin. This Basin Plan sets forth water quality objectives for constituents that could potentially cause an adverse impact on the beneficial uses of water. The Basin Plan is designed to preserve and enhance the quality of water resources in the San Diego region. The purpose of the Basin Plan is to designate beneficial uses of the region's surface waters and groundwater, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives. The Basin Plan incorporates by reference all applicable State Water Resources Control Board and RWQCB plans and policies (RWQCB 2016).

Projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements from the RWQCB. During construction and operation, private and public development projects are required to include stormwater best management practices to reduce pollutants discharged from the project site.

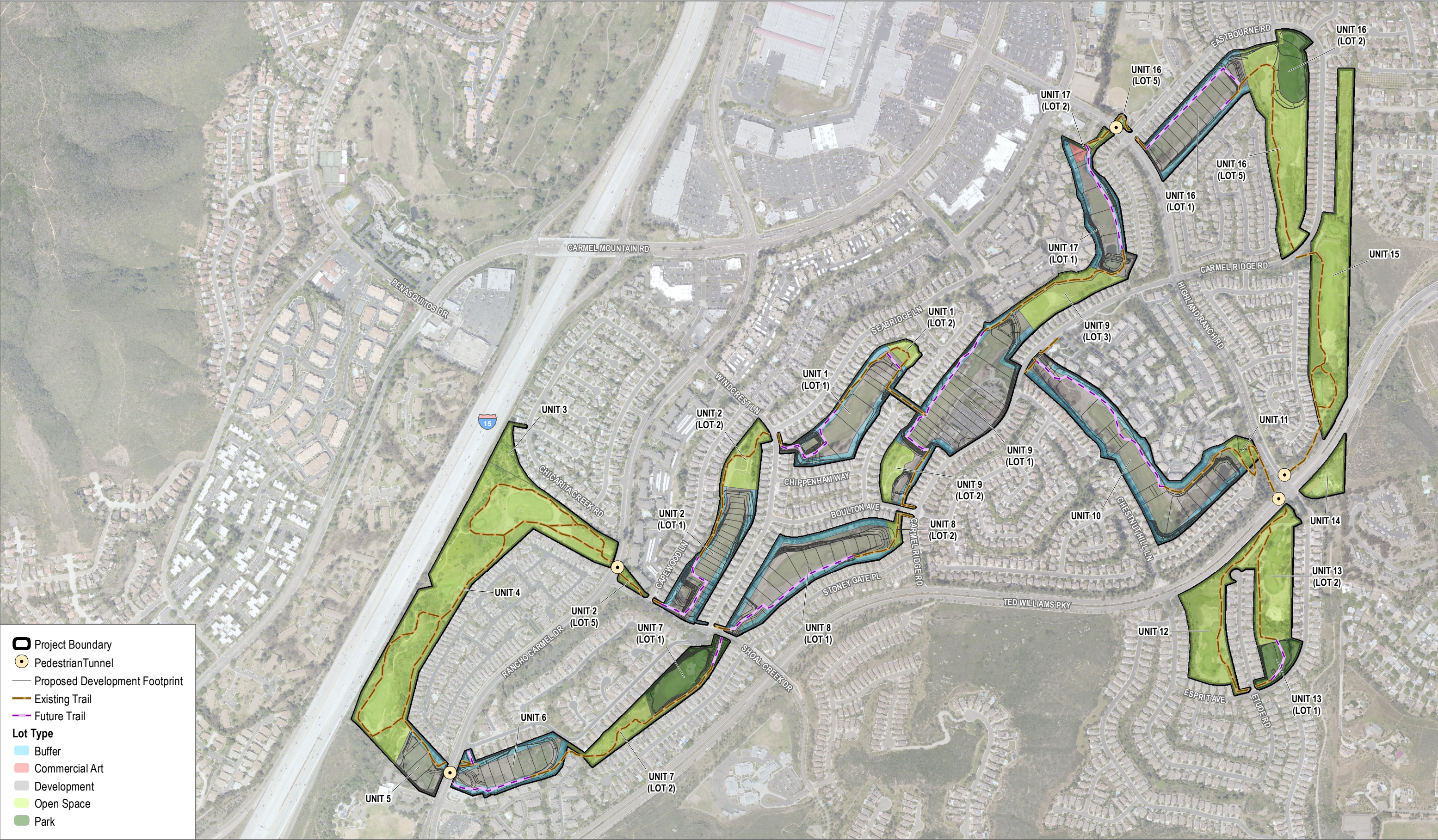
City of San Diego Multiple Species Conservation Program Subarea Plan

The San Diego Multiple Species Conservation Program (MSCP) is a long-term regional conservation plan established to protect sensitive species and habitats in San Diego County. The regional MSCP is divided into subarea plans that are implemented separately from one another (County of San Diego 1997). The entire project site is within the City of San Diego Subarea Plan. This subarea encompasses 206,124 acres and is generally characterized by urban land use. Within the City's MSCP Subarea, a largely contiguous, habitat baseline area or Multi-Habitat Planning Area (MHPA) of approximately 60,000 acres was identified. At the end of the 50-year permit, the City's final MSCP preserve will consist of 90 percent or greater conserved lands from the City's MHPA. The MHPA "baseline/hard line" areas were developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur (City of San Diego 1997). The proposed project area is located outside of these habitat linkages and core areas, with the nearest MHPA being approximately 0.25 miles from the project site.

San Diego Forward – Regional Plan

Every four years, SANDAG prepares a Regional Plan in collaboration with the 18 cities and County of San Diego, along with regional, state, and federal partners. This is a broad-based community effort that plans for how our region will grow and how we will get around. The Regional Plan addresses many important issues, including: using land more wisely, building an efficient and more accessible transportation system, protecting the environment, improving public health, promoting a strong regional economy, better managing our access to energy, incorporating equity into the planning process, addressing pressing needs on tribal lands, and supporting a vibrant international border.

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SOURCE: SANGIS 2017; SANGIS 2019; Project Design 2020

FIGURE 2-1

Site Plan

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3 Project Description

3.1 Introduction

This chapter provides a statement of project goals and objectives, describes the specific characteristics of the project, discusses project construction and operation, and identifies the discretionary actions necessary to implement the project. This chapter has been prepared pursuant to Section 15124 of the California Environmental Quality Act Guidelines.

3.2 Project Objectives

The following are the goals and objectives of the project:

1. Provide multi-family housing units with a range of housing types that are compatible with the adjacent established residential communities.
2. Assist the City of San Diego (City) in meeting state and local housing goals by providing opportunities for high-quality, new, market-rate and deed-restricted housing to meet the needs of current and future City residents on vacant land centrally located near existing jobs, transit, commercial, and industrial development.
3. Preserve the majority of the project site as open space, avoid areas of native vegetation or potentially suitable habitat for special-status plant species, and avoid areas of sensitive habitat including jurisdictional areas and their associated 100-foot buffers.
4. The project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-tolerant, native landscaping.
5. Create a wide-range of active and passive public recreational opportunities above and beyond what is required by City regulations.
6. Establish a multi-use trail system for pedestrians and bicyclists with connections to major amenities and adjacent neighborhoods. Establish a public system of trails and paths for community-wide use, thereby providing enhanced neighborhood connectivity.
7. Ensure new uses are compatible with the existing community by establishing 50-foot setbacks, design regulations and guidelines, best practices, and performance standards to ensure that the project is cohesive and respectful of existing properties.

3.3 Project Components

The proposed project would allow for a total of 1,200 multi-family homes and a mix of open space and recreational uses.

Land Uses

The project would develop distinct residential neighborhoods with a diversity of housing types and open space amenities and with a unique character and sense of place which would be accomplished through implementation of project-specific design guidelines. Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct

pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood, providing a sense of place and arrival. Homes would be clustered and oriented around private open spaces and community amenities, providing a sense of neighborhood identity. Buildings would be oriented and relate directly to internal streets, paseos, greenways, and common open space amenities and generally create an attractive presence and “eyes on the street.”

Residential land uses would be developed as infill residential neighborhoods consistent with the policies and regulations established in the Trails at Carmel Mountain Ranch Design Guidelines (Appendix B). The residential development would occur on approximately 52.9 acres ranging in density from 13 to 37 dwelling units per acre. The proposed project would allow up to 1,200 residential dwelling units with heights ranging from 37 to 48 feet (inclusive of all building appurtenances such as solar panels, chimneys and mechanical equipment). All proposed new residential structures would be set back 50 feet from existing residential development.

The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.4 acres.

Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Building designs would establish a pattern and hierarchy of building massing and forms to help reduce the visual bulk of the development and would incorporate smaller-scale architectural elements, such as bay windows, porches, projecting eaves, awnings, and similar elements, to add visual interest and reduce the scale and mass of buildings.

Development of the residential neighborhoods would be implemented through City-wide zoning with allowable deviations from the development standards described in the Design Guidelines (Appendix B). The Design Guidelines provide guidance and direction on site planning, building design, and landscape design, brush management. See Table 3-1, below for a breakdown of proposed land use and zoning per unit. The Design Guidelines also provide objective criteria for long-term maintenance of open space and trails.

Areas zoned RM-1-1 and RM-1-3 would include two- and three-story townhomes, with two or three bedrooms. Area's zoned RM-2-4 through RM-3-7 would include three- and four-story apartments, with studios, one, two, and three bedrooms.

In addition, the project proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library. This gallery may include up to 6,000 square feet in one or two buildings to house gallery space, studio space with an indoor kiln, and a bathroom/kitchen. In addition, this amenity could include an up-to-2,000-square-foot outdoor open shed structure to house a wood-burning ceramic kiln, wood storage, and a washing area. A 3,000-square-foot café/restaurant/banquet area is proposed with 2,000 square feet of dining space and a 1,000-square-foot kitchen. On additional caretaker unit up to 1,200 square feet would also be proposed. This Community Plan Land Use proposed is Community Commercial and the zone would be CC-2-1.

Proposed Land Use and Zoning

Table 3-1 breaks down the proposed land use and zoning for each lot within each unit. Also see Figure 3-1, Proposed Land Use, and Figure 3-2 Proposed Zoning.

Table 3-1. Proposed Land Use and Zoning Per Unit

Lot No.	Dwelling Units	Development (Acres)	Buffer (Acres)	Park (Acres)	Open Space (Acres)	Total (Acres)	Proposed Land Use	Proposed Zone	Density
UNIT 1						8.72			
1	66	5.10					LOW MED RES (6-29 du/ac)	RM-1-1	13
2					0.78		OPEN SPACE	AR-1-1	
3			1.2				OPEN SPACE	AR-1-1	
4			1.64				OPEN SPACE	AR-1-1	
UNIT 2						9.91			
1	87	4.16					LOW MED RES (6-29 du/ac)	RM-1-3	21
2					2.67		OPEN SPACE	AR-1-1	
3			1.3				OPEN SPACE	AR-1-1	
4			1.37				OPEN SPACE	AR-1-1	
5					0.41		OPEN SPACE	AR-1-1	
UNIT 3						1.36			
1					1.36		OPEN SPACE	AR-1-1	
UNIT 4						25.27			
1					25.27		OPEN SPACE	AR-1-1	
UNIT 5						2.76			
1	78	2.29					MEDIUM RES (30-43 du/ac)	RM-2-6	34
2			0.47				OPEN SPACE	AR-1-1	
UNIT 6						5.83			
1	128	3.42					MEDIUM RES (30-43 du/ac)	RM-3-7	37

Table 3-1. Proposed Land Use and Zoning Per Unit

Lot No.	Dwelling Units	Development (Acres)	Buffer (Acres)	Park (Acres)	Open Space (Acres)	Total (Acres)	Proposed Land Use	Proposed Zone	Density
2			1.13				OPEN SPACE	AR-1-1	
3			1.28				OPEN SPACE	AR-1-1	
UNIT 7						6.45			
1				3.38			OPEN SPACE	OP-1-1	
2					3.07		OPEN SPACE	AR-1-1	
UNIT 8						10.92			
1	98	6.9					LOW MED RES (6-20 du/ac)	RM-1-1	14
2					0.48		OPEN SPACE	AR-1-1	
3			1.93				OPEN SPACE	AR-1-1	
4			1.61				OPEN SPACE	AR-1-1	
UNIT 9						19.75			
1	300	11.10					LOW MED RES (6-29 du/ac)	RM-2-5	27
2					1.57		OPEN SPACE	AR-1-1	
3					3.87		OPEN SPACE	AR-1-1	
4			1.77				OPEN SPACE	AR-1-1	
5			0.88				OPEN SPACE	AR-1-1	
6			0.56				OPEN SPACE	AR-1-1	
UNIT 10						15.34			
1	200	10.07					LOW MED RES (6-29 du/ac)	RM-2-4	20
2			2.24				OPEN SPACE	AR-1-1	
3			3.03				OPEN SPACE	AR-1-1	

Table 3-1. Proposed Land Use and Zoning Per Unit

Lot No.	Dwelling Units	Development (Acres)	Buffer (Acres)	Park (Acres)	Open Space (Acres)	Total (Acres)	Proposed Land Use	Proposed Zone	Density
UNIT 11						0.9			
1					0.90		OPEN SPACE	AR-1-1	
UNIT 12						6.07			
1					6.07		OPEN SPACE	AR-1-1	
UNIT 13						9.26			
1				1.90			OPEN SPACE	OP-1-1	
2					7.36		OPEN SPACE	AR-1-1	
UNIT 14						1.86			
1		1.86					PRIVATE COMMERCIAL RECREATION	RS-1-13	
UNIT 15						13.60			
1					13.60		OPEN SPACE	AR-1-1	
UNIT 16						19.94			
1	123	4.75					LOW MED RES (6-29 du/ac)	RM-2-5	26
2				3.91			OPEN SPACE	OP-1-1	
3			1.23				OPEN SPACE	AR-1-1	
4			1.13				OPEN SPACE	AR-1-1	
5					8.79		OPEN SPACE	AR-1-1	
6					0.13		OPEN SPACE	AR-1-1	

Table 3-1. Proposed Land Use and Zoning Per Unit

Lot No.	Dwelling Units	Development (Acres)	Buffer (Acres)	Park (Acres)	Open Space (Acres)	Total (Acres)	Proposed Land Use	Proposed Zone	Density
UNIT 17						5.94			
1	120	3.29					MEDIUM RES (30-43 du/ac)	RM-3-7	37
2		0.27					COMMUNITY COMMERCIAL	CC-2-1	
3					0.13		OPEN SPACE	AR-1-1	
4			1.25				OPEN SPACE	AR-1-1	
5			1.00				OPEN SPACE	AR-1-1	

Recreational Open Space

Approximately 111.0 acres of development would be composed of parkland, open space, and buffer area. This area includes approximately 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland; 78.1 acres of open space; and 25.0 acres of buffer area. A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The majority of the trail system would include paved trails that would be repurposed from the previous golf cart path, and new paved trails would provide connections through new development areas. Trails would range from 5 to 8 feet in width and all trails would be publicly accessible. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity to the surrounding neighborhood. Recreational amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.

Brush Management

Project specific brush management zones (BMZ) were determined based on the development footprint, off-site adjacent fuels, and the area's fire history and weather. The BMZs provided for the project include a modified BMZ approach with an existing irrigated rear yard Zone 1 condition area (minimum 10 feet in width) and Zone 2 area that varies from 20 to 90 feet in width.

Because the standard BMZ 2 encompasses City wetlands where thinning would be restricted, an extended protective brush thinning zone is proposed beyond these riparian areas to serve as alternative compliance in accordance with SDMC 142.0412 the Land Development Manual, Section 3, and Fire Protection Bulletin-18-01. Maintenance standards within the extended protective brush thinning zone would be the same as those required for the standard BMZ 2 and allows for an additional 20 feet to 50 feet of brush management beyond the limits of City wetlands and the 5-foot-wide "no touch" zone. The extended protective brush thinning zone would involve removal of dead, dying, and established plantings that do not meet the criteria for Zone 2 thinning areas. Portions of the extended protective brush thinning zone would include naturally occurring areas of coastal sage scrub along the western edge of Chicarita Creek. The BMZ largely encompasses portions of the golf greens which are no longer managed and have overgrown with non-native plants such as tocalote, tumbleweed and common sow-thistle. These areas would be landscaped with native upland species.

Chicarita Creek Crossing

The proposed project will place development within the limits of the previous golf course and will avoid all jurisdictional resources. The existing pedestrian crossings over Chicarita Creek will be repaired and maintained to provide continued access throughout the site. This will include removal, replacement, or patching of cracked concrete bridge segments of an existing pedestrian bridge over Chicarita Creek. If needed, bridge footings would be placed outside of wetlands and waters associated with the creek. Portions of the bridge that have collapsed into the creek will remain undisturbed. In addition, an arched culvert will be installed over a concrete-line brow ditch delineated as a non-wetland waters.

Revegetation

The goal of the landscape revegetation program is restoration of native and naturalized vegetation types into the surrounding existing landscape, to establish open space. Revegetation areas consist of former golf course fairways and areas disturbed by the proposed development. The proposed revegetation plant

palette consists of trees, riparian container planting, an ornamental native and erosion control hydroseed mix, and an additional seed mix suitable for areas within BMZ. Container planting and hydroseeding of disturbed areas with a mixture of native grasses, shrubs, and groundcover will provide surface cover and erosion control.

Project Infrastructure

Project Circulation

The project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The project's internal street network would consist of all private roadways designed as Complete Streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. All private drives would include a minimum five-foot contiguous sidewalk along at least one side of the street. Motor courts would also be provided as a shared driveway (private drive) for two or more homes and common access roads would provide access from private drives to private parking areas.

Project Water System

Each Unit within the project is proposed to have a private domestic water system and a private fire protection system. In accordance with City of San Diego standards, both the private domestic water systems and the private fire protection systems would include backflow preventers.

Project Wastewater System

The project would construct new gravity sewer lines to connect the project site to the existing gravity sewer system. Unit 5 would require a private lift station to serve the project. Unit 10 may also require a private lift station to serve the project. On-site sewer systems would be private and designed to maintain a minimum of 1 percent slope to meet state and local plumbing code standards.

Sustainable Design Features

The project is proposed to include a myriad of sustainable design features. All new development within the project site would include rooftop photovoltaic solar panels, energy-efficient lighting and appliances, cool roofs, energy-efficient windows, and other design features that significantly conserve energy. All proposed buildings would be constructed with high-quality and durable building materials to minimize the replacement costs and construction waste that result from periodic renovations. Construction would minimize the amount of impervious surfaces that have large thermal gain, such as concrete and asphalt. Wherever possible, the use of permeable pavers, porous asphalt, reinforced grass pavement (turf-crete), stone pavers and other permeable materials would be encouraged.

The project would include installation of low-flow bathroom and kitchen faucets, low-flow toilets, and low-flow showers. The project would include low-flow fixtures and appliances consistent with the requirements of the CAP checklist. Plumbing fixtures and fittings would be included that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code; and Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code.

In regard to outdoor water, the project would involve installation of water efficient devices and landscaping in accordance with applicable ordinances, including use of drought-tolerant plant species appropriate to the

climate and region. Xeriscaping would be employed such that areas of water use throughout the landscape plan are grouped according to water needs. The project would apply a water conservation strategy resulting in a 20% reduction in indoor water use per California Green Building Standards Code requirements for plumbing fixtures and fittings and a minimum 20% reduction in outdoor water use.

Where covered parking is proposed, the use of solar carports would be encouraged, and understory planting would be recommended to be provided beneath and adjacent to solitary solar carports and required under continuous (or large) carports, where provided.

Off-Site Improvements

Off-site improvements include the installation of a new traffic signal at the intersection of Carmel Ridge Road and Ted Williams Parkway (Signal Warrant Analysis is included in Appendix C). Right-turn overlap signal phasing would be installed by the project at during certain intersection signal phases at the intersections of Carmel Mountain Road/Rancho Carmel Drive (southbound), Carmel Mountain Road/Camino Del Norte (all movements), and Ted Williams Parkway/Pomerado Road (southbound and eastbound, through coordination with the City of Poway). See Section 3.4 for further details.

Construction and Phasing

The proposed project would be developed in phases, over an estimated four year period (see Figure 3-3, Project Phasing). Maintenance and operation of the individual projects would be financed through homeowner's associations (HOAs) and owners of multi-family developments that would be responsible for all private roads, private utilities, and common amenities. The long-term maintenance and preservation of open space resources on the project site including the trail system would be the responsibility of a new Master HOA. The HOA would also be required to contract with qualified professionals for the long-term care and maintenance of the bioretention basins and fuel modification zones. Detention and water quality treatment facilities will be provided within all areas of proposed development in accordance with the requirements of the SDMC and San Diego Regional Water Quality Control Board MS4 permit. The HOA would also be responsible for enforcement of the project's Covenants, Conditions, and Restrictions.

Discretionary Actions

The project requires the following entitlements from the City, which would be processed concurrently:

General Plan Amendment

The General Plan would be amended to incorporate amendments to the Carmel Mountain Ranch Community Plan. The amendment will also include updates Figure LU-2 of the General Plan to redesignate land from Park, Open Space & Recreation to Residential and Commercial Employment, Retail, & Services uses.

Community Plan Amendment

The Carmel Mountain Ranch Community Plan would be amended to re-designate the closed Carmel Mountain Ranch Golf Course from Private Recreation-Golf Course to Low-Medium Residential (6-29 du/ac), and Medium Residential (30-43 du/ac). The amendment also includes redesignation of land to Park and Commercial Uses.

Rezone

Most of the parcels within the project site are zoned as AR-1-1 (Agriculture) and the smaller parcels (associated with the cart paths, cart tunnels, maintenance yard, and clubhouse) are zoned as RS-1-12, RS-1-14, RM-1-1, RM-2-5, and RM-3-7 (Residential) (Figure 2-4 Existing Zoning).

AR-1-1: In order to implement a 50-foot buffer at all units where residential development is proposed, the AR-1-1 zone is retained within the proposed buffer lots. Other undeveloped areas retain the AR-1-1 zone to protect open space and provide recreational amenities. Some AR-1-1 zoned property could be rezoned into two or three different zones, and some property not zoned AR-1-1 could be rezoned to AR-1-1 (see Table 3-1 and Sheet 35 of VTM). No inhabitable structures are permitted within this 50-foot AR-1-1 zone with the exception of structures that are accessory to the adjacent residential use and intended for passive uses only, including the following: trellises, garden walls not exceeding 6 feet in height, retaining walls, fencing, lighting, signage, and circulation elements, may encroach into the 50-foot setback area and AR-1-1 zone and consistent with base zone requirements.

RM-1-1, RM-1-3, RM-2-4, RM-2-5, RM-2-6, and RM-2-7: In order to implement multi-family residential development in all units where development is proposed, the RM zones listed in Table 1 have been assigned to match the anticipated scale, density and extent of development anticipated for each unit. The purpose and intent of the zones is to provide for multiple dwelling unit development at varying densities. This includes, but is not limited to, townhomes, walk-up stacked flat apartments, and apartments. Areas zoned RM-1-1 and RM-1-3 would include two- and three-story townhomes, with two or three bedrooms. Area's zoned RM-2-4 through RM-3-7 would include three- and four-story apartments, with studios, one, two, and three bedrooms.

OP-1-1: This zone would be assigned to public parks on Units 7, 13, and 16 and would be designed in accordance with the City's General Development Plan public input process.

RS-1-13: Unit 14 would retain its RS-1-13 zone, and no development is proposed at this time. Any proposals for development would be processed in accordance with the Land Development Code, and would be required to obtain permits and approvals as required by the Land Development Code.

CC-2-1: This community commercial zone is proposed for Unit 17, Lot 2, to allow for an art studio, gallery, and gathering space.

Vesting Tentative Map

Vesting Tentative Map (VTM) No. 2366422 has been prepared in order to create new legal lots (see Appendix T, Vesting Tentative Map). The VTM details land development, grading, parcel configuration, and necessary infrastructure in accordance with the guidelines and development intensities presented in the MPDP and Design Guidelines.

Master Planned Development Plan

Master Planned Development Permit (MPDP) No. 2366508 has been prepared in accordance with SDMC Section 143.0401 et seq. The City's MPDP regulations provide flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project. The regulations are intended to accommodate, to the

greatest extent possible, an equitable balance of development types, intensities, styles, site constraints, project amenities, public improvements, and community and City benefits. Specifically, in accordance with SDMC Section 143.0480, an MPDP may be processed for a proposed development that proposes to incorporate conceptual development criteria for future or phased development.

Consistent with these regulations, the MPDP would be the regulatory document that would govern development of the project site. The MPDP sets land use policy, building standards, landscaping standards, and architectural character and design standards for the project site, and it provides guidance for mobility, circulation, and infrastructure (water, wastewater, and drainage system) improvements. A detailed Phasing and Maintenance Plan and Map that outlines how the project will be implemented is provided as part of Exhibit 'A' of the MPDP for the project. Please refer to MPDP Exhibit 'A' for further guidance.

Design Guidelines

The primary purpose and intent of the design guidelines is to provide guidance and direction on site planning, building design and landscape design to ensure that future development at the project site is of a high-quality and results in an attractive, safe and livable environment. Additionally, the design guidelines are intended to provide a framework for future project implementation and, as such, must be consistent with, support and implement the goals and policies of the Carmel Mountain Ranch Community Plan, City of San Diego General Plan and Climate Action Plan, by demonstrating how new development can be designed to be compatible with and sensitive to the existing surrounding community.

Deviations

Deviations from applicable base zone development regulations as described below, Lot Zoning Deviations would be required. Deviations to the proposed residential and open space zones being requested are related height deviations in the residential zones, and lot area, width, depth, and street frontage for open space areas. The MPDP would supersede the City's LDC - where the MPDP is silent, applicable provisions of the LDC would still apply; where a conflict exists, the MPDP would apply.

- RM-1-1 and RM-1-3 zones: Where the zone requires a maximum height of 30 feet, the project proposes 37 feet
- RM-2-4, RM-2-5, RM-2-6 and RM-3-7 zones: Where the zones required a maximum height of 40 feet, project proposes 48 feet
- RM-1-1, RM-1-3, RM-2-4, RM-2-5, and RM-2-6 zones: Where the zones require a minimum side yard and rear yard setback of 15 feet, the project proposes no minimum side yard and rear yard setbacks.
- RM-3-7 zone: Where the zone requires a minimum side yard and rear yard setback of 5 feet, the project proposes no minimum side yard and rear yard setbacks.
- CC-2-1 zone: Where the zone requires a minimum street frontage of 50 feet, the project proposes no minimum street frontage.
- AR-1-1 zone: Where the zone requires minimum lot area, minimum lot width, minimum lot depth and minimum street frontage, the project proposes a minimum lot area of 0.1 acre, minimum lot width of 50 feet, minimum lot depth of 50 feet and minimum street frontage of 50 feet.

Site Development Permit

A Site Development Permit (SDP) would be required because the site is located within the Airport Land Use Compatibility Overlay Zone (ALUCOZ) for Marine Corps Air Station and due to the presence of Environmentally Sensitive Lands (ESL) on site in the form of sensitive biological resources (e.g., uplands, wetlands and sensitive species).

Neighborhood Development Permit

An unused portion of a water easement associated with an existing water line would be vacated, and a Neighborhood Development Permit is the process required in order to accomplish that. In addition, there are two separate, existing water easements associated with an existing water line in Unit 9 that would be widened to City of San Diego Standards. A new easement would be dedicated that connects these two widened easements.

3.4 Proposed Off-Site Intersection Improvements

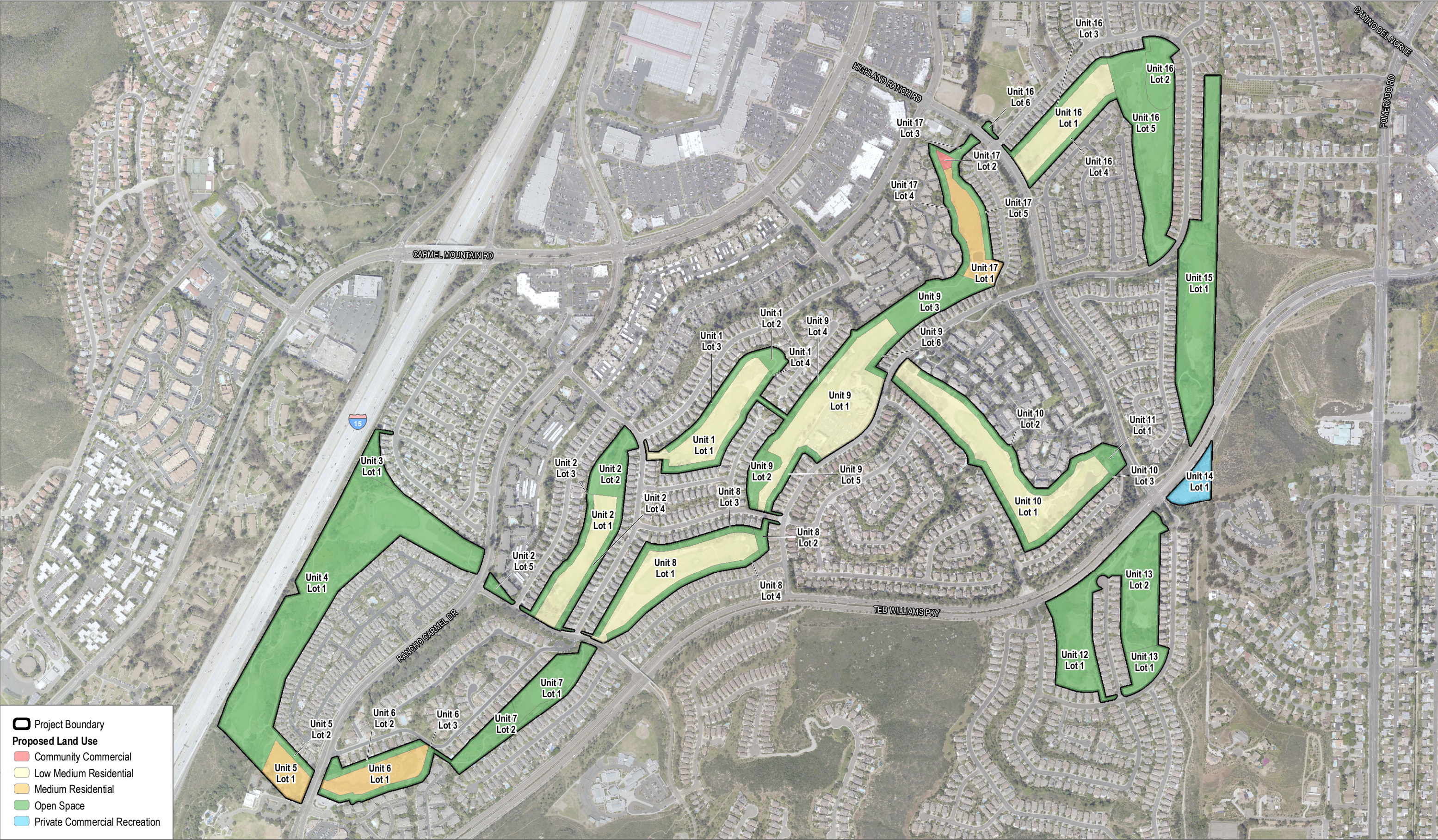
The City of San Diego requires that improvements be considered at intersections and roadways with poor operations with the addition of project related traffic. The following improvements are recommended to be provided by the project to improve operations at these locations:

- 1. Carmel Mountain Road/Rancho Carmel Drive (South)** – Carmel Mountain Road and Rancho Carmel Drive are built to their ultimate classifications per the Carmel Mountain Ranch Community Plan. This intersection currently operates at LOS E during the PM peak hour under Opening Year (2025) With and Without Project conditions and LOS F during the PM peak hour under Horizon Year (2050) With and Without Project conditions. The project contributes to the delay increase at the intersection. Operations at the intersection can be improved to better than Without Project conditions by addition a southbound right-turn overlap phase during the eastbound left-turn phase.
- 2. Ted Williams Parkway/Shoal Creek Drive** – With the implementation of a signal at Carmel Ridge Road/Ted Williams Parkway (discussed below), queueing for the eastbound left turn Shoal Creek Drive/Ted Williams improves to No Project conditions in both the AM and PM peak hours. The eastbound left turn queue reduces by 378 feet under Horizon Year Plus Project conditions as a result of a shift in eastbound left turn traffic from Shoal Creek Drive/Ted Williams Parkway to Carmel Ridge Road/Ted Williams Parkway.
- 3. Ted Williams Parkway/Pomerado Road** – Ted Williams Parkway is built to its ultimate classification per the Carmel Mountain Ranch Community Plan and City of Poway General Plan. The intersection operates at LOS E under Opening Year (2025) With and Without Project conditions and Horizon Year (2050) With and Without Project conditions. The project contributes to the delay increase during both the AM and PM peak periods. Operations at the intersection can be improved to better than Without Project conditions with the addition of southbound and eastbound right turn overlap phases. The Ted Williams Parkway/Pomerado Road intersection lies within the City of Poway's jurisdiction. The applicant will coordinate with the City of Poway in implementing the proposed mitigation.
- 4. Carmel Ridge Road/Ted Williams Parkway** – The intersection of Carmel Ridge Road at Ted Williams Parkway is configured to provide westbound right-turn in and southbound right-turn out only movements. The southbound right-turn turn operates at LOS F during the AM peak hour under Opening Year (2025) With Project conditions and Horizon Year (2050) With project conditions due to the heavy westbound through movement along Ted Williams Parkway and the addition of traffic to

the southbound right turn. The Carmel Ridge Road intersection is approximately 1,380 feet east of the Shoal Creek Drive signalized intersection and 3,200 feet west of the signalized Highland Ranch Road intersection. Given these distances meet City of San Diego design standards for signalized intersection spacing along a major roadway (1,200 feet), it is recommended the project install a traffic signal and allow full movements in all directions. The intersection also meets the peak hour signal warrant for the AM peak hour under Opening Year (2025) With Project conditions. Installation of a traffic signal reduces delay to better than Without Project conditions. A cycle length of 120 seconds for the intersection was used for the delay reduction measure analysis. Installation of this signal improves queueing for the eastbound left turn Shoal Creek Drive/Ted Williams Parkway (discussed above).

5. **Carmel Mountain Road/Camino Del Norte** – Implement right-turn overlap phasing for the southbound right-turns. Prohibition of the eastbound U-turns will not preclude access to the CVS on the northeast corner of the intersection or other uses on the southwest corner of the intersection.

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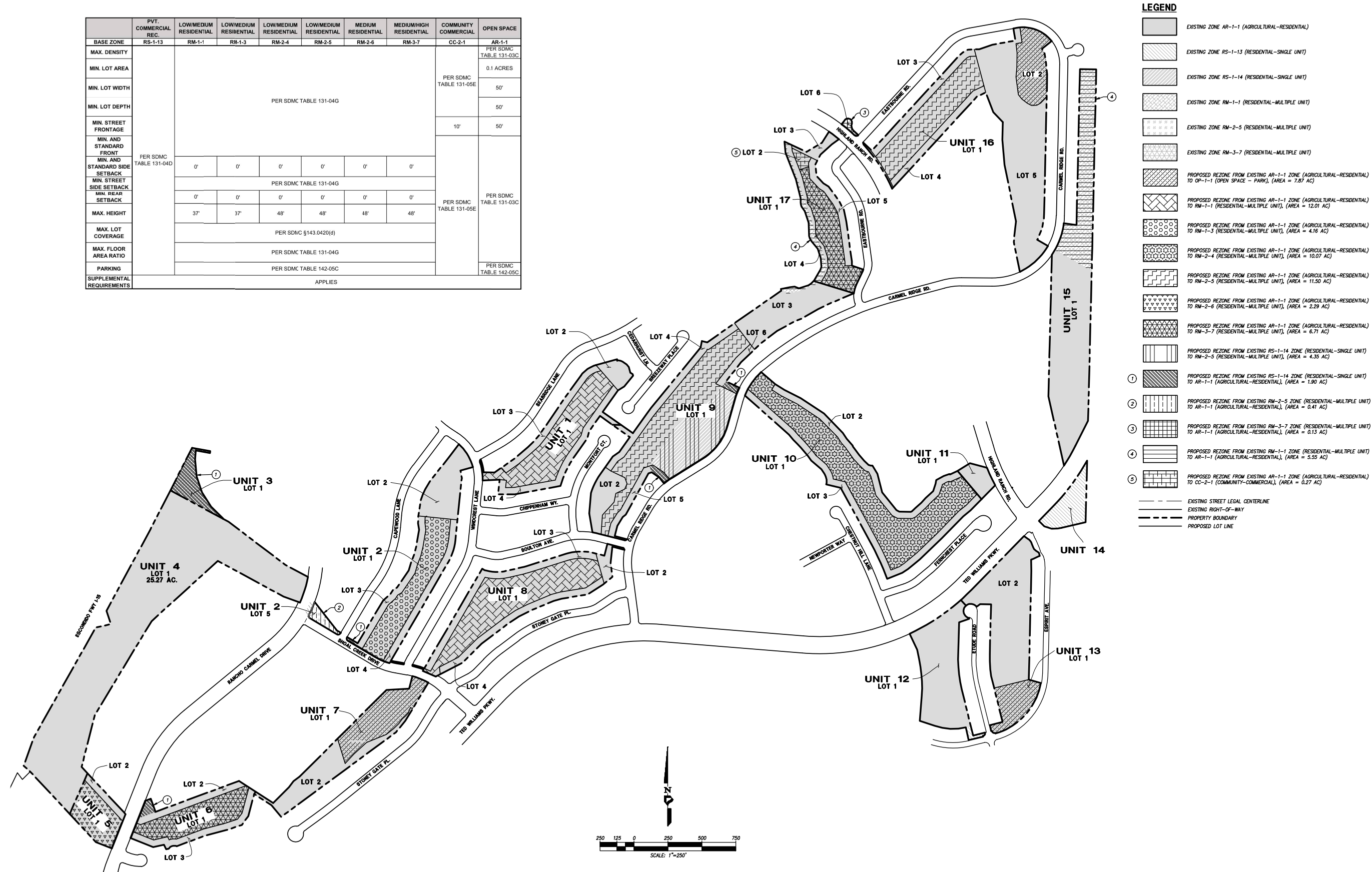


SOURCE: SANGIS 2009, 2017

FIGURE 3-1
Proposed Land Use
Trails at Carmel Mountain Ranch

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	PVT. COMMERCIAL REC.	LOW/MEDIUM RESIDENTIAL	LOW/MEDIUM RESIDENTIAL	LOW/MEDIUM RESIDENTIAL	LOW/MEDIUM RESIDENTIAL	MEDIUM RESIDENTIAL	MEDIUM/HIGH RESIDENTIAL	COMMUNITY COMMERCIAL	OPEN SPACE
BASE ZONE	RS-1-13	RM-1-1	RM-1-3	RM-2-4	RM-2-5	RM-2-6	RM-3-7	CC-2-1	AR-1-1
MAX. DENSITY	PER SDMC TABLE 131-04D	PER SDMC TABLE 131-04G						PER SDMC TABLE 131-05E	PER SDMC TAB.E 131-03C
MIN. LOT AREA									0.1 ACRES
MIN. LOT WIDTH									50'
MIN. LOT DEPTH									50'
MIN. STREET FRONTAGE		PER SDMC TABLE 131-04G						10'	50'
MIN. AND STANDARD FRONT								PER SDMC TABLE 131-05E	PER SDMC TAB.E 131-03C
MIN. AND STANDARD SIDE SETBACK									
MIN. STREET SIDE SETBACK									
MIN. REAR SETBACK									
MAX. HEIGHT		37'	37'	48'	48'	48'	48'		
MAX. LOT COVERAGE	PER SDMC §143.0420(d)								
MAX. FLOOR AREA RATIO	PER SDMC TABLE 131-04G								
PARKING	PER SDMC TABLE 142-05C								
SUPPLEMENTAL REQUIREMENTS	APPLIES								

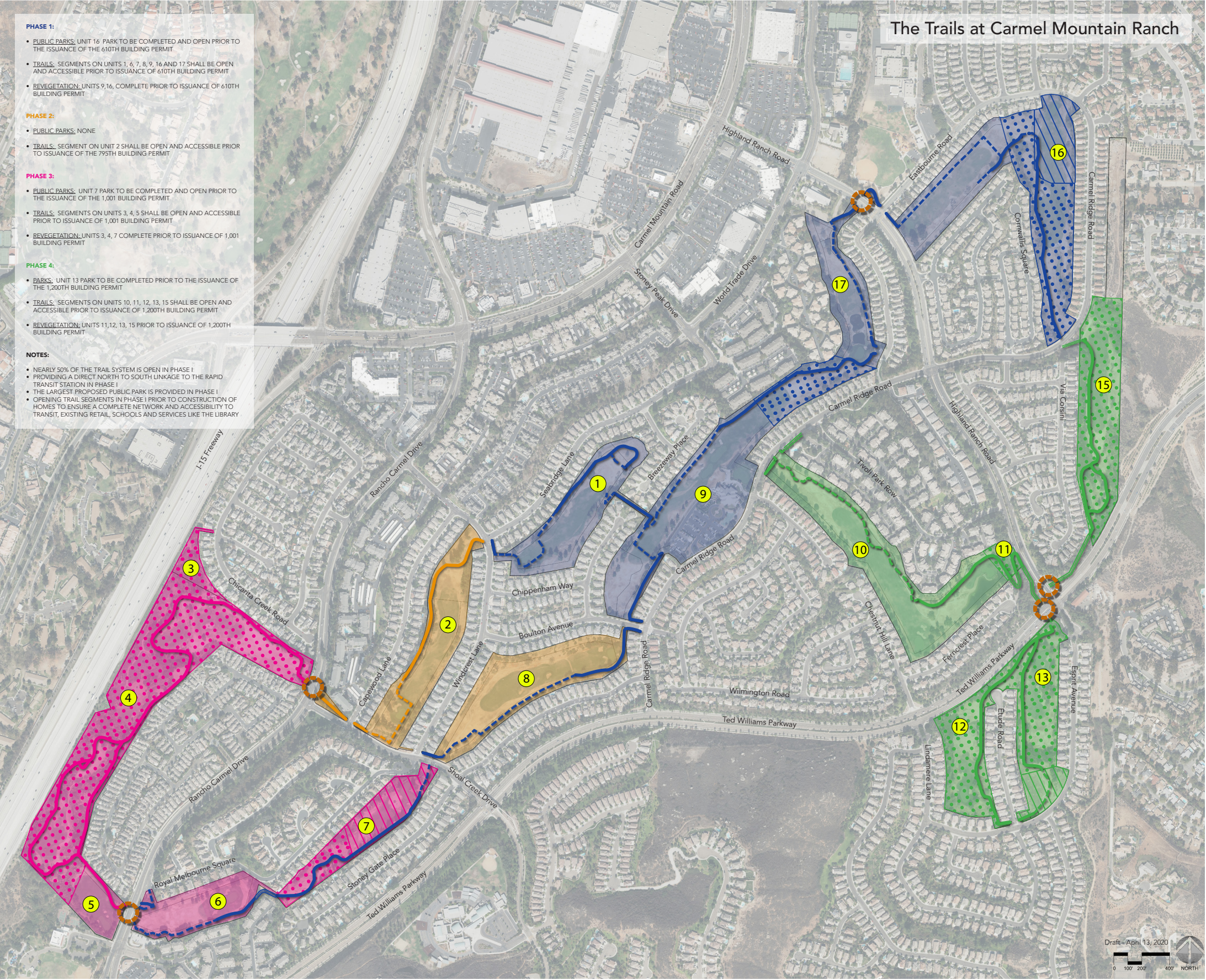


- LEGEND**
- EXISTING ZONE AR-1-1 (AGRICULTURAL-RESIDENTIAL)
 - EXISTING ZONE RS-1-13 (RESIDENTIAL-SINGLE UNIT)
 - EXISTING ZONE RS-1-14 (RESIDENTIAL-SINGLE UNIT)
 - EXISTING ZONE RM-1-1 (RESIDENTIAL-MULTIPLE UNIT)
 - EXISTING ZONE RM-2-5 (RESIDENTIAL-MULTIPLE UNIT)
 - EXISTING ZONE RM-3-7 (RESIDENTIAL-MULTIPLE UNIT)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-1-1 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 12.01 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-1-3 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 4.16 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-2-4 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 10.07 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-2-5 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 11.50 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-2-6 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 2.29 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO RM-3-7 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 6.71 AC)
 - PROPOSED REZONE FROM EXISTING RS-1-14 ZONE (RESIDENTIAL-SINGLE UNIT) TO RM-2-5 (RESIDENTIAL-MULTIPLE UNIT), (AREA = 4.35 AC)
 - PROPOSED REZONE FROM EXISTING RS-1-14 ZONE (RESIDENTIAL-SINGLE UNIT) TO AR-1-1 (AGRICULTURAL-RESIDENTIAL), (AREA = 1.90 AC)
 - PROPOSED REZONE FROM EXISTING RM-2-5 ZONE (RESIDENTIAL-MULTIPLE UNIT) TO AR-1-1 (AGRICULTURAL-RESIDENTIAL), (AREA = 0.41 AC)
 - PROPOSED REZONE FROM EXISTING RM-3-7 ZONE (RESIDENTIAL-MULTIPLE UNIT) TO AR-1-1 (AGRICULTURAL-RESIDENTIAL), (AREA = 0.13 AC)
 - PROPOSED REZONE FROM EXISTING RM-1-1 ZONE (RESIDENTIAL-MULTIPLE UNIT) TO AR-1-1 (AGRICULTURAL-RESIDENTIAL), (AREA = 5.55 AC)
 - PROPOSED REZONE FROM EXISTING AR-1-1 ZONE (AGRICULTURAL-RESIDENTIAL) TO CC-2-1 (COMMUNITY-COMMERCIAL), (AREA = 0.27 AC)
 - EXISTING STREET LEGAL CENTERLINE
 - EXISTING RIGHT-OF-WAY
 - PROPERTY BOUNDARY
 - PROPOSED LOT LINE

SOURCE: Project Design Consultants 2020

FIGURE 3-2
Proposed Zoning
Trails at Carmel Mountain Ranch

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SOURCE: Project Design Consultants 2020

FIGURE 3-3
Project Phasing
Trails at Carmel Mountain Ranch

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4 History of Project Changes

The Trails at Carmel Mountain Ranch was originally submitted to the City of San Diego (City) in December 2019 and subsequently in April 2020, June 2020 and August 2020. Based on review comments received by the City, the project has been revised in the following manner:

- Coordination with City regarding brush management zones, fire fuel load modeling and avoidance of biological resources led to creation of an “extended protective brush thinning zone.”
- Created new open space buffers around City wetlands.
- Additional restrictions on uses within the 50-foot buffer area were added, including limitations on parking, structures and landscape requirements.
- A new pipe in Rancho Carmel Drive is being added to improve the reliability of water facilities and retrofitting the Carmel Mountain High Water Pump Station.

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5 Environmental Analysis

The following sections analyze the potential environmental impacts that may occur as a result of implementation of the proposed Trails at Carmel Mountain Ranch Project (project). Each issue analysis section includes a description of existing conditions, the criteria for the determination of impact significance, evaluation of potential project impacts including mitigation measures (if applicable), and a conclusion of significance after mitigation for impacts identified as requiring mitigation (if applicable).

The environmental issues addressed in this chapter include the following:

- Land Use
- Transportation
- Air Quality
- Biological Resources
- Energy
- Geologic Conditions
- Greenhouse Gas Emissions
- Health and Safety
- Historical Resources
- Hydrology
- Noise
- Paleontological Resources
- Population and Housing
- Public Services and Facilities
- Public Utilities
- Tribal Cultural Resources
- Visual Effects and Neighborhood Character
- Water Quality
- Wildfire

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5.1 Land Use

This section describes the existing land use and planning conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project.

5.1.1 Existing Conditions

Physical Conditions

The project site is a former 18-hole golf course. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). The majority of native habitat within the project area is associated with Chicarita Creek along the western boundary of the project site (adjacent to holes 3, 4, and 5), and along the eastern boundary adjacent to a parcel owned by the City of Poway (adjacent to hole 15).

The project site is currently designated Park, Open Space, and Recreation in the City of San Diego (City General Plan (General Plan) (City of San Diego 2008). Within the Carmel Mountain Ranch Community Plan (Community Plan), the project site is identified as Private Recreation – Golf Course (City of San Diego 1999). Refer to Figures 2-2 and 2-3 for a depiction of the existing General Plan and Community Plan designations of the site and surroundings.

Most of the parcels within the project site are zoned as Agricultural-Residential (AR-1-1). However, some of the smaller parcels (associated with the cart paths, cart tunnels, maintenance yard, and clubhouse) are zoned as Residential-Single Unit (RS-1-12 and RS-1-14) or Residential-Multiple Unit (RM-1-1, RM-2-5, and RM-3-7) (City of San Diego 2005). Refer to Figure 2-4 for a depiction of the existing zoning of the site and surroundings. Permitted uses within the AR-1-1 zone include development of single-dwelling-unit homes at a required minimum of 10-acre lots. Permitted uses within the RS zones include development of single-dwelling units that accommodate a variety of lot sizes and residential dwelling types and promote neighborhood quality, character, and livability. Permitted uses within the RM zones include multiple-dwelling unit development at varying densities. Each of the RM zones are intended to establish development criteria that consolidates common development regulations, accommodates specific dwelling types, and responds to locational issues regarding adjacent land uses.

The project site is partially located within a Transit Priority Area due to the proximity of a portion of the site to the Metropolitan Transit System Sabre Springs Transit Station approximately 0.5 miles south of the project site. The project site is located within Review Area 2 of the Marine Corps Air Station (MCAS) Miramar Airport Land Use Compatibility Plan (ALUCP).

Surrounding Land Uses and Setting

The following descriptions of the surrounding development is shown on Figure 5.1-1. The surrounding development consists of mostly residential development (single-family and multi-family). Multi-family

homes exist to the north of the project site, including the Carmel Terrace apartment complex, the Carmel Summit apartment complex, and the Jefferson at Carmel Mountain Ranch complex. Multi-family homes are also located to the east off Tivoli Park Row, Highland Ranch Road, and Provencal Place. Interstate 15 is located to the west of the project site. The surrounding land is designated as Residential in the City's General Plan, identified as Low/Low Medium/Medium Density Residential in the Community Plan, and zoned as Residential-Single Unit or Residential-Multiple Unit. According to the Community Plan, approximately 4,995 dwelling units are located within the Carmel Mountain Ranch Community Planning Area (CPA), with densities ranging from approximately 3.3 to 25.7 dwelling units per acre.

To the north, beyond the surrounding residential uses is Carmel Mountain Plaza, a community-serving commercial center composed of multiple grocery stores, retail, restaurants, and a U.S. Postal Services office and distribution center. Carmel Mountain Plaza is designated as Commercial Employment, Retail, and Services in the City's General Plan, with the U.S. Postal Services office designated as Institutional and Public and Semi-Public Facilities. The Community Plan identifies the various portions of Carmel Mountain Plaza as Neighborhood Commercial, Community Commercial, Regional Commercial, and Post Office. This area is zoned as Commercial-Community.

To the south of Ted Williams Parkway, lies additional residential and Shoal Creek Elementary School. Beyond the Carmel Mountain Ranch community is the Sabre Springs Community Planning Area (CPA) and the City of Poway. Existing land uses include residential (single- and multi-family) along Sabre Springs Parkway, office/industrial park use along Evening Creek Drive, and the open space area of Van Dam Peak. The Sabre Springs Transit Station and Sabre Springs/Peñasquitos Park and Ride are located on the southwest corner of Ted Williams Parkway and Sabre Springs Parkway. These areas include the following General Plan land use designations: Residential; Institutional and Public and Semi-Public Facilities; Commercial Employment, Retail, and Services; and Park, Open Space, and Recreation. Within the Carmel Mountain Ranch CPA, these land uses are identified as Open Space, School, and Low Density Residential. Within the Sabre Springs CPA, these land uses are identified as Open Space; Low, Very Low, and Medium Density Residential; and Senior High School. Generally, these areas are zoned as Residential-Single Unit, Residential-Multiple Unit, Agricultural-Residential, Commercial-Community, Commercial-Office, and Industrial-Park.

5.1.2 Relevant Plans, Policies, and Ordinances

State

California Building Code Title 24, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the state. The code provides acoustical regulations for both exterior-to-interior sound insulation as well as sound and impact isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dBA CNEL/day-night average noise level (L_{dn}) with windows closed, in any habitable room for general residential use (State of California 2019). These regulations are applicable to the proposed project.

Additionally, Part 11 of Title 24, known as the California Green Building Standards Code, provides guidance on mandatory and voluntary measures for environmental comfort and acoustical control. The California Green Building Standards Code recommends that classrooms have a maximum background noise level of 45 dBA L_{eq} (State of California 2019).

Native American Coordination

Native American involvement in the development review process is addressed by several state laws. Senate Bill (SB) 18 includes detailed requirements for local agencies to consult with identified California Native American Tribes early in the planning and/or development process. The California Native American Graves Protection and Repatriation Act (2001) ensures that Native American human remains, and cultural items are treated with respect and dignity during all phases of the archaeological evaluation process in accordance with CEQA and any applicable local regulations. As the project requires an amendment to the General Plan it is therefore subject to the consultation requirements of SB 18.

Local***San Diego Forward: The Regional Plan***

The San Diego Association of Governments (SANDAG) is the federally designated Metropolitan Planning Organization for the San Diego region. SANDAG serves as a forum for public decision making on regional issues such as growth, transportation, and land use in San Diego County and consists of representatives from each of the county's local jurisdictions. SANDAG builds consensus, develops strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life.

The Regional Comprehensive Plan (RCP), adopted in 2004 by SANDAG, laid out key principles for managing the region's growth while preserving natural resources and limiting urban sprawl. The plan covered eight policy areas, including urban form, transportation, housing, healthy environment, economic prosperity, public facilities, our borders, and social equity.

In 2011, SANDAG approved the 2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). This approval marked the first time SANDAG's RTP included a sustainable communities strategy, consistent with the Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375. This RTP/SCS provided a blueprint to improve mobility, preserve open space, and create communities, all with transportation choices to reduce greenhouse gas emissions and meet specific targets set by the California Air Resources Board (CARB) as required by the 2008 Sustainable Communities and Climate Protection Act. In 2010, CARB established targets for each region in California governed by a metropolitan planning organization.

On October 9, 2015, the SANDAG Board of Directors adopted San Diego Forward: The Regional Plan (Regional Plan). The Regional Plan combines the two previously described existing regional planning documents: the RCP and the RTP/SCS. The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local General Plans of cities, may change based on General Plan amendments initiated by the jurisdiction or landowner applicants. The General Plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, SANDAG's RTP/SCS latest forecasts of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years. SANDAG is

currently preparing San Diego Forward: The 2021 Regional Plan, which provides a vision for the region through 2050. Adoption of the 2021 Regional Plan is anticipated in late 2021.

City of San Diego General Plan

The City's General Plan was unanimously adopted by the City Council on March 10, 2008 (City of San Diego 2008).

The General Plan builds upon many of the goals and strategies of the former 1979 general plan, in addition to offering new policy direction in the areas of urban form, neighborhood character, historic preservation, public facilities, recreation, conservation, mobility, housing affordability, economic prosperity, and equitable development. It recognizes and explains the critical role of the community planning program as the vehicle to tailor the City of Villages strategy for each neighborhood. It also outlines the plan amendment process and other implementation strategies, and it considers the continued growth of the City beyond the year 2020 (City of San Diego 2008). The General Plan includes a Strategic Framework that lists of the ten overall Guiding Principles, outlines the purpose of each of the different elements of the General Plan and implementation of the General Plan (including an action plan, budgeting process, and the City of Villages strategy). The different elements of the General Plan are described in the following paragraphs.

Land Use and Community Planning Element: The purpose of this element is to guide future growth and development into a sustainable citywide development pattern, while maintaining or enhancing quality of life in the City's communities. The Land Use and Community Planning Element addresses land use issues that apply to the City as a whole. The community planning program, which incorporated the various community plans adopted throughout the City, is the mechanism to refine citywide policies, designate land uses, and make additional site-specific recommendations as needed. The Land Use and Community Planning Element establishes the structure to respect the diversity of each community and includes policy direction to govern the preparation of community plans. The element also provides policy direction in areas including zoning and policy consistency, the plan amendment process, coastal planning, airport land use compatibility planning, annexation policies, balanced communities, equitable development, and environmental justice. The project site is designated Park, Open Space, and Recreation in the General Plan Land use and Community Planning Element. According to Figure LU-1 of the Land Use and Community Planning Element, the project site itself has low Village Propensity, however the area immediately to the north (residential and Carmel Mountain Plaza) is considered to have higher Village Propensity.

Mobility Element: This element strives to improve mobility in the City by providing policies that support a balanced, multimodal transportation network, while minimizing environmental and neighborhood impacts. The Mobility Element contains policies that help make walking more viable for short trips, in addition to addressing various other transportation choices in a manner that strengthens the City of Villages land use visions and helps to achieve a sustainable environment.

Urban Design Element: "Urban design" describes the physical features that define the character or image of a street, neighborhood, community, or the City as a whole. Urban design provides the visual and sensory relationship between people and the built and natural environment. The built environment includes buildings and streets, and the natural environment includes features such as shorelines, canyons, mesas, and parks as they shape and are incorporated into the urban framework. Citywide urban design recommendations are necessary to ensure that the built environment continues to contribute to the qualities that distinguish the City as a unique living environment.

Economic Prosperity Element: The policies in this element are intended to improve economic prosperity by ensuring that the economy grows in ways that strengthen our industries, retain and create good jobs with self-sufficient wages, increase average income, and stimulate economic investment in our

communities. A strong economy creates the wealth that allows San Diegans to support the public facilities, services, and quality of life they demand.

Public Facilities, Services, and Safety Element: This element addresses facilities and services that are publicly managed and have a direct influence on the location of land use. These include fire rescue, police, wastewater, stormwater, water infrastructure, waste management, libraries, schools, information infrastructure, disaster preparedness, and seismic safety. Public Facilities, Services, and Safety Element goals and policies are associated with providing adequate public facilities and services to serve the existing population and new growth. Applicable recommendations include requiring development proposals to fully address impacts to public facilities and services.

Recreation Element: The City has over 38,930 acres of park and open space lands that offer a diverse range of recreational opportunities. The Recreation Element contains goals and policies to address the challenges the City faces to preserve, protect, develop, operate, maintain, and enhance public recreation opportunities and facilities throughout the City. The purpose of the element is to help manage the increasing demand on existing/remaining usable park and recreation resources/facilities; develop open space lands and resource-based parks for population-based recreational purposes; ensure the distribution and access to parks is achieved equally citywide recognizing the unique differences among communities; and achieve livable neighborhoods and communities.

Conservation Element: The Conservation Element contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, help define the City's identity, and are relied upon for continued economic prosperity. The purpose of this element is to help the City become an international model of sustainable development and conservation and to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City's identity, contribute to its economy, and improve its quality of life.

Noise Element: The purpose of the noise element is to protect people living and working in the City from excessive noise. The Noise Element provides goals and policies to guide compatible land uses and incorporates noise attenuation measures for new uses to protect people living and working in the City from an excessive noise environment. It also establishes noise land use compatibility guidelines. Table 5.1-1 provides the noise land use compatibility guidelines, which is copied from Table NE-3 of the General Plan Noise Element. The following goals and policies are applicable to the proposed project:

Goal A. Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise.

Policies

NE-A.1. Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.

NE-A.2. Assure the appropriateness of proposed developments relative to existing and future noise levels by consulting the guidelines for noise-compatible land use (shown on Table NE-3) to minimize the effects on noise-sensitive land uses.

NE-A.3. Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.

- NE-A.5.** Require an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the “compatible” noise level thresholds as indicated on the Land Use - Noise Compatibility Guidelines (Table NE-3), so that noise mitigation measures can be included in the project design to meet the noise guidelines.
- NE-A.6.** Prepare noise studies to address existing and future noise levels from noise sources that are specific to a community when updating community plans.
- Goal B.** Minimize excessive motor vehicle traffic noise on residential and other noise-sensitive land uses.

Policies

- NE-B.1.** Encourage noise-compatible land uses and site planning adjoining existing and future highways and freeways.
- NE-B.2.** Consider traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise (see also Mobility Element, Policy ME-C.5 regarding traffic calming).
- NE-B.3.** Require noise reducing site design, and/or traffic control measures for new development in areas of high noise to ensure that the mitigated levels meet acceptable decibel limits.
- NE-B.4.** Require new development to provide facilities which support the use of alternative transportation modes such as walking, bicycling, carpooling and, where applicable, transit to reduce peak-hour traffic.
- NE-B.5.** Designate local truck routes to reduce truck traffic in noise-sensitive land uses areas.
- NE-B.6.** Work with Caltrans to landscape freeway-highway rights-of-way buffers and install low noise pavement surfaces, berms, and noise barriers to mitigate state freeway and highway traffic noise.
- NE-B.7.** Promote the use of berms, landscaping, setbacks, and architectural design where appropriate and effective, rather than conventional wall barriers to enhance aesthetics.

Table 5.1-1. City of San Diego Land Use – Noise Compatibility Guidelines

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	60	65	70	75	
<i>Parks and Recreational</i>					
Parks, Active and Passive Recreation					
Outdoor Spectator Sports; Golf Courses; Water Recreational Facilities; Indoor Recreation Facilities					

Table 5.1-1. City of San Diego Land Use – Noise Compatibility Guidelines

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	60	65	70	75	
<i>Agricultural</i>					
Crop Raising and Farming; Community Gardens, Aquaculture, Dairies; Horticulture Nurseries and Greenhouses; Animal Raising, Maintenance and Keeping; Commercial Stables					
<i>Residential</i>					
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units; <i>*For uses affected by aircraft noise, refer to Policies NE-D.2. and NE-D.3.</i>		45	45*		
<i>Institutional</i>					
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Child Care Facilities		45			
Other Educational Facilities including Vocational/Trade Schools and Colleges and Universities		45	45		
Cemeteries					
<i>Retail Sales</i>					
Building Supplies/Equipment; Food, Beverages, and Groceries; Pets and Pet Supplies; Sundries, Pharmaceutical and Convenience Sales; Wearing Apparel and Accessories			50	50	
<i>Commercial Services</i>					
Building Services; Business Support; Eating and Drinking; Financial Institutions; Maintenance & Repair; Personal Services; Assembly and Entertainment (includes public and religious assembly); Radio and Television Studios; Golf Course Support			50	50	
Visitor Accommodations		45	45	45	
<i>Offices</i>					
Business and Professional; Government; Medical, Dental and Health Practitioner; Regional and Corporate Headquarters			50	50	
<i>Vehicle and Vehicular Equipment Sales and Services Use</i>					
Commercial or Personal Vehicle Repair and Maintenance; Commercial or Personal Vehicle Sales and Rentals; Vehicle Equipment and Supplies Sales and Rentals; Vehicle Parking					
<i>Wholesale, Distribution, Storage Use Category</i>					
Equipment and Materials Storage Yards; Moving and Storage Facilities; Warehouse; Wholesale Distribution					

Table 5.1-1. City of San Diego Land Use – Noise Compatibility Guidelines

Land Use Category				Exterior Noise Exposure (dBA CNEL)				
				60	65	70	75	
Industrial								
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking and Transportation Terminals; Mining and Extractive Industries								
Research and Development							50	
	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level. Refer to Section I.					
		Outdoor Uses	Activities associated with the land use may be carried out.					
	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number for occupied areas. Refer to Section I.					
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable. Refer to Section I.					
	Incompatible	Indoor Uses	New construction should not be undertaken.					
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.					

Source: City of San Diego 2015a, Table NE-3.

Historic Preservation Element: The purpose of this element is to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. It also aims to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

Carmel Mountain Ranch Community Plan

The Community Plan provides the framework for development of the Carmel Mountain Ranch community in conformance with the City's General Plan. The Carmel Mountain Ranch CPA consists of a 1,489-acre planned community located in the northeastern area of the City. It lies east of Interstate 15 between the existing communities of Rancho Bernardo to the north and Sabre Springs to the south. It extends east to Crossrock Road, the Poway/San Diego City boundary, and to Interstate 15 on the west.

The Community Plan sets forth goals, policies, and proposals to guide future development within the Carmel Mountain Ranch CPA. The Community Plan was designed to serve as a guide for the establishment of a balanced community where daily trips to work, shopping and services are internal, which would be achieved through the implementation of the following goals, as identified in the Community Plan (City of San Diego 1999):

- Development of industrial and commercial facilities, which is anticipated to provide total job opportunities in excess of total planned residential units.
- Provision of convenient commercial development to meet shopping, service and recreation needs.

- Accommodation of a variety of residential options through a diversity of product types and economic appeal.
- Incorporation of adequate means for multi-modal circulation within the community integrated with City and regional transportation planning.
- Incorporation of parks, recreation and open space linked by pedestrian and bike paths to meet the needs and desires of users. An 18-hole championship golf course will provide additional recreational opportunities, as well as visual open space, for the entire community.
- Provision for sensible accommodation of, and effective financing for, public facilities and services, concurrent with community growth.
- Inclusion of educational and religious institutions offering programs to meet local community needs.

In order to achieve the goals identified above, 11 community plan elements were developed and included within the Community Plan in order to serve as a guide for development within the Carmel Mountain Ranch CPA. The 11 community plan elements include the Land Use Plan Element, Commercial and Industrial Element, Housing Element, Parks and Open Space Element, School Element, Public Facilities and Services Element, Transportation Element, Social Needs Element, Community Environment, Conservation and Design Element, Cultural Resources Element, and the Implementation Element.

The overall land use plan for the Carmel Mountain Ranch CPA encompasses parcels designated for residential, commercial, industrial, recreation, open space, and support facilities. The project site is currently designated as Private Recreation-Golf Course pursuant to the Community Plan Land Use Map (City of San Diego 1999).

Land Development Code Regulations

Chapter 13, Zones, of San Diego Municipal Code, establishes base zones and overlay zones for the land within the City. The establishment of base zones helps ensure that land uses within the City are properly located. Base zones are intended to regulate uses; minimize adverse impacts of these uses; regulated density and intensity; building size; and address the relationships between land and buildings (City of San Diego 2020). Overlay zones are applied in conjunction with base zone to provide supplemental regulations tailored to specific geographic regions in the City (City of San Diego 2013). As discussed in Section 5.1.1, Existing Conditions, the project site contains the following zones: Agricultural-Residential (AR-1-1), Residential-Single Unit Zones (RS-1-12 and RS-1-14), and Residential-Multiple Unit Zones (RM-1-1, RM-2-5, and RM-3-7). The project falls under the Airport Compatibility Overlay zone (MCAS Miramar – Review Area 2), the AIA Overlay Zone (MCAS Miramar), the Residential Tandem Parking Overlay Zone and a portion of the southwest part of the site is within the Parking Standards Transit Area Overlay Zone and the Transit Priority Areas Overlay Zone.

Master Planned Development Permit

In accordance with San Diego Municipal Code Section 143.0401 et seq., the City's Planned Development Permit (PDP) regulations provide flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project. The regulations are intended to accommodate, to the greatest extent possible, an equitable balance of development types, intensities, styles, site constraints, project amenities, public improvements, and community and City benefits. Specifically, in accordance with SDMC Section 143.0480, a Master Planned Development Permit (MPDP) may be processed for a proposed development that proposes to incorporate conceptual development criteria for future or phased development. An MPDP is being requested.

Consistent with these regulations, the MPDP would be the regulatory document that would govern development of the project site. The MPDP sets land use policy, building standards, landscaping standards, and architectural character and design standards for the project site, and it provides guidance for mobility, circulation, and infrastructure (water, wastewater, and drainage system) improvements. Site Development Permit

A site development permit (SDP) would be required because the site is located within the Airport Land use Compatibility Overlay Zone (ALUCOZ) for Marine Corps Air Station and due to the presence of Environmentally Sensitive Lands (ESL) on the site in the form of sensitive biological resources (e.g., uplands, wetlands and sensitive species). Deviation discussion are provided below.

Neighborhood Development Permit

Because an unused portion of the water easement associated with an existing water line would be vacated, a Neighborhood Development Permit is required to accomplish that vacation. In addition, there are two separate, existing water easements associated with an existing water line in Unit 9 that would be widened to City of San Diego Standards. A new easement would be dedicated that connects these two widened easements.

City of San Diego Multiple Species Conservation Program Subarea Plan

The San Diego Multiple Species Conservation Program (MSCP) is a long-term regional conservation plan established to protect sensitive species and habitats in San Diego County. The regional MSCP is divided into subarea plans that are implemented separately from one another (County of San Diego 1997). The entire project site is within the City of San Diego Subarea Plan. This subarea encompasses 206,124 acres and is generally characterized by urban land use. Within the City's MSCP Subarea, a largely contiguous, habitat baseline area or Multi-Habitat Planning Area (MHPA) of approximately 60,000 acres was identified. At the end of the 50-year permit, the City's final MSCP preserve will consist of 90% or greater conserved lands from the City's MHPA. The MHPA "baseline/hard line" areas were developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur (City of San Diego 1997). The proposed project area is located outside of these habitat linkages and core areas, with the nearest MHPA being approximately 0.25 miles from the project site.

City of San Diego Climate Action Plan

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that the City will undertake to achieve its proportional share of state greenhouse gas (GHG) emission reductions. The CAP includes a variety of potential GHG reduction policies and measures selected to help meet the City's 2050 GHG reduction goals of 80% below the 2010 baseline and meet the City's 2035 interim target that was set based upon the trajectory for meeting the 2050 reductions. Successful implementation of the CAP will (1) prepare for anticipated climate change impacts in the coming decades, (2) help California achieve its reduction target by contributing the City's fair share of GHG reductions, and (3) have a positive impact on the regional economy. The CAP includes a baseline inventory for 2010; emissions forecasts for 2020 and 2035; establishes reduction targets for 2020 and 2035; and identifies federal, state and local measures to reduce emissions that, when totaled, meet or exceed the 2020 and 2035 targets. The CAP also provides an implementation action and phasing for individual goals (City of San Diego 2015). Each of the City's CAP strategies includes goals to identify ways to reduce GHG emissions.

The CAP includes the following five strategies developed to reduce Citywide GHG emissions and to achieve reduction targets for the years 2020 and 2035 (City of San Diego 2015):

1. Energy- and water-efficient buildings
2. Clean & Renewable Energy
3. Bicycling, Walking, Transit & Land Use
4. Zero Waste (Gas & Waste Management)
5. Climate Resiliency

The CAP Consistency Checklist, adopted July 12, 2016, is the primary document used by the City to ensure project-by-project consistency with the underlying assumptions in the CAP and confirm that a project would not impact the City's ability to achieve its emission reduction targets identified in the CAP. For a discussion of the project's consistency with the CAP, see the CAP Checklist Consistency Analysis provided in Section 5.5, Greenhouse Gas Emissions, of this environmental impact report (EIR).

MCAS Miramar Airport Land Use Compatibility Plan

The Airport Authority, which serves as the state-designated Airport Land Use Commission for San Diego County, adopts ALUCPs. ALUCPs serve as a tool for the Airport Land Use Commission when conducting reviews of proposed land uses in areas surrounding airports. The plans also assist the City, as an affected local land use jurisdiction, in the preparation or amendment of land use plans and ordinances, including its General Plan.

Originally adopted in October 2008, the MCAS Miramar ALUCP provides for the orderly growth of the area surrounding the airport and safeguards welfare of the public within the vicinity of the airport. The project site is located within Review Area 2 of the Airport Influence Area and the MCAS Miramar Real Estate Disclosure Area, according to the MCAS Miramar ALUCP (San Diego Regional Airport Authority 2011). Review Area 2 consists of locations within the airspace protection and/or overflight notification area. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land use within Review Area 2.

5.1.3 Impacts Analysis

Issue 1: Would the project result in a conflict with the environmental goals, objectives, and recommendations of the community plan in which it is located?

Impact Threshold(s)

According to the City's Significance Determination Thresholds (City 2016a), an inconsistency with a plan is not in of itself a significant impact; the inconsistency would have to relate to an environmental issue (i.e., cause a direct or indirect physical change in the environment) to be considered significant under CEQA. Land use impacts may be significant if a project would be:

- Inconsistent or conflict with an adopted land use designation or intensity and result in indirect or secondary environmental impacts;

- Inconsistent or conflict with the environmental goals and/or objectives of a community or general plan; or
- Substantially incompatible with an adopted plan.

Impact Analysis

As described previously, the project site is designated Park, Open Space, and Recreation in the City's General Plan (City of San Diego 2008). Most of the parcels within the project site are zoned as Agricultural-Residential (AR-1-1). Other parcels within the project site are zoned as Residential-Single Unit (RS-1-12 and RS-1-14) or Residential-Multiple Unit (RM-1-1, RM-2-5, and RM-3-7) (City of San Diego 2005). Within the Community Plan, the project site is identified as Private Recreation – Golf Course.

The project is concurrently processing General Plan amendment and Community Plan amendment, as well as a Rezone, which would increase the intensity of use and allow for the proposed residential development on site (see Table 4-2, Proposed Land Use and Zoning). Proposed zoning designations include the following: RM-1-1, RM-1-3, RM-2-4, RM-2-5, RM-2-6, RM-3-7, and CC-2-1. Refer to Figures 4-1 through 4-2 for a depiction of the proposed designations.

Impacts associated with the increase in use intensity on the site are analyzed and addressed in throughout this EIR; refer to Section 5.1 Air Quality; Section 5.5, Greenhouse Gas Emissions; Noise; Section 5.13, Public Services and Facilities; Section 5.14, Public Utilities; Section 5.15, Transportation; Section 5.17, Visual Effects/Neighborhood Character; and Chapter 6, Cumulative Impacts. The land use consistency analysis takes several factors into consideration such as whether or not the project implements a principle, goal, or policy or directly conflicts with the implementation of a principle, goal, or policy Included in a planning document. Overall, as shown in Table 5.1-1 and Table 5.1-2, the project would not conflict with the environmental principles, goals, and policies contained within the General Plan and Community Plan. Therefore, impacts would be less than significant.

Significance of Impact

Impacts associated with the increase in use intensity are discussed throughout this EIR in the sections identified above. As shown in Tables 5.1-2 and Table 5.1-3, the project would not conflict with the environmental principles, goals, and policies contained within the General Plan and Community Plan. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting

No mitigation would be required.

Issue 2: Would the project require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?

Impact Threshold(s)

According to the City's Significance Determination Thresholds (2016a), land use impacts may be significant if a project would result in:

- Conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts could occur.

Impact Analysis

The project does not propose or require any variance from the zoning code. As described in Chapter 3, Project Description, development of the residential neighborhoods will be implemented through Citywide zoning with deviations from the development standards described in the Design Guidelines and through the Master Planned Development Permit. The Master Planned Development Permit would allow deviations from the regulations, which would include increases in allowable height of structures within the different residential zones between 37 to 48 feet. The proposed residential zones within the project site allow for heights of 30 feet (RM-1-1 and RM-1-3) and 40 feet (RM-2-4, RM-2-5, RM-2-6, and RM-3-7). Similarly, deviations are requested in lot area, setback, width, depth, and frontage throughout the project site. As described in Chapter 3, Project Description, deviations are also proposed for zone AR-1-1 development standards. These deviations (as detailed in Chapter 3, Project Description) are requested due to irregularly shaped lots and the provision of the buffer between new and existing development.

As described in Section 5.1.1, the project site is immediately surrounded on all sides by existing residential development. Assuming that the majority of existing residential structures are built within the allowable heights of the underlying base zones, maximum residential building heights would range from 37 to 48 feet. In the instances where maximum building height is greater than 40 feet, it is likely that differences in grade and topography would not result in a substantial visible difference between existing and proposed development. Similarly, variations in lot area, setback, width, depth, and frontage would not result in development that is substantially visibly different from the surrounding community. Additionally, any deviations requested would be the exception, with the majority of proposed structures developed in accordance with the base zoning requirements. Further, per California Public Resources Code Section 20199 (d)(1), aesthetic impacts resulting from a residential project on an infill site within a Transit Priority Area are not considered significant. As deviations requested would not affect any other environmental issue or sensitive resource, it would not result in a physical impact on the environment.

Significance of Impact

Deviations requested would not affect any other environmental issue or sensitive resource, it would not result in a physical impact on the environment. Impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 3: *Would the project result in a conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan?*

Impact Threshold(s)

According to the City's Significance Determination Thresholds, impacts may be significant if a project would be:

- inconsistent and/or conflict with adopted environmental plans for an area.

Impact Analysis

The project is within the City Multiple Specific Conservation Program Subarea Plan; more specifically it is within the Northern Area. The proposed project site does not occur within or adjacent to an MHPA. The nearest MHPA occurs approximately 0.25 miles from the proposed project site. The project footprint would avoid all areas of natural habitat and sensitive vegetation communities where MSCP-covered special-status plant species are anticipated to occur. All impacts would be concentrated in already developed/disturbed lands and the project would not impact native habitat that could support MSCP-covered special-status wildlife species. However sensitive wildlife species known to occur in the surrounding region, and those which have a potential to occur within the project's vicinity, including Cooper's Hawk, Orange-Throated Whiptail, Blainville's Horned Lizard, Coastal California Gnatcatcher, Least Bell's Vireo, and Townsend's Big-Eared Bat. Proposed project implementation has the potential to indirectly impact special-status birds (Cooper's hawk, yellow warbler, least Bell's vireo and coastal California gnatcatchers) nesting adjacent to project development area. Based on the provisions of the MSCP Implementing Agreement between the Wildlife Agencies and the City of San Diego, no additional protection is required to offset potential indirect impacts to the coastal California gnatcatchers located outside of the MHPA. Though similarly covered by the MSCP, a 300-foot avoidance buffer is required for the Cooper's hawk to comply with the MSCP conditions of coverage. Refer to Section 5.4, Biological Resources, for additional discussion. In addition, since the project site is not within or adjacent to designated MHPA lands, the proposed project would not conflict with the City's environmentally sensitive land regulations (require avoidance of MHPA lands, wetlands, vernal pools in naturally occurring complexes, MSCP Covered Species, and MSCP Narrow Endemics).

Significance of Impact

The proposed project would not conflict with the City's MSCP or an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, or any local policies or ordinances. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting

No mitigation would be required.

Issue 4: Would the project physically divide an established community?**Impact Threshold(s)**

According to the City's Significance Determination Thresholds (2016a), land use impacts may be significant if a project would:

- Physically divide an established community.

Impact Analysis

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse. All proposed development would be located within the former golf course site. The proposed project would not construct structures that have the potential to physically divide an established community (such as large roadways, extension of physical barriers). The golf course, which is private property, was not available for public use during previous operation and is currently fenced preventing public access. The proposed project would include 6 miles of publicly accessible trails that would provide increased connections between the proposed project and the surrounding community. **Significance of Impact**

The project would not divide an established community; therefore, impacts would not occur.

Mitigation, Monitoring, and Reporting

No mitigation would be required.

Issue 5: Would the project result in land uses which are not compatible with an adopted Airport Land Use Compatibility Plan (ALUCP)?**Impact Threshold(s)**

According to the City's Significance Determination Thresholds (2016a), land use impacts may be significant if a project would:

- Include incompatible uses as defined in an airport land use plan or inconsistency with an airport's land use compatibility plan as adopted by the Airport Land Use Commission to the extent that the inconsistency is based on valid data.
- If the project is proposed within the Airport Environs Overlay Zone (AEOZ) as defined in Chapter 13, Article 2, Division 3 of the San Diego Municipal Code, the potential exterior noise impacts from aircraft noise would not constitute a significant environmental impact.

Impact Analysis

The project site is located approximately 6.3 miles northeast of MCAS Miramar's airport. The project site is located within the Airport Influence Area for MCAS-Miramar – Review Area 2, which consists of locations that are within the airspace protection and/or overflight areas as depicted in the MCAS Miramar ALUCP (San Diego Regional Airport Authority 2011). The project site is located outside of Review Area 1 which encompasses noise and safety zones.

Projects located in Review Area 2 requiring review include projects that create objects in a High Terrain Zone, projects that create electrical or visual hazards to airplanes in flight, and projects that have the potential to cause an increase in bird or wildlife activity. The project site is not located within a High Terrain Zone (San Diego Regional Airport Authority 2011). Moreover, the project does not propose uses that would create electrical hazards to aircraft, and it does not propose the use of neon lights that could be mistaken for airport lighting or interfere with night vision goggles used by military pilots. The project also would not include large water features or proposes uses that would attract wildlife such as birds that would interfere with aircraft operations. The project would provide a Real Estate Disclosure, as required by state law, as a condition of sale or lease of property within the airport influence area.

The project applicant notified FAA because the proposed development meets the notification criteria as defined by Code of Federal Regulations Title 14, Part 77. It was determined that the proposed project does not exceed the applicable height requirements, and thus would comply with the FAA (Part 77) Determination of No Hazard to Air Navigation. The project was also submitted to the San Diego Regional Airport Authority for an ALUC consistency determination with the MCAS Miramar ALUCP; however, ALUC staff concluded that no consistency determination was needed because the project site is entirely within Review Area 2, and it was not determined to be hazardous by the FAA. Therefore, the proposed project will be in compliance with the MCAS Miramar ALUCP.

The project site is not otherwise located in areas designated for airspace protection, FAA height notification, or safety zones of the ALUCP (San Diego Regional Airport Authority 2011). Therefore, the project would not result in land uses that are incompatible with the MCAS Miramar ALUCP and **less-than-significant impacts** would occur.

Significance of Impact

The project would not result in land uses that are incompatible with the MCAS Miramar ALUCP and **less-than-significant impacts** would occur.

Mitigation, Monitoring, and Reporting

No mitigation would be required.

Issue 6: Would the Project result in the exposure of sensitive receptors due to current or future noise levels, which exceed standards established in the Noise Element of the General Plan?

Impact Threshold(s)

A significant land use impact would occur if a project would expose new development to noise levels at exterior use areas or interior areas in excess of the noise compatibility guidelines established in the City General Plan Noise Element (shown in Table 5.1-1). As shown in Table 5.1-1, the City considers outdoor noise levels up to:

- 70 dBA CNEL to be conditionally compatible for multi-family residential, provided that interior noise levels of 45 dBA CNEL can be maintained;
- 75 dBA CNEL to be conditionally compatible for commercial services (i.e. community art gallery/studio and restaurant), provided that interior noise levels of 50 dBA CNEL can be maintained; and
- 70 dBA CNEL to be conditionally compatible for parks and active and passive recreation.

Impact Analysis

The City requires that interior noise levels not exceed a CNEL of 45 or 50 dBA within residential and commercial type land uses, respectively. Typically, with windows closed, building shells of structures provide a minimum of approximately 25 dBA of noise reduction (Transportation Research Board, National Research Council 2000).

The ambient noise environment in the project area is largely influenced by vehicular traffic on the local and regional roadway network. As provided in Section 5.11, Noise, of this EIR, outdoor areas throughout the project site would meet the “compatible” or “conditionally compatible” use thresholds for existing and future traffic noise level, without accounting for noise level reductions provided by intervening elements in the vicinity, with exception to Unit 5 (70.2 dBA CNEL). When accounting for intervening elements, the outdoor areas in Unit 5 are calculated to range from approximately 62 to 65 dBA CNEL. All proposed residential outdoor areas are calculated to be within the 70 dBA CNEL conditionally compatible, for which the building shell with windows closed would provide at most a 45 dBA CNEL interior noise level. Similarly, the proposed community art gallery/studio and restaurant would meet the conditionally compatible noise requirements (61.4 dBA CNEL), for which the building envelope would provide adequate noise reduction or interior uses. Additionally, the project would be required to comply with the California Building Code and the City of San Diego Code, which require that interior noise levels be maintained at 45 dBA Ldn/CNEL or less for residential structures. As parks and active and passive recreation are integrated through the residential land uses throughout the project site, it is expected that all proposed park uses would meet the compatible exterior noise levels of less than 70 DBA CNEL (refer to Table 5.11-12).

Significance of Impact

The project’s land uses would be compatible with Table 5.1-1, City of San Diego Land Use – Noise Compatibility Guidelines; therefore, impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting

Mitigation measures would not be required.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Land Use and Community Planning Element</i>			
A. City of Villages Strategy	Mixed-use villages located throughout the City and connected by high-quality transit.	<p>The project would include a variety of building types (townhomes, garden walk-ups, stacked flats and apartments, among others) in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established in each planning neighborhood to help define a sense of place. In addition, the project proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library.</p> <p>In order to accomplish this, the project would include a General Plan amendment, Community Plan amendment, and rezone to change the zoning and land use designations of the project site. These zoning and land use changes would allow for the proposed higher intensity development that would include a variety of residential types and densities, open space and recreation amenities, and a community art gallery/studio that would include a café/restaurant/banquet area and dining space. Upon approval of the proposed project and concurrent entitlements, the project would be consistent with the General Plan land use categories and designations.</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood. Buildings would be oriented and relate directly to internal streets, paseos, greenways, and common open space amenities.</p> <p>Additionally, the project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The project's internal street network would consist of all private drives designed as Complete Streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. The project site is partially located within a Transit Priority Area due to the proximity of a portion of the site to the Metropolitan Transit System Sabre Springs Transit Station approximately 0.5 miles south of the project site.</p>	
<i>Policy LU-A.1c</i>	Designate Neighborhood, Community, and Urban Village Centers, as appropriate, in community plans throughout the City, where consistent with	The project would develop distinct residential neighborhoods with a diversity of housing types and open space amenities and with a unique character and sense of place. The Trails at Carmel Mountain	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	public facilities adequacy and other goals of the General Plan.	Ranch Design Guidelines (Design Guidelines) have been developed for the project that are intended to provide a framework for future project implementation, which would be consistent with, support, and implement the goals and policies of the Community Plan, General Plan, and Climate Action Plan (CAP) (refer to Section 5.5, Greenhouse Gas Emissions, for a discussion of the CAP Consistency Checklist). As discussed in Section 5.13, Public Services and Facilities, the project would result in less than significant impacts to public facilities including police and fire protection, parks and recreation, library, and school facilities.	
<i>Policy LU-A.5</i>	Conduct environmental review and focused study during the community plan update process, or potential village locations, with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design.	This Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA). It will be released for public review and comments received by any community planning groups and the general public will be responded to and incorporated into the Final EIR as required by CEQA.	The project would be consistent with this policy.
<i>Policy LU-A.6</i>	Recognize that various villages may serve specific functions in the community and City; some villages may have an employment orientation, while others may be major shopping destinations, or primarily residential in nature.	Refer to the analysis in Policy LU-A.1c.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy LU-A.7</i>	<p>Determine the appropriate mix and densities/intensities of village land uses at the community plan level, or at the project level when adequate direction is not provided in the community plan.</p> <ul style="list-style-type: none"> a. Consider the role of the village in the City and region; surrounding neighborhood uses; uses that are lacking in the community; community character and preferences; and balanced community goals (see also LU Section H). b. Achieve transit-supportive density and design, where such density can be adequately served by public facilities and services (see also Mobility Element, Policy ME-B.9). Due to the distinctive nature of each of the community planning areas, population density and building intensity will differ by each community. c. Evaluate the quality of existing and planned transit service 	Refer to the analysis in Land Use Goal A.	The project would be consistent with this policy.
<i>Policy LU-A.9</i>	Integrate public gathering spaces and civic uses into village design (see also Urban Design Element, Policies UD-C.5 and UD-E.1).	The majority of the project site would be retained as recreation and open space. Open space uses would be composed of approximately 111.27 acres, which includes approximately 6 miles of publicly accessible trails and 9.79 acres of publicly accessible parkland. The recreation amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		and biking. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Trails would range from 5 to 8 feet in width and all trails would be publicly accessible. Additionally, the project would include a community art gallery/studio that would include a café/restaurant/banquet area and dining space.	
<i>Policy LU-A.10</i>	Design infill projects along transit corridors to enhance or maintain a "Main Street" character through attention to site and building design, land use mix, housing opportunities, and streetscape improvements.	Refer to the analysis in Land Use Goal A and Policy LU-A-1c.	The project would be consistent with this policy.
<i>Policy LU-A.11</i>	Design and evaluate mixed-use village projects based on the design goals and policies contained in the Urban Design Element.	The project would comply with the goals and policies contained in the Urban Design Element of the City's General Plan, as discussed below.	The project would be consistent with this policy.
B. Category Goals	Land use categories and designations that remain consistent with the General Plan land use categories as community plans are updated and/or amended.	Refer to the analysis in Land Use Goal A.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
C. Community Planning Goal	<p>Community plans that maintain or increase planned density of residential land uses in appropriate locations.</p> <p>Community plans that are kept consistent with the future vision of the General Plan through comprehensive updates or amendments.</p>	Refer to the analysis in Land Use Goal B.	The project would be consistent with this goal.
<i>Policy LU-C.1</i>	<p>Establish each community plan as an essential and integral component of the City's General Plan with clear implementation recommendations and links to General Plan goals and policies.</p> <ul style="list-style-type: none"> a. Develop community plan policies that implement citywide goals and address community or neighborhood-specific issues; such policies may be more detailed or restrictive than the General Plan as needed (see also LU-C.1.c. and LU-C.2.). b. Rely on community plans for site-specific land use and density designations and recommendations. c. Maintain consistency between community plans and the General Plan, as together they represent the City's comprehensive plan. In the event of an inconsistency between the General Plan and a community plan, action must be taken to either: 1) amend the 	Refer to the analysis in Land Use Goal A.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	community plan, or 2) amend the General Plan in a manner that is consistent with the General Plan's Guiding Principles.		
<i>Policy LU-C.3</i>	Maintain or increase the City's supply of land designated for various residential densities as community plans are prepared, updated, or amended.	Refer to the analysis in Land Use Goal A.	The project would be consistent with this policy.
<i>Policy LU-C.4</i>	Ensure efficient use of remaining land available for residential development and redevelopment by requiring that new development meet the density minimums of applicable plan designations.	Refer to the analyses in Land Use Goal A.	The project would be consistent with this policy.
D. Plan Amendment Process Goals	Approve plan amendments that better implement the General Plan and community plan goals and policies. Allow for changes that will assist in enhancing and implementing the community's vision.	Refer to the analysis in Land Use Goal A.	The project would be consistent with this goal.
<i>Policy LU-D.1</i>	Require a general plan and community plan amendment for proposals that involve: a change in community-plan-adopted land use or density/intensity range; a change in the adopted community plan development phasing schedule; or a change in plan policies, maps, or diagrams. (Note: state law mandates that General Plan and community plan amendments are not to be required for projects utilizing state mandated housing density bonuses.)	Refer to the analysis in Land Use Goal A.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy LU-D.2</i>	Require an amendment to the public facilities financing plan concurrently with an amendment to the General Plan and community plan when a proposal results in a demand for public facilities that is different from the adopted community plan and public facilities financing plan.	There is no public facilities financing plan for the proposed project. The project would result in a demand for public facilities that is higher than the adopted community plan, however the project would contribute public facilities to the community. The project includes 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity to the surrounding neighborhood. Off-site improvements include the installation of a new traffic signal at the intersection of Carmel Ridge Road and Ted Williams Parkway. The project also proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library	The project would be consistent with this policy.
<i>Policy LU-D.3</i>	Evaluate all plan amendment requests through the plan amendment initiation process and present the proposal to the planning commission or city council for consideration.	<ul style="list-style-type: none"> • The Carmel Mountain Ranch Community Plan amendment was initiated by Planning Commission Resolution No. 5037-PC on 7/25/19. The Planning Commission identified nine issues to be considered: • Appropriate land use designations, residential densities, and zoning for the site; • Appropriate size and boundary for the amendment site; • Site design considerations for the proposed land use designations; 	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<ul style="list-style-type: none"> • The appropriate mix and siting of active and passive uses; • Provision of amenities, public spaces, and pedestrian-scale elements associated with the proposed development and application of urban design guidelines; • Review of pedestrian and vehicular circulation patterns for safety and connection on the site as well as review of pedestrian/vehicular access into the property; • Climate Action Plan consistency and sustainable development features; • Noise attenuation measures for residential uses sited near I-15; and • Provision of additional benefit to the community. <p>The land use plan amendments would be reviewed by the planning commission and city council pursuant to the requirements of the General Plan, Community Plan, and San Diego Municipal Code.</p>	
<i>Policy LU-D.12</i>	Evaluate specific issues that were identified through the initiation process as well as any additional community-specific amendment evaluation factors.	<p>Refer to the analysis in Policy LU-A.5.</p> <p>Through the CEQA process (19-064), specific issues identified during the initiation process were reviewed and analyzed for potential environmental impacts. See LU-D.2 and LU-D.12.</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy LU-D.13</i>	Address the standard plan amendment issues prior to the planning commission decision at a public hearing related to level and diversity of community support; appropriate size and boundary for the amendment site; provision of additional benefit to the community; implementation of major general plan and community plan goals, especially as related to the vision, values, and City of Villages strategy; and provision of public facilities.	Refer to the analyses in Land Use Policy LU-D.3. The project objectives, which are included in Chapter 4, Project Description, outline benefits to the community including the preservation of open space and addition of publicly accessible recreation amenities. See LU-D.2 and LU-D.12.	The project would be consistent with this policy.
F. Consistency Goals	Zoning concurrent with community plan updates and amendments to ensure consistency with community plan land use designations. Zones or development regulations to better implement updated community plans.	Refer to the analyses in Land Use Policy LU-D.3. Proposed zoning designations include the following: RM-1-1, RM-1-3, RM-2-4, RM-2-5, RM-2-6, RM-3-7, OP-1-1, and CC-2-1, which would be implemented concurrent and consistent with the proposed amendments to the General Plan and Community Plan. The proposed zoning would implement uses and residential densities within the allowable uses of the proposed General Plan and Community Plan designations. The public parks on Units 7, 13, and 16 would be zoned OP-1-1 and designed in accordance with the City's General Development Plan public input process. The project also includes Design Guidelines that provide direction on site planning, building design, and landscape design, which are consistent with the General Plan, Climate Action Plan, Community Plan, and zoning.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy LU-F.1</i>	Apply existing or new Land Development Code zone packages or other regulations as needed to better implement the policy recommendations of the General Plan; land use designations of the community plans; other goals and policies of the community plans; and community-specific policies and recommendations.	As discussed in Section 5.1, Land Use and Planning, and herein throughout Table 5.1-1 and Table 5.1-2, the project would comply with the City's General Plan and the Community Plan. The project would also comply with the City's Land Development Code, as discussed in Section 5.1, Land Use and Planning.	The project would be consistent with this policy.
<i>Policy LU-F.2</i>	Review public and private projects to ensure that they do not adversely affect the general plan and community plans. Evaluate whether proposed projects implement specified land use, density/intensity, design guidelines, and other general plan and community plan policies, including open space preservation, community identity, mobility, and the timing, phasing, and provision of public facilities.	Upon adoption of these amendments, the project would be consistent with the City's General Plan and the Community Plan, including policies regarding open space preservation, community identity, mobility, and the timing, phasing, and provision of public facilities.	The project would be consistent with this policy.
G. Airport Land Use Compatibility Goals	<p>Protection of the health, safety, and welfare of persons within an airport influence area by minimizing the public's exposure to high levels of noise and risk of aircraft accidents.</p> <p>Protection of public use airports and military air installations from the encroachment of incompatible land uses within an airport influence area that could unduly constrain airport operations.</p>	<p>The closest airport is Marine Corps Air Station (MCAS) Miramar, located approximately 6.5 miles southwest. The project site is located within Review Area 2 of the Airport Land Use Compatibility Plan (ALUCP).</p> <p>The project applicant notified FAA because the proposed development meets the notification criteria as defined by Code of Federal Regulations Title 14, Part 77. It was determined that the proposed project does not exceed the applicable height requirements, and thus would comply with the FAA (Part 77) Determination of No Hazard to Air Navigation. The project was also submitted to the San Diego Regional</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		Airport Authority for an ALUC consistency determination with the MCAS Miramar ALUCP; however, ALUC staff concluded that no consistency determination was needed because the project site is entirely within Review Area 2, and it was not determined to be hazardous by the FAA. Therefore, the proposed project will be in compliance with the MCAS Miramar ALUCP.	
<i>Policy LU-G.2</i>	Submit all amendments and updates to the General Plan, community plans, specific plans, airport plans, development regulations and zoning ordinances affected by an airport influence area to the ALUC to ensure that they are consistent with the Airport Land Use Compatibility Plan or have the City Council take steps to overrule the ALUC.	Refer to the analysis for Land Use Goal G.	The project would be consistent with this policy.
<i>Policy LU-G.4</i>	Submit development projects affected by an airport influence area to the ALUC after the adoption or amendment to an Airport Land Use Compatibility Plan to ensure that they are consistent up until the time that the ALUC has determined the General Plan, community plans, and specific plans consistent with the Airport Land Use Compatibility Plan or have the City Council take steps to overrule the ALUC.	Refer to the analysis for Land Use Goal G.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy LU-G.5</i>	Implement the height standards used by the FAA as defined by Code of Federal Regulations Title 14, Part 77 through development regulations and zoning ordinances.	Refer to the analysis for Land Use Goal G. The maximum height of residential buildings would be 48 feet, which would be in compliance with FAA regulations.	The project would be consistent with this policy.
<i>Policy LU-G.9</i>	Coordinate with the Navy and Marine Corps to ensure that future land use and General Plan community plan, specific plan, development regulations and zoning ordinances amendments are consistent with the Air Installation Compatible Use Zone study for military air installations.	Refer to the analysis for Land Use Goal G.	The project would be consistent with this policy.
H. Balanced Communities and Equitable Development Goals	Ensure diverse and balanced neighborhoods and communities with housing available for households of all income levels. Community and neighborhood-specific strategies and implementation measures to achieve equitable development.	The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.42 acres. Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each	The project would be consistent with these goals.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood</p> <p>Refer also to the analysis in Goal A.</p>	
<i>Policy LU-H.1</i>	<p>Promote development of balanced communities that take into account community-wide involvement, participation, and needs.</p> <ul style="list-style-type: none"> a. Plan village development with the involvement of a broad range of neighborhood, business, and recognized community planning groups and consideration of the needs of individual neighborhoods, available resources, and willing partners. b. Invest strategically in public infrastructure and offer development incentives that are consistent with the neighborhood's vision. c. Recognize the important role that schools play in neighborhood life and look for opportunities to form closer partnerships among local schools, residents, neighborhood groups, and the City with the goal of improving public education. d. Ensure that neighborhood development and redevelopment addresses the needs of older people, particularly those disadvantaged by age, disability, or poverty. 	<p>Refer to the analysis in Land Use Goal A and H.</p> <p>Any proposed new infrastructure needed to serve the project would be connected to existing infrastructure, and thus no environmental impacts would occur with project development. Additionally, as discussed in Section 5.13, Public Services and Facilities, the project would be served by schools in the Camel Mountain Ranch community and would not result in impacts to such schools.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> e. Provide affordable housing opportunities within the community to help offset the displacement of the existing population. f. Provide a full range of senior housing from active adult to convalescent care in an environment conducive to the specific needs of the senior population. 		
<i>Policy LU-H.2</i>	Provide affordable housing throughout the City so that no single area experiences a disproportionate concentration.	Refer to the analysis in Land Use Goal A and H.	The project would be consistent with this policy.
<i>Policy LU-H.3</i>	Provide a variety of housing types and sizes with varying levels of affordability in residential and village developments.	Refer to the analysis in Land Use Goal A and H.	The project would be consistent with this policy.
<i>Policy LU-H.6</i>	Provide linkages among employment sites, housing, and villages via an integrated transit system and a well-defined pedestrian and bicycle network.	Refer to the analyses in Land Use Goal A and H, and Policies LU-A.3 and LU-A.9.	The project would be consistent with this policy.
<i>Policy LU-H.7</i>	Provide a variety of different types of land uses within a community in order to offer opportunities for a diverse mix of uses and to help create a balance of land uses within a community (see also LU-A.7).	Refer to the analysis in Land Use Goal A and H.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
I. Environmental Justice Goals	<p>Ensure a just and equitable society by increasing public outreach and participation in the planning process.</p> <p>Equitable distribution of public facilities, infrastructure, and services throughout all communities.</p> <p>Improve mobility options and accessibility in every community</p> <p>Promote and ensure environmental protection that will emphasize the importance of safe and healthy communities.</p>	<p>Refer to the analysis in Land Use Goal A and H.</p> <p>The project has included community residents and Native American tribes in the planning process.</p> <p>New development within the project site would comply with the California Energy Code (Title 24) and California Green Building Standards Code (CALGreen), as part of project conditions.</p> <p>To meet these requirements, all new development within the project site would include rooftop photovoltaic solar panels, energy-efficient lighting and appliances, cool roofs, energy-efficient windows, and other design features that significantly conserve energy. These features would reduce energy demand, water and resource consumption, and environmental waste, and would generate renewable energy on site.</p>	The project would be consistent with these goals.
<i>Policy LU-I.1</i>	<p>Ensure environmental justice in the planning process through meaningful public involvement.</p> <p>a. Assure potentially affected community residents that they have opportunities to participate in decisions that affect their environment and health and that the concerns of all participants involved will be considered in the decision-making process.</p> <p>b. Increase public outreach to all segments of the community so that it is informative and</p>	<p>Refer to the analyses in Policy LU-A.5 and Land Use Goal I.</p> <p>The project would be consistent with all applicable state and local notification process requirements.</p> <p>Consultation with Native American tribes has occurred in accordance with Assembly Bill (AB) 52 requirements and is discussed in Section 5.16, Tribal Cultural Resources, of the EIR. Upon implementation of mitigation measure MM-TCR-X, the project would result in less-than-significant impacts to tribal cultural resources.</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>detailed in terms of process and options available to the community.</p> <p>c. Consult with California Native American tribes to provide them with an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting or mitigating impacts to cultural places.</p>		
<i>Policy LU-I.14</i>	<p>As part of community plan updates or amendments that involve land use or intensity changes, evaluate public health risks associated with identified sources of hazardous substances and toxic air emissions (see also Conservation Element, Section F). Create adequate distance separation, based on documents such as those recommended by the California Air Resources Board and site specific analysis, between sensitive receptor land use designations and potential identified sources of hazardous substances such as freeways, industrial operations or areas such as warehouses, train depots, port facilities, etc.</p>	<p>Hazards and Hazardous Materials are discussed in Section 5.6, Health and Safety, of this EIR. As discussed therein, upon implementation of mitigation measures, MM-HS-1 through MM-HS-3, the project would result in less-than-significant impacts from hazards and hazardous materials. Additionally, as discussed, in Section 5.1, Air Quality, the project would result in less than significant impacts with mitigation measures.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Mobility Element			
A) Walkable Community Goals	<p>A city where walking is a viable travel choice, particularly for trips of less than one-half mile.</p> <p>A safe and comfortable pedestrian environment.</p> <p>A complete, functional, and interconnected pedestrian network, that is accessible to pedestrians of all abilities.</p> <p>Greater walkability achieved through pedestrian friendly street, site and building design.</p>	<p>The project site, including pedestrian/cart pathways, as it exists today is closed to public access. The site currently does not allow for pedestrian use or connectivity. The project would directly improve the walkability of the project site and surroundings by providing a publically accessible trail network connected to the surrounding neighborhood.</p> <p>Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood. Buildings would be oriented and relate directly to internal streets, paseos, greenways, and common open space amenities and generally create an attractive presence and "eyes on the street."</p> <p>A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The majority of the trail system would include paved trails that would be repurposed from the previous</p>	The project would be consistent with these goals.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>golf cart path, and new paved trails would provide connections through new development areas. Trails would range from 5 to 8 feet in width and all trails would be publicly accessible. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity to the surrounding neighborhood, including the commercial uses to the north in Carmel Mountain Plaza, residential uses, and nearby schools.</p> <p>The project's internal street network would consist of all private drives designed as Complete Streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. All private drives would include a minimum five-foot sidewalk along at least one side of the street.</p> <p>The trails network would be constructed to City standards for safety, including nighttime lighting.</p> <p>The project also includes project design feature PDF-ENG-1, which states:</p> <p>The proposed project would also include a number of features designed to reduce vehicle miles traveled, such as creating a multimodal trail system that would provide internal connections throughout the project site and connect residents</p>	

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		to the neighborhoods and commercial developments surrounding the project. The multimodal trail would allow both walking and bicycling opportunities. The trail network would also include enhancements to the existing Class II bicycle lanes. Refer also to the analyses in Policy LU-A.9.	
<i>Policy ME-A.1</i>	Design and operate sidewalks, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions, including but not limited to those described in the Pedestrian Improvements Toolbox, Table ME-1.	Refer to the analysis for Mobility Element Goal A.	The project would be consistent with this policy.
<i>Policy ME-A.2</i>	Design and implement safe pedestrian routes. a. Collaborate with appropriate community groups, and other interested private and public sector groups or individuals to design and implement safe pedestrian routes to schools, transit, and other highly frequented destinations. Implement needed improvements and programs such as wider and noncontiguous sidewalks, more visible pedestrian crossings, traffic enforcement, traffic calming, street and pedestrian lighting, pedestrian trails, and educating children on traffic and bicycle safety.	Refer to the analysis for Mobility Element Goal A.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> b. Promote "Walking School Bus" efforts where parents or other responsible adults share the responsibility of escorting children to and from school by foot or bicycle. c. When new schools are planned, work with school districts and affected communities to locate schools so that the number of students who can walk to school safely is maximized. d. Implement Crime Prevention Through Environmental Design (CPTED) measures to reduce the threat and incidence of crime in the pedestrian environment (see also Urban Design Element, Policy UD-A.17). e. Ensure that there are adequate law enforcement, code enforcement, and litter and graffiti control to maintain safe and attractive neighborhoods. f. Provide adequate levels of lighting for pedestrian safety and comfort. 		
<i>Policy ME-A.4</i>	<p>Make sidewalks and street crossings accessible to pedestrians of all abilities.</p> <ul style="list-style-type: none"> a. Meet or exceed all federal and state requirements. b. Provide special attention to the needs of children, the elderly, and people with disabilities. 	<p>Refer to the analysis for Mobility Element Goal A.</p> <p>All proposed sidewalks and street crossings would be constructed in accordance with all federal, state, and local safety requirements.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	c. Maintain pedestrian facilities to be free of damage or trip hazards.		
<i>Policy ME-A.5</i>	<p>Provide adequate sidewalk widths and clear path of travel as determined by street classification, adjoining land uses, and expected pedestrian usage.</p> <ul style="list-style-type: none"> a. Minimize obstructions and barriers that inhibit pedestrian circulation. b. Consider pedestrian impacts when designing the width and number of driveways within a street segment. 	<p>Refer to the analysis for Mobility Element Goal A.</p> <p>The project would design driveways in consideration of pedestrian impacts.</p>	The project would be consistent with this policy.
<i>Policy ME-A.6</i>	<p>Work toward achieving a complete, functional and interconnected pedestrian network.</p> <ul style="list-style-type: none"> a. Ensure that pedestrian facilities such as sidewalks, trails, bridges, pedestrian oriented and street lighting, ramps, stairways and other facilities are implemented as needed to support pedestrian circulation. Additional examples of pedestrian facilities are provided in the Pedestrian Improvements Toolbox, Table ME-1. <ul style="list-style-type: none"> 1 Close gaps in the sidewalk network. 2. Provide convenient pedestrian connections between land uses, including shortcuts where possible. 	Refer to the analysis for Mobility Element Goal A.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> 3. Design grading plans to provide convenient and accessible pedestrian connections from new development to adjacent uses and streets. b. Link sidewalks, pedestrian paths and multipurpose trails into a continuous region-wide network where possible. c. Provide and maintain trash and recycling receptacles, and restrooms available to the public where needed. d. Address pedestrian needs as an integral component of community and public facilities financing plan updates and amendments, other planning studies and programs, and the development project review process. e. Routinely accommodate pedestrian facilities and amenities into private and public plans and projects. 		
<i>Policy ME-A.7</i>	<p>Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.</p> <ul style="list-style-type: none"> a. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to 	<p>Refer to the analyses for Land Use Policies LU-A.1c and LU-A.1d and Mobility Element Goal A.</p> <p>The Design Guidelines include landscaping and architectural requirements, which would enhance public spaces and create compatibility with surrounding communities.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>those described in the Pedestrian Improvement Toolbox, Table ME-1 (see also Urban Design Element, Policy UD-A.10)</p> <ul style="list-style-type: none"> b. Design site plans and structures with pedestrian-oriented features (see also Urban Design, Policies UD-A.6, UD-B.4, and UD-C.6). c. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design. d. Enhance alleys as secure pathways to provide additional pedestrian connections. e. Implement traffic-calming measures to improve walkability in accordance with Policy ME-C.5. f. When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood. 		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy ME-A.8</i>	Encourage a mix of uses in villages, commercial centers, transit corridors, employment centers and other areas as identified in community plans so that it is possible for a greater number of short trips to be made by walking.	Refer to the analyses in Land Use Goal A, Land Use Policies LU-A. 1c, LU-A.1d, LU-A.3 and LU-A.9.	The project would be consistent with this policy.
B. Transit First Goals	Increased transit ridership.	<p>The project would place housing near existing transit. The project site is partially located within a Transit Priority Area (TPA) due to the proximity of a portion of the site (holes 4, 5 and 6) to the Metropolitan Transit System Sabre Springs Transit Station approximately 0.5 miles south of the project site.</p> <p>Refer to the analyses in Land Use Goal A and Policy LU-A.3.</p>	The project would be consistent with this goal.
C. Street and Freeway System Goals	<p>An interconnected street system that provides multiple linkages within and between communities.</p> <p>Vehicle congestion relief.</p> <p>Safe and efficient street design that minimizes environmental and neighborhood impacts.</p> <p>Well maintained streets.</p>	<p>Refer to the analyses in Land Use Goal A, Policy LU-A.9 and Mobility Element Goal A.</p> <p>All private drives would include a minimum 5-foot-wide sidewalk along at least one side of the street. Motor courts would also be provided as a shared driveway (private drive) for two or more homes and common access roads would provide access from private drives to parking areas.</p> <p>The project would provide a Transportation Demand Management (TDM) plan as a benefit to future residents and the community. The goal of this plan is to reduce and/or remove single-occupant vehicle trips from peak-hour traffic, thereby relieving congestion.</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>The project also includes project design feature PDF-ENG-1, which states:</p> <p>The proposed project would also include a number of features designed to reduce vehicle miles traveled, such as creating a multimodal trail system that would provide internal connections throughout the project site and connect residents to the neighborhoods and commercial developments surrounding the project. The multimodal trail would allow both walking and bicycling opportunities. The trail network would also include enhancements to the existing Class II bicycle lanes.</p>	
<i>Policy ME-C.3</i>	<p>Design an interconnected street network within and between communities, which includes pedestrian and bicycle access, while minimizing landform and community character impacts.</p> <ul style="list-style-type: none"> a. Identify locations where the connectivity of the street network could be improved through the community plan update and amendment process, the Regional Transportation Plan update process, and through discretionary project review (see also Urban Design Element, Policy UDB.5). b. Use local and collector streets to form a network of connections to disperse traffic and give people a choice of routes to neighborhood destinations such as schools, parks, and village centers. This network 	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>should also be designed to control traffic volumes and speeds through residential neighborhoods.</p> <ol style="list-style-type: none"> 1. In newly developing areas or in large-scale redevelopment/infill projects, strive for blocks along local and collector streets to have a maximum perimeter of 1,800 feet. 2. When designing modifications/improvements to an existing street system, enhance street or pedestrian connections where possible. c. Provide direct and multiple street and sidewalk connections within development projects, to neighboring projects, and to the community at large. d. Where possible, design or redesign the street network, so that wide arterial streets do not form barriers to pedestrian traffic and community cohesiveness. 		
<i>Policy ME-C.8</i>	<p>Implement Traffic Impact Study Guidelines that address site and community specific issues.</p> <ol style="list-style-type: none"> a. Give consideration to the role of alternative modes of transportation and transportation demand management (TDM) plans in addressing development project traffic impacts. 	A Vehicle Miles Traveled Analysis was completed pursuant to the City's current guidelines (Appendix G; Section 5.15, Transportation).	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> b. Consider the results of site-specific studies or reports that justify vehicle trip reductions (see also ME-E.7). c. Implement best practices for multi-modal quality/level of service analysis guidelines to evaluate potential transportation impacts and determine appropriate mitigation measures from a multi-modal perspective. 		
<i>Policy ME-C.9</i>	Implement best practices for multi-modal quality/level of service analysis guidelines to evaluate potential transportation improvements from a multimodal perspective in order to determine optimal improvements that balance the needs of all users of the right of way.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.
E. Transportation Demand Management Goals	<p>Reduced single-occupant vehicle traffic on congested streets and freeways.</p> <p>Improved performance and efficiency of the street and freeway system, by means other than roadway widening or construction.</p> <p>Expanded travel options and improved personal mobility.</p>	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this goal.
<i>Policy ME-E.1</i>	Support and implement TDM strategies including, but not limited to: alternative modes of transportation, alternative work schedules, and telework.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy ME-E.2</i>	Maintain and enhance personal mobility options by supporting public and private transportation projects that will facilitate the implementation of Transportation Demand Management (TDM) strategies.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.
<i>Policy ME-E.3</i>	Emphasize the movement of people rather than vehicles.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.
<i>Policy ME-E.4</i>	Promote the most efficient use of the City's existing transportation network.	Refer to the analysis for Mobility Element Goals A and C. The project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. Off-site improvements include the installation of a new traffic signal at the intersection of Carmel Ridge Road and Ted Williams Parkway	The project would be consistent with this policy.
<i>Policy ME-E.6.</i>	Require new development to have site designs and on-site amenities that support alternative modes of transportation. Emphasize pedestrian and bicycle-friendly design, accessibility to transit, and provision of amenities, that are supportive and conducive to implementing TDM strategies such as car sharing vehicles and parking spaces, bike lockers, preferred rideshare parking, showers and lockers, on-site food service, and child care, where appropriate.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy ME-E.7</i>	Consider TDM programs with achievable trip reduction goals as partial mitigation for development project traffic and air quality impacts.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.
<i>Policy ME-E.8</i>	Monitor implementation of TDM programs to ensure effectiveness.	Refer to the analysis for Mobility Element Goals A and C.	The project would be consistent with this policy.
F. Bicycling Goals	<p>A city where bicycling is a viable travel choice, particularly for trips of less than five miles.</p> <p>A safe and comprehensive local and regional bikeway network.</p> <p>Environmental quality, public health, recreation and mobility benefits through increased bicycling</p>	<p>Refer to the analysis for Mobility Element Goals A and C. As part of the trails network, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. The project also includes project design feature PDF-ENG-1, which states:</p> <p>The proposed project would also include a number of features designed to reduce vehicle miles traveled, such as creating a multimodal trail system that would provide internal connections throughout the project site and connect residents to the neighborhoods and commercial developments surrounding the project. The multimodal trail would allow both walking and bicycling opportunities. The trail network would also include enhancements to the existing Class II bicycle lanes.</p>	The project would be consistent with this policy.
<i>Policy ME-F.2</i>	Identify and implement a network of bikeways that are feasible, fundable, and serve bicyclists' needs, especially for travel to employment	Refer to the analysis for Mobility Element Goals A, C, and F.	The project would be

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>centers, village centers, schools, commercial districts, transit stations, and institutions.</p> <ul style="list-style-type: none"> a. Develop a bikeway network that is continuous, closes gaps in the existing system, improves safety, and serves important destinations. b. Implement bicycle facilities based on a priority program that considers existing deficiencies, safety, commuting needs, connectivity of routes, and community input. c. Recognize that bicyclists use all City roadways. <ul style="list-style-type: none"> 1. Design future roadways to accommodate bicycle travel; and 2. Upgrade existing roadways to enhance bicycle travel, where feasible. 		consistent with this policy.
<i>Policy ME-F.3</i>	Maintain and improve the quality, operation, and integrity of the bikeway network and roadways regularly used by bicyclists.	Refer to the analysis for Mobility Element Goal C.	The project would be consistent with this policy.
<i>Policy ME-F.4</i>	Provide safe, convenient, and adequate short- and long-term bicycle parking facilities and other bicycle amenities for employment, retail, multifamily housing, schools and colleges, and transit facility uses.	Refer to the analysis for Mobility Element Goal C.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> a. Continue to require bicycle parking in commercial and multiple unit residential zones. b. Provide bicycle facilities and amenities to help reduce the number of vehicle trips. 		
G. Parking Management Goal	New development with adequate parking through the application of innovative citywide parking regulations.	The project would provide adequate parking as required by San Diego Municipal Code Table 142-05C.	The project would be consistent with this goal.
<i>Policy ME-G.1</i>	Provide and manage parking so that it is reasonably available when and where it is needed.	The project would provide adequate parking as required by San Diego Municipal Code Table 142-05C.	The project would be consistent with this policy.
<i>Policy ME-G.2.b</i>	Strive to reduce the amount of land devoted to parking through measures such as parking structures, shared parking, mixed-use developments, and managed public parking, while still providing appropriate levels of parking.	The project would provide adequate parking as required by San Diego Municipal Code Table 142-05C.	The project would be consistent with this policy.
Urban Design Element			
A. General Urban Design Goals	<p>A built environment that respects San Diego's natural environment and climate.</p> <p>An improved quality of life through safe and secure neighborhoods and public places.</p>	The project would develop distinct residential neighborhoods with a diversity of housing types and open space amenities and with a unique character and sense of place which would be accomplished through implementation of project-specific design guidelines. Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>A pattern and scale of development that provides visual diversity, choice of lifestyle, opportunities for social interaction, and that respects desirable community character and context.</p> <p>A City with distinctive districts, communities, neighborhoods, and village centers where people gather and interact.</p> <p>Maintenance of historic resources that serve as landmarks and contribute to the City's identity.</p> <p>Utilization of landscape as an important aesthetic and unifying element throughout the City.</p>	<p>entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths.</p> <p>Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Building designs would establish a pattern and hierarchy of building massing and forms to help reduce the visual bulk of the development and would incorporate smaller-scale architectural elements, such as bay windows, porches, projecting eaves, awnings, and similar elements, to add visual interest and reduce the scale and mass of buildings.</p> <p>Approximately 111.0 acres of development would be composed of parkland, open space, and buffer area. This area includes approximately 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland; 78.1 acres of open space; and 25.0 acres of buffer area. A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for</p>	

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>pedestrians and bicyclists. Recreational amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking.</p> <p>In addition, the project proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library.</p> <p>No historic built resources exist within the project site.</p> <p>Refer to the analyses in Land Use Goal A and Policies LU-A.1c, LU-A.1d, LU-A.9 and ME-A.7.</p>	
<i>Policy UD-A.1</i>	<p>Preserve and protect natural landforms and features.</p> <ul style="list-style-type: none"> a. Protect the integrity of community plan designated open spaces b. Continue to implement the Multiple Species Conservation Program (MSCP) to conserve San Diego's natural environment and create a linked open space system. Preserve and enhance remaining naturally occurring features such as wetlands, riparian zones, canyons, and ridge lines. 	<p>Refer to the analyses in Land Use Goal A and Policies LU-A.1c, LU-A.1d, LU-A.9 and ME-A.7. Refer to the analysis in Urban Design Goal A.</p> <p>As discussed in Section 5.2, Biological Resources, the impact footprint associated with the project would not occur within or adjacent to designated Multi-Habitat Planning Area (MHPA) lands within the City. Therefore, the City's MSCP Land Use Adjacency Guidelines would not be applicable to the proposed project, and no significant adverse edge effects associated with the introduction of a land use within an area adjacent to the MHPA would occur.</p>	The project would be consistent with this policy.
<i>Policy UD-A.2</i>	Use open space and landscape to define and link communities.	Refer to the analyses in Land Use Goal A and Policies LU-A.1c, LU-A.1d, LU-A.9, ME-A.7 and UD-A.1.	The project would be consistent

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> a. Link villages, public attractions, canyons, open space and other destinations together by connecting them with trail systems, bikeways, landscaped boulevards, formalized parks, and/or natural open space, as appropriate. b. Preserve and encourage preservation of physical connectivity and access to open space. c. Recognize that sometimes open spaces prevent the continuation of transportation corridors and inhibit mobility between communities. Where conflicts exist between mobility and open space goals, site-specific solutions may be addressed in community plans. 	<p>Additionally, the proposed multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.</p>	<p>with this policy.</p>
<i>Policy UD-A.3</i>	<p>Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.</p> <ul style="list-style-type: none"> a. Integrate development on hillside parcels with the natural environment to preserve and enhance views, and protect areas of unique topography. b. Minimize grading to maintain the natural topography, while contouring any 	<p>Refer to the analyses in Land Use Goal A and Policies LU-A.1c, LU-A.1d, LU-A.9, ME-A.7 and Policy UD-A.2.</p> <p>Additionally, as discussed in Section 5.17, Visual Effect/Neighborhood Character, the project would not result in visual effect of neighborhood character impacts.</p> <p>The project would also include a minimum 50-foot buffer zone between existing homes and proposed new development, which may include open space and landscaped areas. Architectural articulation</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>landform alterations to blend into the natural terrain.</p> <ul style="list-style-type: none"> c. Utilize variable lot sizes, clustered housing, stepped-back facades, split-level units or other alternatives to slab foundations to minimize the amount of grading. d. Consider terraced homes, stepped down with the slope for better integration with the topography to minimize grading in sensitive slope areas. e. Utilize a clustered development pattern, single-story structures or single-story roof elements, or roofs sloped toward the open space system or natural features, to ensure that the visibility of new developments from natural features and open space areas are minimized. f. Provide increased setbacks from canyon rims or open space areas to ensure that the visibility of new development is minimized. g. Screen development adjacent to natural features as appropriate so that development does not appear visually intrusive, or interfere with the experience within the open space system. The provision of enhanced landscaping adjacent to natural features could be used 	<p>would also be used to provide visual relieve from new buildings facing existing residential developments.</p> <p>Additionally, as discussed in Section 5.19, Wildfire, portions of the project site are located within the Very High Fire Hazard Severity Zone. However, the project would include brush management zones and fuel modification area vegetation management shall occur as-needed for fire safety, in compliance with the Brush Management Zone requirements detailed in Section 5.19, Wildlife, and as determined by the San Diego Fire Rescue Department. The project would also use drought-tolerant, naturalized landscaping and a Brush Management Plan has been developed for the proposed project and is included as Appendix F to Appendix D, Fire Fuel Load Modeling Report. The project would be required to design, construct, and maintain structures, private drives, and facilities in compliance with applicable local, regional, state, and federal requirements related to fire safety, emergency access, and evacuation plans, as well as building materials, setbacks, water supply, hydrants, fire-flow, and defensible space requirements for development in fire hazard areas. As a result, the project was determined to have less-than-significant impacts from wildfire hazards.</p>	

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>to soften the appearance of or buffer development from the natural features.</p> <p>h. Use building and landscape materials that blend with and do not create visual or other conflicts with the natural environment in instances where new buildings abut natural areas. This guideline must be balanced with a need to clear natural vegetation for fire protection to ensure public safety in some areas.</p> <p>i. Ensure that the visibility of new development from natural features and open space areas is minimized to preserve the landforms and ridgelines that provide a natural backdrop to the open space systems. For example, development should not be visible from canyon trails at the point the trail is located nearest to proposed development. Lines-of-sight from trails or the open space system could be used to determine compliance with this policy.</p> <p>j. Design and site buildings to permit visual and physical access to the natural features from the public right-of-way.</p> <p>k. Encourage location of entrances and windows in development adjacent to open space to overlook the natural features.</p>		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> <li>l. Protect views from public roadways and parklands to natural canyons, resource areas, and scenic vistas. <li>m. Preserve views and view corridors along and/or into waterfront areas from the public right-of-way by decreasing the heights of buildings as they approach the shoreline, where possible. <li>n. Provide public pedestrian, bicycle, and equestrian access paths to scenic view points, parklands, and where consistent with resource protection, in natural resource open space areas. <li>o. Provide special consideration to the sensitive environmental design of roadways that traverse natural open space systems to ensure an integrated aesthetic design that respects open space resources. This could include the use of alternative materials such as "quiet pavement" in noise sensitive locations, and bridge or roadway designs that respect the natural environment. <li>p. Design structures to be ignition and fire-resistant in fire prone areas or at-risk areas as appropriate. Incorporate fire-resistant exterior building materials and architectural 		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	design features to minimize the risk of structure damage or loss due to wildfires.		
<i>Policy UD-A.4</i>	Use sustainable building methods in accordance with the sustainable development policies in the Conservation Element.	Design guidelines have been developed for the project that include standards for sustainable design features. New development within the project site would comply with Title 24 and CALGreen, as part of project conditions. To meet these requirements, all new development within the project site would include rooftop photovoltaic solar panels, energy-efficient lighting and appliances, cool roofs, energy-efficient windows, and other design features that significantly conserve energy.	The project would be consistent with this policy.
<i>Policy UD-A.5</i>	Design buildings that contribute to a positive neighborhood character and relate to neighborhood and community context. <ul style="list-style-type: none"> a. Relate architecture to San Diego's unique climate and topography. b. Encourage designs that are sensitive to the scale, form, rhythm, proportions, and materials proximate to commercial areas and residential neighborhoods that have a well-established, distinctive character. c. Provide architectural features that establish and define a building's appeal and enhance the neighborhood character. 	Refer to the analyses for General Plan Policies UD-A.1 through UD-A.4.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> d. Encourage the use of materials and finishes that reinforce a sense of quality and permanence. e. Provide architectural interest to discourage the appearance of blank walls for development. This would include not only building walls, but fencing bordering the pedestrian network, where some form of architectural variation should be provided to add interest to the streetscape and enhance the pedestrian experience. For example, walls could protrude, recess, or change in color, height, or texture to provide visual interest. f. Design building wall planes to have shadow relief, where pop-outs, offsetting planes, overhangs, and recessed doorways are used to provide visual interest at the pedestrian level. g. Design rear elevations of buildings to be as well-detailed and visually interesting as the front elevation, if they will be visible from a public right-of-way or accessible public place or street. h. Acknowledge the positive aspects of nearby existing buildings by incorporating compatible features in new developments. 		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> i. Maximize natural ventilation, sunlight, and views. j. Provide convenient, safe, well-marked, and attractive pedestrian connections from the public street to building entrances. k. Design roofs to be visually appealing when visible from public vantage points and public rights-of-way. 		
<i>Policy UD-A.6</i>	<p>Create street frontages with architectural and landscape interest to provide visual appeal to the streetscape and enhance the pedestrian experience.</p> <ul style="list-style-type: none"> a. Locate buildings on the site so that they reinforce street frontages. b. Relate buildings to existing and planned adjacent uses. c. Ensure that building entries are prominent, visible, and well-located. d. Maintain existing setback patterns, except where community plans call for a change to the existing pattern. e. Minimize the visual impact of garages, parking and parking portals to the pedestrian and street façades. 	Refer to the analyses for General Plan Policies UD-A.1 through UD-A.4.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Policy UD-A.8	<p>Landscape materials and design should enhance structures, create and define public and private spaces, and provide shade, aesthetic appeal, and environmental benefits.</p> <ul style="list-style-type: none"> a. Maximize the planting of new trees, street trees, and other plants for their shading, air quality, and livability benefits (See also Urban Forestry section of Conservation Element, Policies CE-A.11, CE-A.12, and Section J). b. Encourage water conservation through the use of drought-tolerant landscape. c. Use landscape to support stormwater management goals for filtration, percolation, and erosion control. d. Use landscape to provide unique identities within neighborhoods, villages, and other developed areas. e. Landscape materials and design should complement and build upon the existing character of the neighborhood (See also Conservation Element, Section J). f. Design landscape bordering the pedestrian network with new elements, such as a new plant form or material, at a scale and at intervals appropriate to the site. This is not intended to discourage a uniform street 	<p>Refer to the analysis for General Plan Policies UD-A.3.</p> <p>Additionally, drought-tolerant, naturalized landscaping would be used to replace dead and dying vegetation associated with the vacant and blighted golf course. A Stormwater Quality Management Plan has also been developed for the project and includes best management practices (BMPs) to maintain natural drainage features and minimize potential impacts to storm drain facilities. Additionally, as discussed in the Drainage Study prepared for the project, Appendix E, implementation of the project would not adversely affect existing drainage patterns.</p> <p>Furthermore, as discussed in Section 5.4, Geologic Conditions, short-term erosion and sedimentation impacts would be addressed through conformance with applicable elements of the City storm water program and related National Pollutant Discharge Elimination System (NPDES) standards. Additionally, the project would implement an approved Stormwater Pollution Prevention Plan and related plans and BMPs, including appropriate measure to address erosion and sedimentation. As such, potential erosion and sedimentation impacts from implementation of the project would be less than significant.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>tree or landscape theme, but to add interest to the streetscape and enhance the pedestrian experience.</p> <p>h. Shade paved areas, especially parking lots.</p> <p>j. Use landscaped walkways to direct people to proper entrances and away from private areas.</p> <p>k. Reduce barriers to views or light by selecting appropriate tree types, pruning thick hedges, and large overhanging tree canopies.</p> <p>l. Utilize landscape adjacent to natural features to soften the visual appearance of a development and provide a natural buffer between the development and open space areas</p>		
<i>Policy UD-A.13.</i>	<p>Provide lighting from a variety of sources at appropriate intensities and qualities for safety.</p> <p>a. Provide pedestrian-scaled lighting for pedestrian circulation and visibility.</p> <p>b. Use effective lighting for vehicular traffic while not overwhelming the quality of pedestrian lighting.</p> <p>c. Use lighting to convey a sense of safety while minimizing glare and contrast.</p>	<p>As discussed in Section 5.17, Visual Effects/Neighborhood Character, the project would introduce new sources of lighting on the project site. Lighting at the project site would include safety lighting for parking and open space areas, and paseos between buildings. Specialty lighting may also be incorporated within entry gateways throughout the site. All lighting proposed would be constructed in compliance with the standards contained in the City's Outdoor Lighting Regulations (San Diego Municipal Code Section 142.0740), which requires that all outdoor lighting fixtures shall be installed in a</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> d. Use vandal-resistant light fixtures that complement the neighborhood and character. e. Focus lighting to eliminate spill-over so that lighting is directed and only the intended use is illuminated. 	<p>manner that minimizes negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Pedestrian lighting would be provided to increase on-site safety, visibility, and wayfinding throughout the site during nighttime hours. Security lighting would be provided within the parking areas and structures. In addition, lighting would be provided throughout the project, especially along the pedestrian walkways. To minimize glare and contrast, safety lighting would be directed downward and would only be provided to the level necessary for the safety of pedestrians and vehicles. All outdoor lighting would be shielded to prevent spillover and glare to adjacent land uses. It is also important to note that there are no sensitive receptors in the vicinity of the project site. Furthermore, Section 5.17 determined that the project would result in less-than-significant impacts from light and glare.</p>	
<i>Policy UD-A.14.</i>	<p>Provide comprehensive project sign plans to effectively utilize sign area.</p> <ul style="list-style-type: none"> a. Design signs as a means to communicate a unified theme and identity for the project. b. Include pedestrian-oriented signs to acquaint users with various aspects of a development. Place signs to direct vehicular and pedestrian circulation. 	<p>Design guidelines have been developed for the project that are intended to provide a framework for future project implementation. These guidelines include requirements for the use of signage on the project site. All signage would be consistent with Chapter 14 Article 2 Division 12 of the San Diego Municipal Code and the Carmel Mountain Ranch Special District Sign Guidelines, where appropriate.</p>	<p>The project would be consistent with this policy.</p>

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> c. Post signs to provide directions and rules of conduct where appropriate behavior control is necessary. d. Design signs to minimize negative visual impacts. 	Open space and recreation areas may also incorporate interpretive signage for passive recreation. Project signage would be designed to be harmonious with the project design and direct pedestrian and vehicular circulation.	
<i>Policy UD-A.17.</i>	<p>Incorporate crime prevention through environmental design measures, as necessary, to reduce incidences of fear and crime, and design safer environments.</p> <ul style="list-style-type: none"> a. Design projects to encourage visible space and “eyes on the street” security that will serve as a means to discourage and deter crime through the location of physical features, activities, and people to maximize visibility. b. Define clear boundaries between public, semi-public/private, and private spaces. c. Promote regulations, programs, and practices that result in the proper maintenance of the measures employed for CPTED surveillance, access control, and territoriality. d. Consider pedestrian scale lighting and indirect techniques to provide adequate security but not glare and flood-light conditions. 	As described in the analysis for General Plan Policy UD-A.13, the project would incorporate safety lighting throughout the project site for security purposes. Public spaces including the proposed parkland would also be clearly marked and would only be open for public use during designated hours.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
B. Distinctive Neighborhoods and Residential Design Goals	<p>A city of distinctive neighborhoods.</p> <p>Development that protects and improves upon the desirable features of San Diego's neighborhoods.</p> <p>Architectural design that contributes to the creation and preservation of neighborhood character and vitality.</p> <p>Innovative design for a variety of housing types to meet the needs of the population.</p> <p>Infill housing, roadways and new construction that are sensitive to the character and quality of existing neighborhoods.</p> <p>Pedestrian connections linking residential areas, commercial areas, parks, and open spaces.</p>	<p>The project would develop distinct residential neighborhoods with a diversity of housing types and open space amenities and with a unique character and sense of place which would be accomplished through implementation of project-specific design guidelines. Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood, providing a sense of place and arrival. Homes would be clustered and oriented around private open spaces and community amenities, providing a sense of neighborhood identity. Buildings would be oriented and relate directly to internal streets, paseos, greenways, and common open space amenities and generally create an attractive presence and "eyes on the street."</p> <p>Residential land uses would be developed as infill residential neighborhoods consistent with the policies and regulations established in the Trails at Carmel Mountain Ranch Design Guidelines (Appendix B).</p> <p>The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate</p>	The project would be consistent with these goals

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.42 acres.</p> <p>Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental, and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Building designs would establish a pattern and hierarchy of building massing and forms to help reduce the visual bulk of the development and would incorporate smaller-scale architectural elements, such as bay windows, porches, projecting eaves, awnings, and similar elements, to add visual interest and reduce the scale and mass of buildings.</p> <p>A public multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The majority of the trail system would include paved trails that would be repurposed from the previous golf cart path, and new paved trails would provide connections through new development areas. Trails would range from 5 to 8</p>	

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		<p>feet in width and all trails would be publicly accessible. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity to the surrounding neighborhood. Recreational amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. The multi-use trail system would link to the surrounding neighborhood.</p> <p>Refer to analyses in Land Use Goal A, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.</p>	
<i>Policy UD-B.1</i>	<p>Recognize that the quality of a neighborhood is linked to the overall quality of the built environment. Projects should not be viewed singularly, but viewed as part of the larger neighborhood or community plan area in which they are located for design continuity and compatibility.</p> <p>a. Integrate new construction with the existing fabric and scale of development in surrounding neighborhoods. Taller or denser development is not necessarily inconsistent with older, lower-density neighborhoods but must be designed with sensitivity to existing development. For example, new development should not cast shadows or create wind tunnels that will significantly impact existing</p>	Refer to analyses in Urban Design Goal B, Land Use Goal A, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>development and should not restrict vehicular or pedestrian movements from existing development.</p> <p>b. Design new construction to respect the pedestrian orientation of neighborhoods.</p> <p>c. Provide innovative designs for a variety of housing types to meet the needs of the population.</p>		
<i>Policy UD-B.2</i>	<p>Achieve a mix of housing types within single developments.</p> <p>a. Incorporate a variety of unit types in multifamily projects.</p> <p>b. Incorporate a variety of single-family housing types in single-family projects/subdivisions.</p> <p>c. Provide transitions of scale between higher-density development and lower density neighborhoods.</p> <p>d. Identify sites for revitalization and additional housing opportunities in neighborhoods.</p>	Refer to analyses in Urban Design Goal B, Land Use Goal A, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.	The project would be consistent with this policy.
<i>Policy UD-B.3</i>	Design subdivisions to respect the existing lot pattern established within neighborhoods to maintain community character.	Refer to analyses in Urban Design Goal B, Land Use Goal A, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> a. Create lot divisions that respect the existing pattern of development for neighborhood continuity and compatibility. b. Design lot divisions to have a portion of each created lot in areas of less than 25 percent gradient. 		
<i>Policy UD-B.4</i>	<p>Create street frontages with architectural and landscape interest for both pedestrians and neighboring residents.</p> <ul style="list-style-type: none"> a. Locate buildings on the site so that they reinforce street frontages. b. Relate buildings to existing and planned adjacent uses. c. Provide ground level entries and ensure that building entries are prominent and visible. d. Maintain existing setback patterns, except where community plans call for redevelopment to change the existing pattern. e. Locate transparent features such as porches, stoops, balconies, and windows facing the street to promote a sense of community. f. Encourage side- and rear-loaded garages. Where not possible, reduce the prominence of the garage through architectural features and varying planes. 	Refer to analyses in Urban Design Goal B, Land Use Goal A, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	g. Minimize the number of curb-cuts along residential streets.		
<i>Policy UD-B.5</i>	<p>Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity.</p> <ul style="list-style-type: none"> a. Design or retrofit street systems to achieve high levels of connectivity within the neighborhood street network that link individual subdivisions/projects to each other and the community. b. Avoid closed loop subdivisions and extensive cul-de-sac systems, except where the street layout is dictated by the topography or the need to avoid sensitive environmental resources. c. Design open ended cul-de-sacs to accommodate visibility and pedestrian connectivity, when development of cul-de-sacs is necessary. d. Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools. e. Design new streets and consider traffic calming where necessary, to reduce neighborhood speeding (see also Mobility Element, Policy ME-C.5). 	Refer to analyses in Urban Design Goal B, Land Use Goal A, Mobility Element Goal C, Policies LU-A.1c, LU-A.3, LU-A.9, UD-A.2 and UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> f. Enhance community gateways to demonstrate neighborhood pride and delineate boundaries. g. Clarify neighborhood roadway intersections through the use of special paving and landscape. h. Develop a hierarchy of walkways that delineate village pathways and link to regional trails. i. Discourage use of walls, gates and other barriers that separate residential neighborhoods from the surrounding community and commercial areas. 		
<i>Policy UD-B.8</i>	<p>Provide usable open space for play, recreation, and social or cultural activities in multifamily as well as single-family projects.</p> <ul style="list-style-type: none"> a. Design attractive recreational facilities, common facilities, and open space that can be easily accessed by everyone in the development it serves. b. Design outdoor space as “outdoor rooms” and avoid undifferentiated, empty spaces. c. Locate small parks and play areas in central accessible locations. 	Refer to the analyses in Urban Design Goal B, Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Public Facilities, Services, and Safety Element</i>			
C. Evaluation of Growth, Facilities, and Services	<p>Adequate public facilities available at the time of need.</p> <p>Public facilities exactions that mitigate the facilities impacts that are attributable to new development.</p> <p>Improvement of quality of life in communities through the evaluation of private development and the determination of appropriate exactions</p>	<p>Refer to the analysis in Policy LU-A.1c.</p> <p>As discussed in Section 5.13, Public Services and Facilities, implementation of the project would increase the demand for public services and facilities including police and fire protection services, parks and recreation facilities, schools, and libraries. However, the project would be adequately served by existing fire and police protection services and there would be no need to expand or build new police or fire facilities as a result of the project. Additionally, the project would increase student enrollment at nearby schools. However, development impact fees would also be paid to the Poway Unified School District and there would be no need to expand or build new school facilities as a result of the project. With regard to parks and recreation facilities, the project would increase demand for recreational areas or uses in the community. However, the project's provision of 9.79 acres of public use neighborhood parks, and the inclusion of open space areas with publicly accessible multi-use trails, no park and recreation facility expansion beyond what is proposed as part of the proposed project would be required. Finally, the project would increase the use of library facilities; however, the project would pay a development impact fee that would be used by the</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		library to expand government services. Impacts to public services and facilities were all deemed less-than-significant during preparation of this EIR.	
<i>Policy PF-C.1</i>	<p>Require development proposals to fully address impacts to public facilities and services:</p> <ul style="list-style-type: none"> a. Identify the demand for public facilities and services resulting from discretionary projects. b. Identify specific improvements and financing which would be provided by the project, including but not limited to sewer, water, storm drain, solid waste, fire, police, libraries, parks, open space, and transportation projects. c. Subject projects, as a condition of approval, to exactions that are reasonably related and in rough proportionality to the impacts resulting from the proposed development. d. Provide public facilities and services to assure that current levels of service are maintained or improved by new development within a reasonable time period. 	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.8.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy PF-C.3</i>	Satisfy a portion of the requirements of PF-C.1 through physical improvements, when a nexus exists, that will benefit the affected community planning area when projects necessitate a community plan amendment due to increased densities.	Refer to the analysis for General Plan Public Facilities Element Goal C.	The project would be consistent with this policy.
D. Fire-Rescue Goals	<p>Protection of life, property, and environment by delivering the highest level of emergency and fire-rescue services, hazard prevention, and safety education.</p> <p>Minimize fire hazards resulting from structural or wildland fires.</p> <p>Manage fuel loads in wildland areas.</p>	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.	The project would be consistent with this goal.
<i>Policy PF-D.5</i>	Maintain service levels to meet the demands of continued growth and development, tourism, and other events requiring fire-rescue services.	Refer to the analysis for General Plan Public Facilities Element Goal C.	The project would be consistent with this policy.
<i>Policy PF-D.12</i>	<p>Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones.</p> <p>a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment. (see also LU-C.2.a.4)</p>	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after a fire. c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires. d. Provide and maintain water supply systems to supplies for structural fire suppression. e. Provide adequate fire protection. (see also PF-D.1 and PF-D.2) 		
<i>Policy PF-D.13</i>	<p>Incorporate fire safe design into development within very high fire hazard severity zones to have fire-resistant building and site design, materials, and landscaping as part of the development review process.</p> <ul style="list-style-type: none"> a. Locate, design and construct development to provide adequate defensibility and minimize the risk of structural loss from wildland fires. b. Design development on hillsides and canyons to reduce the increased risk of fires from topography features (i.e., steep slopes, ridge saddles). c. Minimize flammable vegetation and implement brush management best 	<p>Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.</p> <p>Additionally, as discussed in Section 5.19, Wildfire, portions of the project site are located within the Very High Fire Hazard Severity Zone. However, the project would include brush management zones and fuel modification area vegetation management shall occur as-needed for fire safety, in compliance with the Brush Management Zone requirements detailed in Section 5.19, Wildlife, and as determined by the San Diego Fire Rescue Department. The project would also use drought-tolerant, naturalized landscaping and a Brush Management Plan has been developed for the proposed project and is included as Appendix F to Appendix D, Fire Fuel Load Modeling Report. The</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>practices in accordance with the Land Development Code.</p> <p>d. Design and maintain public and private streets for adequate fire apparatus vehicles access (ingress and egress), and install visible street signs and necessary water supply and flow for structural fire suppression.</p> <p>e. Coordinate with the Fire-Rescue Department to provide and maintain adequate fire breaks where feasible or identify other methods to slow the movement of a wildfire in very high fire hazard severity zones.</p>	<p>project would be required to design, construct, and maintain structures, private drives, and facilities in compliance with applicable local, regional, state, and federal requirements related to fire safety, emergency access, and evacuation plans, as well as building materials, setbacks, water supply, hydrants, fire-flow, and defensible space requirements for development in fire hazard areas. As a result, the project was determined to have less-than-significant impacts from wildfire hazards.</p> <p>As discussed in Section 5.13, Public Services and Facilities, implementation of the project would increase the demand for public services and facilities including police and fire protection services, parks and recreation facilities, schools, and libraries. However, the project would pay development impact fees to the City of San Diego Fire and Rescue Department and Police Departments and would be adequately served by existing fire and police protection services and there would be no need to expand or build new police or fire facilities as a result of the project. Impacts to public services and facilities were all deemed less-than-significant during preparation of this EIR.</p>	
<i>Policy PF-D.14</i>	Implement brush management along City maintained roads in very high fire hazard severity zones adjacent to open space and canyon areas.	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy PF-D.15</i>	Maintain access for fire apparatus vehicles along public streets in very high fire hazard severity zones for emergency equipment and evacuation.	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.	The project would be consistent with this policy.
<i>Policy PF-D.16</i>	Provide wildland fire preparedness education for fire safety advance planning.	Refer to the analysis for General Plan Public Facilities Element Goal C and Policy UD-A.3.	The project would be consistent with this policy.
<i>Policy PF-E.6</i>	Monitor how development affects average police response time goals and facilities needs (see also PF-C.5).	Refer to the analysis for General Plan Public Facilities Element Goal C.	The project would be consistent with this policy.
<i>Policy PF-E.7</i>	Maintain service levels to meet demands of continued growth and development, tourism, and other events requiring police services.	Refer to the analysis for General Plan Public Facilities Goal C.	The project would be consistent with this policy.
F. Wastewater Goal	Environmentally sound collection, treatment, re-use, disposal, and monitoring of wastewater. Increased use of reclaimed water to supplement the region's limited water supply.	The project would connect to the City's sewer system. Wastewater from the project would ultimately be conveyed through the City's Municipal Wastewater System to the North City Water Reclamation Plant for treatment and disposal. The project would construct new gravity sewer lines to connect the project site to the existing gravity sewer system. Unit 5 would require a private lift station to serve the project. Unit 10 may also require a private lift station to serve the project. On-site sewer systems would be private and would be designed to maintain a minimum of 1% slope to meet	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		state and local plumbing code standards. Alternatively, the private sewer systems within each unit may be designed in accordance with the City of San Diego Sewer Design Guide. As discussed in Section 5.14, Public Utilities, the applicant has coordinated with water and wastewater providers to ensure that adequate service levels would be available with the implementation of the project. As such, the project would result in less-than-significant impacts to the City's wastewater system.	
<i>Policy PF-F.4</i>	Maintain conveyance and treatment capacity.	Refer to the analysis for General Plan Public Facilities Element Goal F.	The project would be consistent with this policy.
<i>Policy PF-F.6</i>	Coordinate land use planning and wastewater infrastructure planning to provide for future development and maintain adequate service levels.	Refer to the analysis for General Plan Public Facilities Element Goal F.	The project would be consistent with this policy.
G. Stormwater Infrastructure Goals	Protection of beneficial water resources through pollution prevention and interception efforts. A storm water conveyance system that effectively reduces pollutants in urban runoff and storm water to the maximum extent practicable.	Refer to the analysis included in Policy UD-A.8. The project would not adversely affect existing drainage patterns. It was determined that redevelopment on the project site would result in an overall increase in runoff flows from the project site. To address issues of storm water treatment from increased runoff, the project design would include on-site bioretention and hydromodification features implemented in accordance with the	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		federal Clean Water Act and California Regional Water Quality Control Board for the San Diego region municipal stormwater NPDES permit (MS4 Permit). As such, the Drainage Study concluded that the total flow rates after detention would be less than or equal to existing flows. Finally, as discussed in Section 5.18, Water Quality, the project would adhere to the City's Stormwater Standards and would result in less-than-significant impacts to Water Quality.	
<i>Policy PF-G.1</i>	Ensure that all storm water conveyance systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board NPDES Permit standards.	Refer to the analyses for General Plan Public Facilities Element Goal G and Policy UD-A.8.	The project would be consistent with this policy.
<i>Policy PF-G.2</i>	Install infrastructure that, where feasible, includes components to capture, minimize, and prevent pollutants in urban runoff from reaching receiving waters and our potable water supplies.	Refer to the analyses for General Plan Public Facilities Element Goal G and Policy UD-A.8.	The project would be consistent with this policy.
<i>Policy PF-G.3</i>	Meet and preferably exceed regulatory mandates to protect water quality in a cost-effective manner monitored through performance measures.	Refer to the analyses for General Plan Public Facilities Element Goal G and Policy UD-A.8.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy PF-G.5</i>	Identify and implement BMPs for projects that repair, replace, extend, or otherwise affect the stormwater conveyance system. These projects should also include design considerations for maintenance, inspection, and, as applicable, water quality monitoring.	Refer to the analyses for General Plan Public Facilities Element Goal G and Policy UD-A.8.	The project would be consistent with this policy.
H. Water Infrastructure Goal	Ensure a safe, reliable, and cost-effective water supply for San Diego.	The City's Public Works Department would provide domestic water to the proposed project. Each unit within the project is proposed to have a private domestic water system and a private fire protection system. In accordance with City of San Diego standards, private domestic water systems would include a meter and backflow preventer, and private fire protection systems would include backflow preventers. The applicant has coordinated with the City Water Department to ensure that adequate water supplies are available with the implementation of the project. As discussed in Section 5.14, Public Utilities, the project would result in less-than-significant impacts to water supplies.	The project would be consistent with this goal.
<i>Policy PF-H.3</i>	Coordinate land use planning and water infrastructure planning with local, state, and regional agencies to provide for future development, maintain adequate service levels, and ensure adequate water supply during emergency situations.	Refer to the analysis for General Plan Public Facilities Element Goal H.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> a. Plan for a water supply and emergency reserves to meet peak load demand during a natural disaster such as a fire or earthquake. b. Plan for water supply and emergency reserves recognizing anticipated Climate Change impacts. c. Recognize the water/energy nexus. Plan and implement water projects after consideration of their energy demands in coordination with energy suppliers to minimize and optimize the energy impact of projects. 		
I. Waste Management Goals	Maximize diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.	The project would implement a Waste Management Plan (WMP) for solid waste generated by the project. The project would comply with all state and local laws regarding solid waste and recycling with the preparation of a WMP. Additionally, the proposed project would be required to adhere to City ordinances, including the C&C Debris Diversion Deposit Program, the City's Recycling Ordinance, and the Refuse and Recyclable Materials Storages Regulations. In addition, waste reduction, recycling, and management programs would be implemented as a part of CALGreen Building Standards Code.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy PF-1.2</i>	Maximize waste reduction and diversion (see also Conservation Element, Policy CE-A.8).	Refer to the analysis for General Plan Public Facilities Element Goal I.	The project would be consistent with this policy.
<i>Policy PF-1.2.a</i>	Conveniently locate facilities and informational guidelines to encourage waste reduction, diversion, and recycling practices.	Refer to the analysis for General Plan Public Facilities Element Goal I. Additionally, the project would implement waste reduction by improving management and recycling programs, both during and after construction, provide permanent, adequate and convenient space for individual homes to collect refuse and recyclable material.	The project would be consistent with this policy.
<i>Policy PF-1.2.d</i>	Maximize the separation of recyclable and compostable materials.	The project would provide facilities for the separation, collection and storage of paper, glass, plastic, metals, yard waste, and other materials.	The project would be consistent with this policy.
<i>Policy PF-1.2.f</i>	Reduce and recycle construction and demolition (C&D) debris to the extent feasible.	Refer to the analysis for General Plan Public Facilities Element Goal I.	The project would be consistent with this policy.
M. Public Utilities Goals	Public utility services provided in the most cost-effective and environmentally sensitive way. Public utilities that sufficiently meet existing and future demand with facilities and maintenance practices that are sensible, efficient, and well-integrated into the natural and urban landscape.	As discussed in Section 5.14, Public Utilities, the City's Public Works Department would provide domestic water to the project site. The project would connect to existing pipelines and would include improvements to the public water system. The project would also connect to the City's sewer system. The project would construct new gravity sewer lines	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		to connect the project site to the existing gravity sewer system. Unit 5 would require a lift station to serve the project. Wastewater from the project would ultimately be conveyed through the City's Municipal Wastewater System to the North City Water Reclamation Plant for treatment and disposal. Dry utilities, including electric power and natural gas would be provided by San Diego Gas & Electric (SDG&E). No major improvements to the local distribution networks are anticipated to be needed to support the growth facilitated by the proposed project. The applicant would work with dry utility providers to ensure utility systems have adequate capacity to serve the project. Telephone, cable TV, and internet service would be available from a variety of providers. The project would also implement a WMP for solid waste generated by the project. As discussed in Section 5.14, implementation of the project would result in less-than-significant impacts to all public utilities.	
<i>Policy PF-M.4.d</i>	For projects, in particular large-scale developments (such as those requiring redevelopment plans, community plan updates, general plan amendments), consult and coordinate with all appropriate public utilities early on to determine the type, size, and location of facilities that are needed to accommodate the project's increased demand.	Refer to the analysis for General Plan Public Facilities Element Goal M. The project has coordinated with the applicable public utilities providers and would be adequately served.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Q. Seismic Safety Goals	<p>Protection of public health and safety through abated structural hazards and mitigated risks posed by seismic conditions.</p> <p>Development that avoids inappropriate land uses in identified seismic risk areas.</p>	<p>Health and Safety are discussed in Section 5.6 of this EIR. However, seismic hazards are discussed in Section 5.4, Geologic Conditions. As determined therein, the project has the potential to expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards because the design of the project has not been finalized. Similarly, there is a potential for the project to result in impacts related 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 because the design of the project has not yet been finalized. As such, the project would implement MM-GEO-1, which requires the preparation of a final geotechnical investigation report that specifically addresses the proposed construction plans prior to the issuance of any construction permits. The geotechnical report would be prepared in accordance with the City's "Guidelines for Geotechnical Reports" and would be reviewed for adequacy by the Geology Section of Development Services. The project would also be required to adequately demonstrate compliance with the CBC and applicable geologic hazards regulations. Upon preparation of a final, design-specific geotechnical investigation report, all potential impacts due to geologic conditions would be reduced to less-than-significant levels.</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy PF-Q.1</i>	<p>Protect public health and safety through the application of effective seismic, geologic, and structural considerations.</p> <ul style="list-style-type: none"> a. Ensure that current and future community planning and other specific land use planning studies continue to include consideration of seismic and other geologic hazards. This information should be disclosed, when applicable, in the CEQA document accompanying a discretionary action. c. Require the submission of geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever seismic or geologic problems are suspected. g. Adhere to state laws pertaining to seismic and geologic hazards. 	Refer to the analysis for General Plan Public Facilities Goal Q.	The project would be consistent with this policy.
<i>Policy PF-Q.2</i>	<p>Maintain or improve integrity of structures to protect residents and preserve communities.</p> <ul style="list-style-type: none"> b. Continue to consult with qualified geologists and seismologists to review geologic and seismic studies submitted to the City as project requirements. 	Refer to the analysis for General Plan Public Facilities Goal Q.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Recreation Element			
A. Park and Recreation Guidelines Goals	<p>Provision of parklands that keep pace with population growth through timely acquisition and development.</p> <p>An increase in the amount and quality of recreation facilities and infrastructure through the promotion of alternative methods where development of typical facilities and infrastructure may be limited by land constraints.</p> <p>An equitable citywide distribution of and access to parks and recreation facilities.</p>	<p>Refer to the analyses in Policy LU-A.9 and UD-A.2.</p> <p>The total amount of parkland provided within the project area would meet the City's park requirements and Section 5.13, Public Services and Facilities, determined that the project would result in less-than-significant impacts to parks and recreation facilities.</p>	The project would be consistent with this goal.
<i>Policy RE-A.2</i>	Use community plan updates to further refine citywide park and recreation land use policies consistent with the Parks Master Plan.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-A.8</i>	Provide population-based parks at a minimum ratio of 2.8 useable acres per 1,000 residents (see also Table RE-2, Parks Guidelines).	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-A.10</i>	Encourage private development to include recreation facilities, such as children's play areas, rooftop parks and courts, useable public plazas, and mini-parks to supplement population-based parks. (see also Urban Design Policies, UD-B.8 and UD-C.5)	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy RE-A.17</i>	Ensure that all development impact fees and assessments collected for the acquisition and development of population-based parks and recreation facilities be used for appropriate purposes in a timely manner.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2. The project would not be required to pay development impact fees for parks and recreation facilities.	The project would be consistent with this policy.
B. Recreational Opportunities Goals	<p>A City with park and recreation facilities and services that are designed to accommodate the needs of a growing and diverse population and respect the City's natural landforms.</p> <p>A regional and citywide parks/open space system, including the bays, beaches, rivers, and other attractions, that gives our region identity, attracts tourism, and enriches the quality of life for residents and visitors.</p> <p>A City with a diverse range of active and passive recreational opportunities that meet the needs of each neighborhood/community and reinforce the City's natural beauty and resources.</p>	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this goal.
<i>Policy RE-B.3</i>	Include recreation needs in community plans, consistent with a Parks Master Plan, to ensure that facilities and programs reflect community preferences, including the growing demand for senior activities.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy RE-B.4</i>	In planning, with respect to existing parks, give consideration to preserving the existing uses.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
C. Preservation Goals	<p>Preserve, protect and enhance the integrity and quality of existing parks, open space, and recreation programs citywide.</p> <p>Preserve, protect and enrich natural, cultural, and historic resources that serve as recreation facilities.</p>	<p>Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.</p> <p>Additionally, as discussed in Section 5.7, Historical Resources, no historic structures or properties exist within the project Area of Potential Effect (APE) and the property itself is not eligible to be classified as a historical resource. As such, no impacts to historical resources would occur with implementation of the project. The project would have the potential to impact one previously identified archaeological cultural resource on the project APE and the potential to impact unknown cultural resources within the project APE. As such, the project would implement MM-HR-1 to avoid known cultural resources and ensure that construction work does not extend into the resource boundary. Additionally, the project would implement a monitoring program as outlined in MM-HR-2 to protect unknown archaeological or tribal cultural resources that may be encountered during construction and/or maintenance-related activities. Implementation of mitigation measures MM-HR-1 and MM-HR-2</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		would reduce all potential impacts to cultural resources to less-than-significant levels.	
<i>Policy RE-C.2</i>	Protect, manage and enhance population- and resource-based parks and open space lands through appropriate means which include sensitive planning, park and open space dedications, and physical protective devices.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-C.5</i>	Design parks to preserve, enhance, and incorporate items of natural, cultural, or historic importance.	Refer to the analyses for General Plan Recreation Element Goals A and C, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-C.7</i>	Protect beaches and canyons from uncontrolled urban run off.	Refer to the analyses in Public Facilities Goal F and Policy UD-A.8.	The project would be consistent with this policy.
<i>Policy RE-C.9</i>	Determine strategies that accommodate both lands for residential, commercial, and industrial use with the needs for parkland and open space uses.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2. The project would include a mix of residential, open space, recreation, and commercial uses.	The project would be consistent with this policy.
D. Accessibility Goals	A park and recreation system that provides an equitable distribution of park and recreation facilities that are designed to accommodate the needs of a diverse population.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>Park and recreation facilities that are sited to optimize access by foot, bicycle, public transit, automobile, and alternative modes of travel.</p> <p>Provision of an inter-connected park and open space system that is integrated into and accessible to the community.</p> <p>Recreational facilities that are available for programmed and non-programmed uses.</p>		
<i>Policy RE-D.1</i>	Provide new and upgraded park and recreation facilities that employ barrier-free design principles that make them accessible to San Diegans regardless of age or physical ability, giving priority to economically disadvantaged communities.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-D.2</i>	Provide barrier-free trails and outdoor experiences and opportunities for persons with disabilities where feasible.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-D.6</i>	<p>Provide safe and convenient linkages to, and within, park and recreation facilities and open space areas.</p> <ul style="list-style-type: none"> a. Provide pedestrian and bicycle paths between recreation facilities and residential development. b. Designate pedestrian and bicycle corridors, and equestrian corridors where appropriate, 	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>that link residential neighborhoods with park and recreation facilities, trails, and open spaces.</p> <ul style="list-style-type: none"> c. Improve public access through development of, and improvements to, multi-use trails within urban canyons and other open space areas. d. Coordinate efforts with the City's Pedestrian Master Plan, the anticipated Parks Master Plan which incorporates trails master planning or a Trails Master Plan, and the County's trail system to provide safe and convenient linkages between areas (see also Mobility Element, Section A). e. Coordinate with the county, state, and federal governments to ensure planning for and connectivity to trail systems outside of the City such as the Trans-County Trail Plan, San Diego River trails, Sweetwater River trails, Otay Valley trails, the California Coastal Trail, the Pacific Crest Trail and the California Riding and Hiking Trail. f. Identify key trails and access points as a part of community plan updates, discretionary permit reviews, and other applicable land use and park planning documents. 		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy RE-D.7</i>	Provide public access to open space for recreational purposes.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
F. Open Space Lands and Resource-Based Parks Goals	<p>An open space and resource-based park system that provides for the preservation and management of natural resources, enhancement of outdoor recreation opportunities, and protection of the public health and safety.</p> <p>Preservation of the natural terrain and drainage systems of San Diego's open space lands and resource-based parks.</p> <p>A system of pedestrian, bicycle, and equestrian paths linking communities, neighborhoods, parks, and the open space system</p>	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9, UD-A.2, RE-C.7.	The project would be consistent with this goal.
<i>Policy RE-F.1</i>	Protect and enhance park lands from adjacent incompatible uses and encroachments. (see also Urban Design Element, Policy UD-A.3.)	Refer to the analyses for General Plan Land Use Element Goal A, Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-F.4</i>	Balance passive recreation needs of trail use with environmental preservation.	Refer to the analyses for General Plan Recreation Element Goal A, and Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy RE-F.5</i>	Utilize open space lands for outdoor recreation purposes, when doing so is compatible with cultural, historic preservation and MSCP	Refer to the analyses for General Plan Recreation Element Goals A and C, and Policies LU-A.9, UD-A.1 and UD-A.2.	The project would be

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>conservation goals and surrounding land uses, including, but not limited to:</p> <p>Locations of outstanding scenic, historic, and cultural value;</p> <p>Corridors that link recreation facilities and open space areas such as utility easements, river and stream corridors, trails, and scenic highway corridors; and</p> <p>Sites particularly suited for park and recreation purposes, such as areas adjacent to and providing access to beaches, lakeshores, rivers, and streams.</p>		consistent with this policy.
<i>Policy RE-F.7</i>	<p>Create or enhance open space multi-use trails to accommodate, where appropriate, pedestrians/ hikers, bicyclists, and equestrians.</p> <ul style="list-style-type: none"> a. Develop, adopt and maintain updates of a citywide Trails Master Plan or Parks Master Plan which incorporates trails master planning to guide the provision of and enhancement of open space multi-purpose trails. b. Enhance public access to public open space by clearly identifying trailheads and trail alignments which are consistent with MSCP preservation goals. 	Refer to the analyses for General Plan Recreation Element Goal A, Public Facilities Goal Q, Policies LU-A.9, UD-A.1. UD-A.2 and UD-A.8.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<ul style="list-style-type: none"> c. Locate canyon and other open space trails to take advantage of existing pathways and maintenance easements where possible and appropriate. d. Design, construct and manage trails to: <ul style="list-style-type: none"> • Consider the context and sensitivity of the area they traverse. • Protect and preserve sensitive natural and cultural resources. • Provide for safe and enjoyable use using best practices (e.g. user management). • Be sustainable and minimize maintenance using best practices (e.g. erosion control). e. Ensure that trails that are considered to be a part of the City's trail system meet one or more of the City's definitions of what constitutes a trail (see Glossary). f. Allow for the closure of existing public trails where such trails are unsafe, unsustainable, redundant, serve only a single private property, lack legal public access, and/or unnecessarily impact environmentally sensitive areas. 		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Conservation Element			
A. Climate Change & Sustainable Development Goal	<p>To reduce the City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally sound waste management.</p> <p>To be prepared for, and able to adapt to adverse climate change impacts.</p> <p>To become a city that is an international model of sustainable development and conservation.</p>	Refer to the analyses in Land Use Goals A and I, Policies LU-A.3, LU-A.9, UD-A.2 and UD-A.4.	The project would be consistent with this goal.
<i>Policy CE-A.5</i>	Employ sustainable or "green" building techniques for the construction and operation of buildings.	Refer to the analyses in Land Use Goals A and I, Policies LU-A.3, LU-A.9, UD-A.2 and UD-A.4.	The project would be consistent with this policy.
<i>Policy CE-A.7</i>	Construct and operate buildings using materials, methods, and mechanical and electrical systems that ensure a healthful indoor air quality. Avoid contamination by carcinogens, volatile organic compounds, fungi, molds, bacteria, and other known toxins.	<p>Refer to the analyses in Land Use Goals A and I, Policies LU-A.3, LU-A.9, UD-A.2 and UD-A.4.</p> <p>Additionally, as discussed in Section 5.6, Health and Safety, hazardous materials potentially occurring on the project site, such as those containing asbestos-containing materials or other wastes, including polychlorinated biphenyls (PBCs) and universal wastes, would be mitigated to less-than-significant levels with the implementation of MM-HS-1, which requires preparation of a hazardous building materials survey and subsequent abatement, if required. Furthermore,</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		soil sampling and remediation would be required by MM-HS-2 to mitigate for impacts due to potentially contaminated soils on the project site. Finally, MM-HS-3 would require development of a Hazardous Materials Contingency Plan to address potential impacts to soil, soil vapor, and/or groundwater from releases on or near the project site. All potential Health and Safety impacts would be mitigated to less-than-significant levels.	
<i>Policy CE-A.8</i>	Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I-2, or by renovating or adding on to existing buildings, rather than constructing new buildings where feasible.	Refer to the analysis in Public Facilities Goal I.	The project would be consistent with this policy.
<i>Policy CE-A.9:</i>	Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible.	Refer to the analysis in Public Facilities Goal I.	The project would be consistent with this policy.
<i>Policy CE-A.10</i>	<p>Include features in buildings to facilitate recycling of waste generated by building occupants and associated refuse storage areas.</p> <ul style="list-style-type: none"> a. Provide permanent, adequate, and convenient space for individual building occupants to collect refuse and recyclable material. b. Provide a recyclables collection area that serves the entire building or project. The 	<p>Refer to the analysis in Public Facilities Goal I.</p> <p>Additionally, the project would implement waste reduction by improving management and recycling programs, both during and after construction, provide permanent, adequate and convenient space for individual homes to collect refuse and recyclable material. As discussed in Section 5.14, Public Utilities, the project would be adequately served by landfills</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	space should allow for the separation, collection, and storage of paper, glass, plastic, metals, yard waste, and other materials as needed.	and would have less-than-significant impacts on solid waste services with incorporation of mitigation.	
<i>Policy CE-A.11</i>	<p>Implement sustainable landscape design and maintenance, where feasible.</p> <p>Use integrated pest management techniques, where feasible, to delay, reduce, or eliminate dependence on the use of pesticides, herbicides, and synthetic fertilizers.</p> <ul style="list-style-type: none"> c. Decrease the amount of impervious surfaces in developments, especially where public places, plazas and amenities are proposed to serve as recreation opportunities. d. Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals. f. Strive to incorporate existing trees and native vegetation into site designs. g. Minimize the use of landscape equipment powered by fossil fuels. h. Implement water conservation measures in site/building design and landscaping. i. Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for 	<p>Refer to analyses in Land Use Policies LU-A.1c and ME-A.7.</p> <p>The project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-resistant, naturalized landscaping. New trees would be planted on the project site in accordance with the design guidelines and existing trees on site would be retained where feasible. The project would reduce the use of pesticides, herbicides, and synthetic fertilizers for pest management. The project would maximize pervious surfaces wherever feasible. The majority of the trail system would include decomposed granite or compacted earth trails with some concrete trails that would be repurposed from the previous golf cart path. The use of drought-tolerant, naturalized landscaping would also reduce water usage for irrigation. The project design would also include on-site biofiltration and hydromodification features to reduce stormwater runoff. The project would install new tree plantings to provide shade and reduce heat island effect. High-efficiency plumbing fixtures and fittings would be installed in all structures. Recycled</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	irrigation. Use recycled water to meet the need of development project to the maximum extent feasible.	water would be used instead of potable water for irrigation of landscaping.	
B. Open Space and Landform Preservation	Preservation and long-term management of the natural landforms and open spaces that help make San Diego unique.	Refer to the analyses in Policies LU-A.9, UD-A.2 and CE-A.11. The long-term maintenance and preservation of open space resources on the project site including the trail system may be the responsibility of the Carmel Mountain Ranch Maintenance Assessment District and/or the new Master Homeowners' Association.	The project would be consistent with this goal.
<i>Policy CE-B.1</i>	Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities. a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation	Refer to the analyses in Conservation Goal B, and Policies LU-A.9, UD-A.1, UD-A.2 and CE-A.11. The project would construct new gravity sewer lines to connect the project site to the existing gravity sewer system. Unit 5 would require a lift station to serve the project. On-site sewer systems would be private and would be designed to maintain a minimum of 1% slope to meet state and local plumbing code standards. As such, new sewer infrastructure would not impact canyons or other environmentally sensitive lands.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>Element, Sections C and F; Urban Design Element, Section A).</p> <p>d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.</p> <p>e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.</p> <p>f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological areas of the City's adopted MSCP Subarea Plan.</p> <p>g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resources conservation.</p>		
<i>Policy CE-B.4</i>	Limit and control runoff, sedimentation, and erosion both during and after construction activity.	Refer to the analyses in Public Facilities Goal G and Policy UD-A.8.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy CE-B.5</i>	Maximize the incorporation of trails and greenways linking local and regional open space and recreation areas into the planning and development review processes.	Refer to the analyses in Policies LU-A.9 and UD-A.2.	The project would be consistent with this policy.
<i>Policy CE-B.6</i>	Provide an appropriate defensible space between open space and urban areas through the management of brush, the use of transitional landscaping, and the design of structures (see also Urban Design Element, Policy UD-A.3.o). Continue to implement a citywide brush management system.	Refer to the analysis in Policies UD-A.3 and CE-A.11.	The project would be consistent with this policy.
E. Urban Runoff Management Goals	Protection and restoration of water bodies, including reservoirs, coastal waters, creeks, bays and wetlands.	As discussed in Section 5.2, Biological Resources, implementation of the proposed project would impact approximately 0.001 acres of an unvegetated channel wetlands. This describes the location where an arch culvert will span an existing concrete-lined brow ditch, resulting in no alteration of structure or function of the feature. The structure and function of this channel would not be altered, and would therefore not be considered a significant impact. Direct impacts would be less than significant. Long-term indirect impacts to wetlands and non-wetland waters are not anticipated for the project, as buffers of 30 to 100 feet between the proposed development and designated City wetlands are proposed in order to protect these resources. The project would not impact other water bodies including reservoirs, coastal waters, creeks, or bays.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Policy CE-E.2	<p>Apply water quality protection measures to land development projects early in the process-during project design, construction, and operations-in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows and the contamination of storm water runoff.</p> <ul style="list-style-type: none"> a. Increase on-site infiltration, and preserve, restore or incorporate natural drainage systems into site design. b. Direct concentrated drainage flows away from the MHPA and open space areas. If not possible, drainage should be directed into sedimentation basins, grassy swales or mechanical trapping devices prior to drainage into the MHPA or open space areas. c. Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible. d. Increase the use of vegetation in drainage design. e. Maintain landscape design standards that minimize the use of pesticides and herbicides. f. Avoid development of areas particularly susceptible to erosion and sediment loss 	Refer to the analysis for General Plan Conservation Element Policy CE-A.11 regarding landscaping; Policy CE-B.4 regarding drainage and runoff; and Policy CE-B.1 regarding the MHPA.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>(e.g., steep slopes) and, where impacts are unavoidable, enforce regulations that minimize their impacts.</p> <p>g. Apply land use, site development and zoning regulations that limit impacts on, and protect the natural integrity of topography, drainage systems, and water bodies.</p> <p>h. Enforce maintenance requirements in development permit conditions.</p>		
<i>Policy CE-E.3</i>	<p>Require contractors to comply with accepted storm water pollution prevention planning practices for all projects.</p> <p>a. Minimize the amount of graded land surface exposed to erosion and enforce erosion control ordinances.</p> <p>b. Continue routine inspection practices to check for proper erosion control methods and housekeeping practices during construction.</p>	Refer to the analysis for General Plan Conservation Element Policy CE-B.4.	The project would be consistent with this policy.
<i>Policy CE-E.6</i>	Continue to encourage "Pollution Control" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.	Refer to the analysis for General Plan Conservation Element Policy CE-B.4.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
F. Air Quality	Regional air quality which meet state and federal standards. Reduction in greenhouse gas emissions effecting climate change.	As discussed in Section 5.1, Air Quality, the project would result in less-than-significant impacts to air quality and would meet applicable air quality standards. As discussed in Section 5.5, Greenhouse Gas Emissions, the project would result in less-than-significant impact from greenhouse gas emissions.	The project would be consistent with this goal.
<i>Policy CE-F.4</i>	Preserve and plant trees and vegetation that are consistent with habitat and water conservation policies and that absorb carbon dioxide and pollutants.	Refer to the analysis for General Plan Conservation Element Policy CE-A.11.	The project would be consistent with this policy.
<i>Policy CE-F.6</i>	Encourage and provide incentives for the use of alternative to single-occupancy vehicle use, including using public transit, carpooling, vanpooling, teleworking, bicycling, and walking. Continue to implement programs to provide City employees with incentives for the use of alternatives to single-occupancy vehicles.	The project would include approximately 6 miles of publicly accessible trails and 9.79 acres of publicly accessible parkland. The recreation amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Additionally, the project would include residential land uses that would be developed as infill residential neighborhoods with proximate access to	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		existing employment sites and transit systems in the Carmel Mountain Ranch community.	
G. Biological Diversity	Preservation of healthy, biologically diverse regional ecosystems and conservation of endangered, threatened, and key sensitive species and their habitats.	<p>The project would avoid direct impacts to sensitive biological resources. Potential indirect impacts to sensitive biological resources would be mitigated to a level below significant. The impact footprint associated with the project would not occur within or adjacent to designated MHPA lands within the City. Refer to Section 5.4, Biological Resources, for additional information.</p> <p>The project would retain the majority of the 164.5-acre project site as open space. Specifically, open space uses would be composed of approximately 111.27 acres.</p> <p>The proposed project will place development within the limits of the previous golf course and will avoid all jurisdictional resources. The goal of the landscape revegetation program is restoration of native and naturalized vegetation types into the surrounding existing landscape, to establish open space. Revegetation areas consist of former golf course fairways and areas disturbed by the proposed development. The proposed revegetation plant palette consists of trees, riparian container planting, an ornamental native and erosion control hydroseed mix, and an additional seed mix suitable for areas within BMZ. Container planting and hydroseeding of disturbed areas with a mixture of native grasses,</p>	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		shrubs, and groundcover will provide surface cover and erosion control.	
<i>Policy CE-G.1</i>	Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.	As discussed in Section 5.2, Biological Resources, the impact footprint associated with the project would not occur within or adjacent to designated MHPA lands within the City. Therefore, the City's MSCP Land Use Adjacency Guidelines would not be applicable to the proposed project, and no significant adverse edge effects associated with the introduction of a land use within an area adjacent to the MHPA would occur.	The project would be consistent with this policy.
H Wetlands	Preservation of San Diego's rich biodiversity and heritage through the protection and restoration of wetland resources. Preservation of all existing wetland habitat in San Diego through a "no net loss" approach.	Refer to the analysis for General Plan Conservation Element Goal E. As determined in Section 5.2, Biological Resources, the project would have less-than-significant impacts on wetlands.	The project would be consistent with this goal.
<i>Policy CE-H.7</i>	Encourage site planning that maximizes the potential biological, historic, hydrological and land use benefits of wetlands.	Refer to the analysis for General Plan Conservation Element Goal E. As determined in Section 5.2, Biological Resources, the project would have less-than-significant impacts on wetlands.	The project would be consistent with this policy.
<i>Policy CE-I.4</i>	Maintain and promote water conservation and waste diversion programs to conserve energy.	Refer to the analysis for General Plan Conservation Element Goal I. Additionally, the project would implement sustainability measures to decrease water and resource consumption, including high-efficiency plumbing fixtures and fittings and landscaping	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		with non-invasive drought-tolerant native species. The project would also implement a WMP for solid waste generated by the project.	
<i>Policy CE-I.5</i>	Support the installation of photovoltaic panels, and other forms of renewable energy production. b. Promote the use and installation of renewable energy alternatives in new and existing development.	Refer to the analysis for General Plan Conservation Element Goal I.	The project would be consistent with this policy.
<i>Policy CE-I.10</i>	Use renewable energy sources to generate energy to the extent feasible.	Refer to the analysis for General Plan Conservation Element Goal I.	The project would be consistent with this policy.
J. Urban Forestry	Protection of a sustainable urban forest.	Design guidelines have been developed for the project that are intended to provide a framework for future project implementation. The design guidelines include landscaping requirements that would enhance public spaces and create compatibility with surrounding communities. The project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-resistant, naturalized landscaping. New trees would be planted on the project site in accordance with the design guidelines and existing trees on site would be retained where feasible.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy CE-J.4</i>	Continue to require the planting of trees through the development permit process. a. Consider tree planting as mitigation for air pollution emissions, storm water runoff, and other environmental impacts as appropriate.	Refer to the analysis for General Plan Conservation Element Goal J.	The project would be consistent with this policy.
Noise Element			
A. Noise and Land Use Compatibility Goal	Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise.	A Noise Analysis Technical Report was prepared for the project and is incorporated as Appendix F to this EIR. Section 5.10, Noise, addressed existing and potential future noise levels generated by the project. It was determined that the project would result in potentially significant impacts due to short-term construction noise and potential long-term impacts due to the operation of residential mechanical equipment such as HVAC systems and noise levels generated in association with outdoor recreation activities and events occurring within the project area. However, the project would incorporate mitigation measures MM-NOI-1 to reduce construction noise, MM-NOI-2 to reduce mechanical equipment noise, and MM-NOI-3 to reduce outdoor/recreational and gathering space noise. With implementation of mitigation measures, MM-NOI-1 through MM-NOI-3 , the project would result in less-than-significant noise impacts from all sources both in the short-term and long-term.	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy NE-A.1</i>	Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.	Refer to the analysis for General Plan Noise Element Goal A. Existing noise-sensitive land uses in the project area include single-family residential, multi-family residential, the Carmel Mountain Ranch Library, the Highland Ranch Elementary School, and the Shoal Creek Elementary School. However, implementation of mitigation measures MM-NOI-1 through MM-NOI-3 would reduce all noise impacts to less-than-significant levels.	The project would be consistent with this goal.
<i>Policy NE-A.2</i>	Assure the appropriateness of proposed developments relative to existing and future noise levels by consulting the guidelines for noise-compatible land use (shown on Table NE-3) to minimize the effects on noise-sensitive land uses.	Refer to the analysis for General Plan Noise Element Goal A and Policy NE-A.1. The project would be in compliance with the City's guidelines for noise-compatible land uses as shown in Table NE-3 of the General Plan.	The project would be in conformance with this policy.
<i>Policy NE-A.3</i>	Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.	Refer to the analysis for General Plan Noise Element Goal A.	The project would be in conformance with this policy.
<i>Policy NE-A.4</i>	Require an acoustical study consistent with acoustical study guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the land use-noise compatibility guidelines (Table NE-3), so that noise mitigation	Refer to the analysis for General Plan Noise Element Goal A and Policy NE-A.2.	The project would be in conformance with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	measures can be included in the project design to meet the noise guidelines.		
<i>Policy NE-A.5</i>	Prepare noise studies that address existing and future noise levels from noise sources that are specific to a community when updating community plans.	Refer to the analysis for General Plan Noise Element Goal A.	The project would be in conformance with this policy.
B. Motor Vehicle Traffic Noise Goal	Create minimal excessive motor vehicle traffic noise on residential and other noise-sensitive land uses.	The ambient noise in the project area would be primarily generated by traffic; however, the noise generated from these uses would not impact nearby residential or other sensitive land uses.	The project would be in conformance with this goal.
<i>Policy NE-B.1</i>	Encourage noise-compatible land uses and site planning adjoining existing and future highways and freeways.	The project would be consistent with the existing and surrounding uses and provides project features and mitigation measures to reduce potential impact to sensitive noise receptors and would comply with the City's noise ordinance.	The project would be in conformance with this policy.
<i>Policy NE-B.2</i>	Consider traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise	As discussed in Section 5.10, Noise, the long-term operational noise from roadway traffic associated with implementation of the project would result be below the City of San Diego threshold for significant change in the ambient noise environment and impacts would be less than significant. Additionally, the project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic, further limiting traffic-related noise within the project site.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy NE-B.3</i>	Require noise reducing site design, and/or traffic control measures for new development in areas of high noise to ensure that the mitigated levels meet acceptable decibel limits.	Refer to the analysis for General Plan Noise Element Policy NE-B.2.	The project would be consistent with this policy.
<i>Policy NE-B.4</i>	Require new development to provide facilities which support the use of alternative transportation modes such as walking, bicycling, carpooling, and, where applicable, transit to reduce peak-hour traffic.	The project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The project's internal street network would consist of private drives designed as Complete Streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. Additionally, the project includes approximately 6 miles of publicly accessible trails. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.	The project would be in conformance with this policy.
<i>Policy NE-B.7</i>	Promote the use of berms, landscaping, setbacks, and architectural design where appropriate and effective, rather than conventional wall barriers to enhance aesthetics.	The project would include a minimum 50-foot buffer zone between existing homes and proposed new development, which may include open space and landscaped areas.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy NE-B.9</i>	When parks are located in noisier areas, seek to reduce exposure through site planning, including locating the most noise sensitive uses, such as children's play areas and picnic tables, in the quieter areas of the site; and in accordance with the other policies of this section.	As discussed in Section 5.10, Noise, design details for outdoor recreation areas, such as location, capacity, specific activity elements, site configuration and design are unknown at this time. As such, the project would result in potentially significant impacts due to noise levels generated in association with outdoor recreation activities and events occurring within the project area. However, the project would implement MM-NOI-3 to reduce outdoor/recreational and gathering space noise to less-than-significant levels.	The project would be consistent with this policy.
D. Aircraft Noise Goal	Minimal excessive aircraft-related noise on residential and other noise-sensitive land uses.	The project site is located within Review Area 2 of the MCAS Miramar Airport. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. The project site is not located within a noise compatibility zone of the MCAS Miramar Airport thus aircraft-related noise would not be a concern for the project.	The project would be consistent with this goal.
<i>Policy NE-D.1</i>	Encourage noise-compatible land use within airport influence areas in accordance with federal and state noise standards and guidelines.	Refer to the analysis for General Plan Noise Element Goal D.	The project would be in conformance with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
G. Construction, Refuse Vehicles, Parking Lot Sweepers, and Public Activity Noise Goal	Minimal exposure of residential and other noise-sensitive land uses to excessive construction, refuse vehicles, parking lot sweeper-related noise and public noise.	Refer to the analysis for General Plan Noise Element Goal A and Policy NE-A.1.	The project would be consistent with this goal.
<i>Policy NE-G.1</i>	Implement limits on the hours of operation for non-emergency construction and refuse vehicle and parking lot sweeper activity in residential areas and areas abutting residential areas.	Refer to the analysis for General Plan Noise Element Goal A. Additionally, the project would comply with the requirements set forth in the City's noise ordinance, including limiting construction activity to 7a.m. to 7p.m.	The project would be in conformance with this policy.
I. Typical Noise Attenuation Methods Goal	Attenuate the effect of noise on future residential and other noise-sensitive land uses by applying feasible noise mitigation measures.	Refer to the analysis for General Plan Noise Element Goal A and Policy NE-A.1.	The project would be in conformance with this goal.
<i>Policy NE-1.1</i>	Require noise attenuation measures to reduce the noise to an acceptable noise level for proposed developments to ensure an acceptable interior noise level, as appropriate, in accordance with California's noise insulation standards (CCR Title 24) and Airport Land Use Compatibility Plans.	Refer to the analysis for General Plan Noise Element Goal A.	The project would be consistent with this policy.
<i>Policy NE-1.2</i>	Apply CCR Title 24 noise attenuation measures requirements to reduce the noise to an acceptable noise level for proposed single-family, mobile homes, senior housing, and all other types of residential uses not addressed by CCR	Refer to the analysis for General Plan Noise Element Goal A.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	Title 24 to ensure an acceptable interior noise level, as appropriate.		
<i>Policy NE-I.3</i>	Consider noise attenuation measures and techniques addressed by the Noise Element, as well as other feasible attenuation measures not addressed as potential mitigation measures, to reduce the effect of noise on future residential and other noise-sensitive land uses to an acceptable noise level.	Refer to the analysis for General Plan Noise Element Goal A and Policy NE-A.1.	The project would be in conformance with this policy.
Historic Preservation Element			
A. Identification and Preservation of Historical Resources Goals	<p>Identification of the historical resources of the City.</p> <p>Preservation of the City's important historical resources.</p> <p>Integration of historic preservation planning in the larger planning process.</p>	As discussed in Section 5.7, Historical Resources, no historic structures or properties exist within the project APE and the property itself is not eligible to be classified as a historical resource. As such, no impacts to historical resources would occur with implementation of the project.	The project would be consistent with this goal.
Policy HP-A.2	<p>Fully integrate the consideration of historical and cultural resources in the larger land use planning process.</p> <p>a. Promote early conflict resolution between the preservation of historical resources and alternative land uses.</p> <p>b. Encourage the consideration of historical and cultural resources early in the development review process by promoting</p>	<p>Refer to the analysis for General Plan Historic Preservation Element Goal A regarding historical resources.</p> <p>Additionally, the project would have the potential to impact one previously identified archaeological cultural resource on the project APE and the potential to impact unknown cultural resources within the project APE. As such, the project would implement MM-HR-1 to avoid known cultural resources and ensure that construction work does not extend into the resource</p>	The project would be consistent with these policies.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>the preliminary review process and early consultation with property owners, community and historic preservation groups, land developers, Native Americans, and the building industry.</p> <p>c. Include historic preservation concepts and identification of historic buildings, structures, objects, sites, neighborhoods, and non-residential historical resources in the community plan update process.</p> <p>e. Make the results of historical and cultural resources planning efforts available to planning agencies, the public and other interested parties to the extent legally permissible.</p>	<p>boundary. Additionally, the project would implement a monitoring program as outlined in MM-HR-2 to protect unknown archaeological or tribal cultural resources that may be encountered during construction and/or maintenance-related activities. Implementation of mitigation measures MM-HR-1 and MM-HR-2 would reduce all potential impacts to cultural resources to less-than-significant levels. Additionally, the project has included community residents and Native American tribes in the planning process. Consultation with Native American tribes has occurred in accordance with AB 52 requirements and is discussed in Section 5.16, Tribal Cultural Resources, of the EIR. Upon implementation of mitigation measure MM-TCR-1, the project would result in less-than-significant impacts to tribal cultural resources would be less than significant.</p>	
Policy HP-A.4	<p>Actively pursue a program to identify, document and evaluate the historical and cultural resources in the City of San Diego.</p> <p>a. Develop context statements specific to areas being surveyed.</p> <p>b. Complete and regularly update a comprehensive citywide inventory of historical and cultural resources in conformance with state standards and procedures. Include community, neighborhood, cultural, and historic</p>	<p>Refer to the analysis for General Plan Historic Preservation Element Goal A and Policy HP-A.2.</p> <p>Additionally, procedures for the accidental discovery of human remains are included in MM-HR-2. Thus, the project would result in less-than-significant impacts to undiscovered human remains.</p>	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	<p>preservation groups, property owners, land developers, and the building industry in planning and implementing historic surveys.</p> <p>c. Require that archaeological investigations be guided by appropriate research designs and analytical approaches to allow recovery of important prehistoric and historic information.</p> <p>d. Require the permanent curation of archaeological artifact collections and associated research materials, including collections held by the City. Support the permanent archiving of primary historical records and documents now in public institutions.</p> <p>e. Include Native American monitors during all phases of the investigation of archaeological resources including survey, testing, evaluation, data recovery, and construction monitoring.</p> <p>f. Treat with respect and dignity any human remains discovered during implementation of public and private projects within the City and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.</p>		

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
Housing Element			
Goal 1	Ensure the provision of sufficient housing for all income groups to accommodate San Diego's anticipated share of regional growth over the next housing element cycle, 2013–2020, in a manner consistent with the development pattern of the Sustainable Communities Strategy (SCS), that will help meet regional GHG targets by improving transportation and land use coordination and jobs/housing balance, creating more transit-oriented, compact and walkable communities, providing more housing capacity for all income levels, and protecting resource areas.	The proposed project would allow up to 1,200 residential dwelling units. The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.42 acres. The project would include residential land uses that would be developed as infill residential neighborhoods with proximate access to exiting employment sites, commercial areas, transit systems, and parks and recreation areas in the Carmel Mountain Ranch community. A variety of building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Design guidelines have been developed for the project that are intended to provide a framework for future project implementation. The design guidelines include landscaping and architectural requirements, which would enhance public spaces and create compatibility with surrounding communities. The	The project would be consistent with this goal.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		project would include a minimum 50-foot buffer zone between existing homes and proposed new development, which may include open space and landscaped areas. Additionally, the proposed multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists.	
<i>Policy HE-A.5</i>	Ensure efficient use of remaining land available for residential development and redevelopment by requiring that new development meet the density minimums, as well as maximums, of applicable zone and plan designations.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-B.4</i>	Ensure that the development of low-income housing meets applicable standards of health, safety and decency.	Refer to the analysis for General Plan Housing Element Goal 1. Affordable housing would be meet all applicable standards of health, safety and decency.	The project would be consistent with this policy.
<i>Policy HE-B.5</i>	Emphasize the provision of affordable housing in proximity to emerging job opportunities throughout the City of San Diego. Jobs/housing linkages should be considered through the community plan update process. This desired linkage should be reflected through appropriate land use designations and zoning.	Refer to the analysis for General Plan Housing Element Goal 1 and Policy HE-A.4. Affordable housing would be provided as part of the proposed project in 120 designated affordable housing units in Units 5 and 6 in the southwest corner of the project site nearest the Saber Springs/Penasquitos Transit Center. The project would include 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
		and affordable apartments on approximately 3.42 acres. Numerous building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, and rental product to serve a diverse and mixed population and household size. The number of jobs available in the community should far exceed the number of residential units; that is to say, a balanced community has been created in terms of the employment/housing balance.	
<i>Policy HE-B.15</i>	Encourage, through the community plan update process, increased use of zones that promote townhouse and row house development that can accommodate housing that is more efficient and less costly than traditional single-family detached housing.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-B.16</i>	Foster a housing stock that meets the needs of all residents across lifecycles.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-B.18</i>	Encourage housing for the elderly and people with disabilities near public transportation, shopping, medical, and other essential support services and facilities.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-B.52</i>	Through the community plan update process, encourage small lot, townhouse and row house development that make more efficient use of land	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
	and allow lower per unit housing costs than traditional detached single-family housing. Additionally, explore the option of micro-unit apartments, so long as they would be in conformance with the minimum habitable space requirements per state housing code.		consistent with this policy.
Goal 4	Provide affordable housing opportunities consistent with a land use pattern which promotes infill development and socioeconomic equity; and facilitate compliance with all applicable federal, state, and local laws.	Refer to the analysis for General Plan Housing Element Goal 1. The project would include affordable housing.	The project would be consistent with this goal.
<i>Policy HE-H.2</i>	Promote alternative forms of housing which offer opportunities for economies of scale and shared facilities and services.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-I.2</i>	An inclusionary housing requirement shall be in effect throughout the City to help ensure that affordable housing opportunities are spread throughout the City.	Refer to the analysis for General Plan Housing Element Goal 1. The project would include affordable housing.	The project would be consistent with this policy.
<i>Policy HE-I.5</i>	Encourage new housing that relies on transit use and environmentally sustainable patterns of movement.	Refer to the analysis for General Plan Housing Element Goal 1 and Policy HE-A.4.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy HE-I.6</i>	Encourage location of affordable housing opportunities throughout all sections of the City by encouraging mixed-income developments through a variety of programs and by encouraging the dispersal of rental subsidies.	Refer to the analysis for General Plan Housing Element Goal 1. The project would include affordable housing.	The project would be consistent with this policy.
<i>Policy HE-I.8</i>	Ensure that new housing fosters a sense of community through architectural design using features that promote community interaction. This will enable growth to be accommodated throughout the City without adversely impacting existing neighborhood character.	Refer to the analysis for General Plan Housing Element Goal 1.	The project would be consistent with this policy.
<i>Policy HE-J.8</i>	Require net-zero energy for new residential buildings by the year 2020 to meet the State's goal outlined in the Long-Term Energy Efficiency Strategic Plan.	New development within the project site would comply with the California Energy Code (Title 24) and California Green Building Standards Code (CALGreen), as part of project conditions. To meet these requirements, all new development within the project site would include rooftop photovoltaic solar panels, energy-efficient lighting and appliances, cool roofs, energy-efficient windows, and other design features that significantly conserve energy. These features would reduce energy demand, water and resource consumption, and environmental waste, and would generate renewable energy on site. Additionally, as discussed in Section 5.14, Public Utilities, the project would not result in the use of excessive amounts of fuel or energy.	The project would be consistent with this policy.

Table 5.1-2. Project's Consistency with City of San Diego's General Plan

Goal/Policy	Goal/Recommendation	Analysis	Project Consistency
<i>Policy HE-J.13</i>	Encourage and support cost-effective energy technologies with both positive economic and environmental impacts, (e.g. passive solar space heating and cooling and water conservation.)	Refer to the analysis for General Plan Housing Element Policy HE-J.8.	The project would be consistent with this policy.
<i>Policy HE-J.18</i>	In support of the California Solar Electric Incentive program, ensure that new photovoltaic (PV) systems meet minimum energy efficiency levels and that PV system components and installations meet rating standards and specific performance requirements.	Refer to the analysis for General Plan Housing Element Policy HE-J.8. PV system components and installations would meet rating standards and specific performance requirements.	The project would be consistent with this policy.

Table 5.1-3. Project's Consistency with Carmel Mountain Ranch Community Plan

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
Community Plan Goals	<p>Accommodation of a variety of residential options through a diversity of product types and economic appeal.</p> <p>Incorporation of adequate means for multi-modal circulation within the community integrated with City and regional transportation planning.</p> <p>Incorporation of parks, recreation and open space linked by pedestrian and bike paths to meet the needs and desires of users. An 18-hole championship golf course will provide additional recreational opportunities, as well as visual open space, for the entire community.</p> <p>Provision for sensible accommodation of, and effective financing for, public facilities and services, concurrent with community growth.</p>	<p>The proposed project would allow up to 1,200 residential dwelling units, including 451 townhomes on approximately 26.2 acres, 543 market-rate apartments on approximately 19.1 acres, 78 affordable apartments on approximately 2.3 acres, and 128 mixed market-rate and affordable apartments on approximately 3.42 acres.</p> <p>Each neighborhood would provide an open space amenity, trail connection, recreation area, and separate entrance. Gateways into the neighborhoods would be clearly marked and accentuated with distinct landscape features, building forms, enhanced paving, and direct pedestrian paths. Entrances to each neighborhood would lead residents and visitors directly to recreation areas and open space amenities in the neighborhood. Homes would be clustered and oriented around private open spaces and community amenities.</p> <p>The project site encompasses the now closed golf course referenced in this objectives. While the golf course will no longer be maintained, the project is consistent with the other applicable goals, policies, and objectives of the Community Plan as discussed throughout this table.</p>	The project would be consistent with these goals.

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
		<p>Approximately 111.0 acres of development would be composed of parkland, open space, and buffer area. This area includes approximately 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland; 78.1 acres of open space; and 25.0 acres of buffer area. A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The majority of the trail system would include paved trails that would be repurposed from the previous golf cart path, and new paved trails would provide connections through new development areas. Trails would range from 5 to 8 feet in width and all trails would be publicly accessible. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity to the surrounding neighborhood. Recreational amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.</p> <p>As discussed in Section 5.14, Public Utilities, the City's Public Works Department would provide domestic water to the project site. The project would connect to existing</p>	

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
		<p>pipelines and would include improvements to the public water system. The project would also connect to the City's sewer system. The project would construct new gravity sewer lines to connect the project site to the existing gravity sewer system. Unit 5 would require a lift station to serve the project. Wastewater from the project would ultimately be conveyed through the City's Municipal Wastewater System to the North City Water Reclamation Plant for treatment and disposal. Dry utilities, including electric power and natural gas would be provided by San Diego Gas & Electric (SDG&E). No major improvements to the local distribution networks are anticipated to be needed to support the growth facilitated by the proposed project. The applicant would work with dry utility providers to ensure utility systems have adequate capacity to serve the project. Telephone, cable TV, and internet service would be available from a variety of providers. The project would also implement a WMP for solid waste generated by the project. As discussed in Section 5.14, implementation of the project would result in less-than-significant impacts to all public utilities.</p>	

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
Housing Element Objective and Guidelines	<p>Accommodate a variety of residential options through a diversity of project types and economic appeal.</p> <p>Guidelines for attainment of this objective include:</p> <p>Incorporate Planned Residential Development (PRD) zoning overlays on designated attached ownership unit neighborhoods to ensure design compatibility.</p> <p>Design residential development so as not to adversely affect surrounding land uses and topography.</p> <p>Have residential site planning sensitive to natural environmental concerns.</p> <p>Establish a sense of neighborhood by the use of physical transitions, natural or created, by separation of internal circulation patterns, with entry statements and architectural theme treatments. Use this as a means of reinforcing the concept of defensible neighborhoods.</p> <p>Encourage the development and maintenance of individual neighborhood landscape treatments. These treatments will reinforce natural environments and features and will serve to blend the effects of urban development with the landscape.</p> <p>Seek means of creative financing or product offerings (ownership and rental) to enable</p>	<p>The project would include residential land uses that would be developed as infill residential neighborhoods with proximate access to existing employment sites, commercial areas, transit systems, and parks and recreation areas in the Carmel Mountain Ranch community. A variety of building types (townhomes, garden walk-ups, stacked flats and apartments, among others) would be provided in the community, with a mix of for-sale, rental and age-restricted product to serve a diverse and mixed population and household size. A variety of architectural styles would be allowed across the neighborhoods, so long as a consistency is established at each planning unit neighborhood to help define a sense of place. Design guidelines have been developed for the project that are intended to provide a framework for future project implementation. The design guidelines include landscaping and architectural requirements that would enhance public spaces and create compatibility with surrounding communities. The project would include a minimum 50-foot buffer zone between existing homes and proposed new development, which may include open space and landscaped areas.</p> <p>Additionally, the proposed multi-use trail system would circulate throughout the project site to provide mobility and</p>	The project would be consistent with this objective and guidelines.

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
	<p>inclusion of a reasonable percentage of moderate cost housing in the community. Incorporate a mobile home zone as an affordable neighborhood that will represent two percent of the total community dwellings.</p> <p>Design neighborhoods specifically suited to elderly life styles that meet their unique needs by housing, street and open space designs.</p> <p>Encourage utilization of the principles of crime deterrent design and defensible neighborhood for all residential developments.</p> <p>Residential standards will be those of the City of San Diego unless they differ from PRD ordinances and then the PRD regulations will be conformed with.</p>	<p>recreational opportunities for pedestrians and bicyclists. The project would use drought-tolerant, naturalized landscaping and the long-term maintenance and preservation of open space resources on the project site including the trail system may be the responsibility of the Carmel Mountain Ranch Maintenance Assessment District and/or the new Master Homeowners' Association.</p>	
Parks and Open Space Element Objective and Guidelines	<p>To incorporate parks, a golf course, recreation and open space linked by pedestrian, hiking and/or bike paths to meet the needs and desires of users.</p> <p>Considerations that make the objective possible are:</p> <ul style="list-style-type: none"> • Development of neighborhood and community parks that adequately meet the needs of residents by location and amenities. • Public neighborhood park requirements in some cases will be augmented by private open space and recreation areas; the establishment, maintenance and care of 	<p>The project would retain the majority of the 164.5-acre project site as open space. Specifically, open space uses would be composed of approximately 111.27 acres, which includes approximately 6 miles of publicly accessible trails and 9.79 acres of publicly accessible parkland. The recreation amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the</p>	<p>The project would be consistent with this objective and guidelines.</p>

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
	<p>which will be specified in homeowners' covenants, conditions and restrictions (CC&Rs).</p> <ul style="list-style-type: none"> • Encouragement of park designs which allow maximum visibility of facilities from external roadways and easy internal accessibility by emergency vehicles. • Encouragement of the joint use of facilities between schools, civic organizations, park groups and other appropriate users. • Retention of open space acreage for view easements, noise buffers, or preservation of natural, irreplaceable environments. • Linkage of open space and public parks into a continuous network of bike paths and pedestrian trails where it can be done in a manner sensitive to the topography and landforms traversed. • Blending of median and right-of-way landscaping with parking facilities, utility easements, trails and open space. • Use of drought and fire resistant vegetation in open space and on public property. • Incorporation of the golf course, as a visual and physical amenity, which will link the natural and physical features of the community into a coherent whole. 	<p>proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. The project would also include a minimum 50-foot buffer zone between existing homes and proposed new development, which may include open space and landscaped areas. The total amount of parkland provided within the project area would meet the City's park requirements and Section 5.13, Public Services and Facilities, determined that the project would result in less-than-significant impacts to parks and recreation facilities.</p> <p>The project would also use drought-tolerant, naturalized landscaping and a Brush Management Plan has been developed for the proposed project and is included as Appendix F to Appendix D. The project would be required to design, construct, and maintain structures, private drives, and facilities in compliance with applicable local, regional, state, and federal requirements related to fire safety, emergency access, and evacuation plans, as well as building materials, setbacks, water supply, hydrants,</p>	

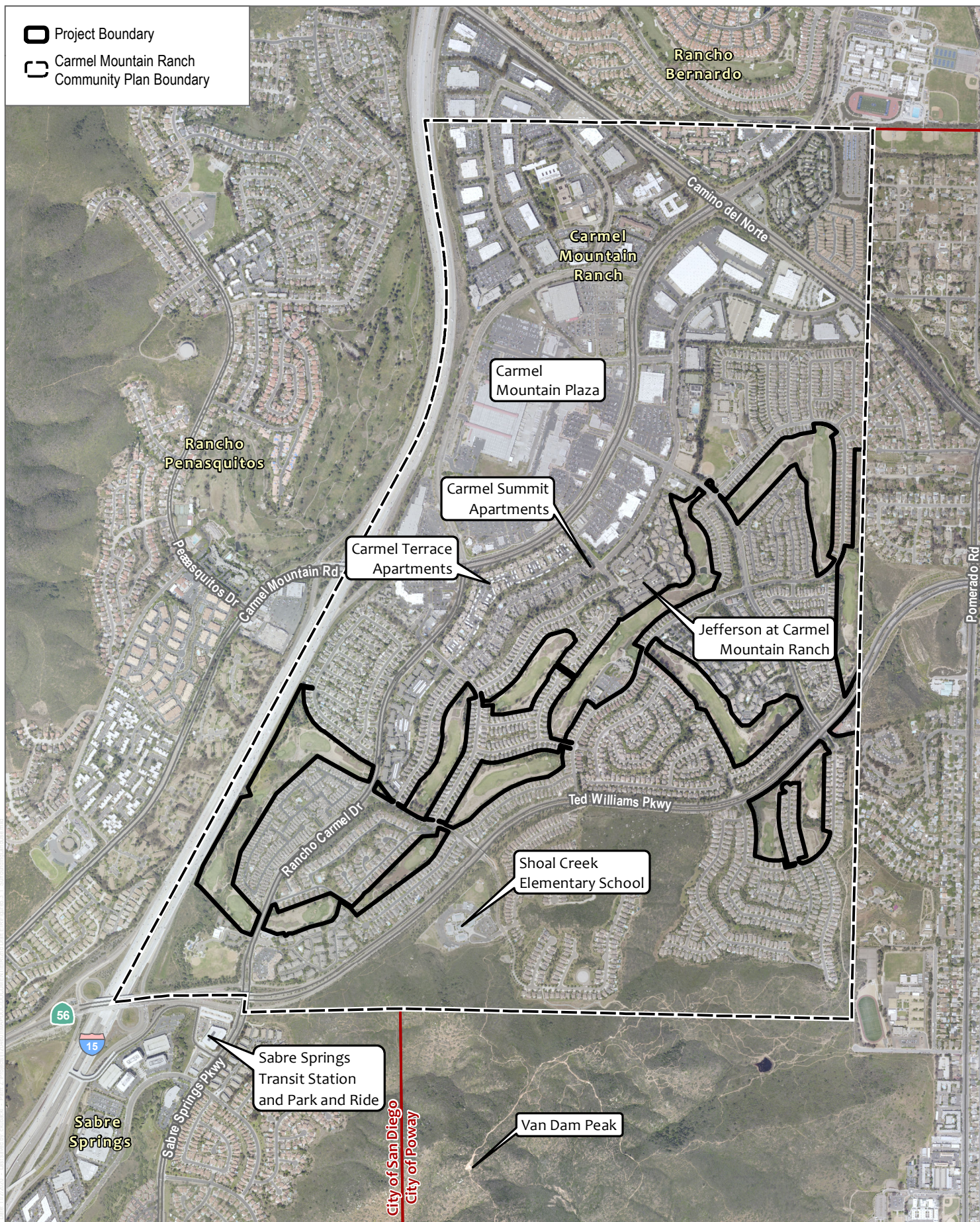
Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
		<p>fire-flow, and defensible space requirements for development in fire hazard areas.</p> <p>The project site encompasses the now closed golf course referenced in this objectives. While the golf course will no longer be maintained, the project is consistent with the other applicable goals, policies, and objectives of the Community Plan as discussed throughout this table.</p>	
Public Facilities and Services Element	<p>To allow for sensible accommodation of, and effective financing for, public facilities and services concurrent with community growth and to ensure that existing public facilities (police and fire protection, utilities, etc.) shall not be adversely impacted by the population increase resulting from development.</p> <p>Implementation will be through the following:</p> <p>Establishment of services appropriate to community needs in timeliness, accessibility, quantity and kind.</p> <p>Construction of a library and fire station within the community to serve a regional need.</p> <p>Encouragement of police department involvement in the planning and development process to maximize the opportunity for persons to live and work in a crime-free community</p>	<p>As discussed in Section 5.13, Public Services and Facilities, implementation of the project would increase the demand for public services and facilities including police and fire protection services, parks and recreation facilities, schools, and libraries. However, the project would pay development impact fees to the San Diego Fire and Rescue Department and Police Departments and would be adequately served by existing fire and police protection services and there would be no need to expand or build new police or fire facilities as a result of the project. Additionally, the project would increase student enrollment at nearby schools. However, development impact fees would also be paid to the San Diego Unified School District and there would be no need to expand or build new school facilities as a result of the project. With regard to parks and recreation facilities, the project would increase demand for recreational areas</p>	The project would be consistent with this objective and guidelines.

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
		<p>or uses in the community. However, the project's provision of 9.79 acres of public use neighborhood parks, and the inclusion of open space areas with publicly accessible multi-use trails, no park and recreation facility expansion beyond what is proposed as part of the proposed project would be required. Finally, the proposed project could potentially result in increased utilization of existing library facilities. However, the project will pay an impact fee to support expanded library services. Furthermore, dispersal of residents to library branches throughout the City is typical and nearby library branches would be used by both existing and new residents associated with the project. Impacts to public services and facilities were all deemed less-than-significant during preparation of this EIR.</p>	
<p>Transportation Element Objective and Guidelines</p>	<p>To incorporate adequate means for multi-modal circulation within the community integrated with city and regional circulation and transportation planning.</p> <p>Attainment of this objective can be achieved by recognition of existing and projected circulation patterns and identification of Carmel Mountain Ranch needs. The specifics are:</p> <p>Provide employment opportunities in Carmel Mountain Ranch to reduce commuter traffic.</p>	<p>The project would include residential land uses that would be developed as infill residential neighborhoods with proximate access to exiting employment sites, commercial areas, transit systems, and parks and recreation areas in the Carmel Mountain Ranch community. The project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The project's internal street network would consist of all private drives designed as Complete Streets that accommodate</p>	<p>The project would be consistent with this objective and guidelines.</p>

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
	<p>Coordinate completion of proposed interchange expansions with Caltrans for relief of future Interstate (I) 15 access congestion.</p> <p>Provide circulation routes consistent with long-range City circulation plans.</p> <p>Provide full right-of-way widths on the land use plan in accordance with projected buildout traffic volumes.</p> <p>Interchange design will give priority treatment to buses and high-occupancy vehicles.</p> <p>Design transportation facilities sensitive to topographic and aesthetic characteristics.</p> <p>Support construction of Ted Williams Parkway and SA-680 with the necessary intersections and interchanges east of I-15.</p> <p>Design circulation patterns which separate externally generated traffic from residential areas and provide driveway access onto local residential streets and major streets where feasible.</p> <p>Offer pedestrian and bicycle systems which connect development elements, access open space areas and public transportation facilities to minimize conflict with vehicular traffic patterns.</p> <p>Support development of public transportation, carpools and bikeways within and without Carmel</p>	<p>automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles, and golf carts. All private drives would include a minimum five-foot sidewalk along at least one side of the street. Motor courts would also be provided as a shared driveway (private drive) for two or more homes and common access roads would provide access from private drives to parking areas. The project would provide parking in accordance with City requirements.</p> <p>Additionally, the project includes approximately 6 miles of publicly accessible trails. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Trails would connect to sidewalks along the proposed on-site private drives and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas.</p> <p>Finally, all lighting proposed would be constructed in compliance with the standards contained in the City's Outdoor Lighting Regulations (Municipal Code Section 142.0740), which requires that all outdoor</p>	

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
	<p>Mountain Ranch in adherence with citywide programs.</p> <p>Provide parking to meet ordinance requirements.</p> <p>Support designation of park-and-ride facilities within the community, adjacent to high capacity public transit routes.</p> <p>Cooperation with public and private groups for the implementation of a light rail transit system in the I-15 corridor with stationing at Carmel Mountain Road near the Regional Center.</p> <p>Provide adequate traffic control devices and street illumination to ensure safety.</p>	<p>lighting fixtures shall be installed in a manner that minimizes negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination.</p> <p>Security lighting would also be provided within the parking areas and structures. In addition, lighting would be provided throughout the project, especially along the pedestrian walkways. To minimize glare and contrast, safety lighting would be directed downward and would only be provided to the level necessary for the safety of pedestrians and vehicles.</p>	
Community Environment, Conservation and Design Element Objective and Guidelines	<p>To ensure a healthy, save environment that balances development with preservation of environmental elements and natural resources and assures high design standards for each development zone, which will be achieved through the following:</p> <p>Preservation of unique natural environments in accordance with relevant EIR mitigation measures.</p> <p>Employment of aesthetic and appropriately functional signs, fences, street lighting and street furniture which reinforce defensible spaces.</p>	<p>The project would retain the majority of the 164.5-acre project site as open space. Specifically, open space uses would be composed of approximately 111.27 acres, which includes approximately 6 miles of publicly accessible trails and 9.79 acres of publicly accessible parkland.</p> <p>The project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-tolerant, naturalized landscaping. The use of drought-tolerant, naturalized landscaping would reduce water usage for irrigation. The project design would also include on-site biofiltration</p>	The project would be consistent with this objective and guidelines.

Objective/Guideline	Goal/Recommendation	Analysis	Project Consistency
	<p>Incorporation of passive and active solar technology where appropriate to achieve energy efficient developments.</p> <p>Landscaping choices employing indigenous species and low water demand flora to reduce the irrigation demands of the community while minimizing water run-off and erosion.</p>	<p>and hydromodification features to reduce stormwater runoff.</p> <p>Street lighting and signage would be installed in accordance with City requirements. All new residential development within the project site would include rooftop photovoltaic solar panels, energy efficient lighting and appliances, cool roofs, energy efficient windows, and other design features to significantly conserve energy.</p>	



SOURCE: SanGIS 2017, 2020; Open Street Map 2019

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5.2 Transportation

This section describes the existing transportation conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential significant impacts and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the Vehicle Miles Traveled (VMT) Analysis (Appendix G) prepared by Fehr and Peers (August 28, 2020 and updated December 13, 2020), and the Local Mobility Analysis (Appendix C) also prepared by Fehr and Peers (December 2020).

5.2.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Existing Roadway Network

Existing major north/south roadways surrounding the project site include Rancho Carmel Drive, Highland Ranch Road, Camino Del Norte, Pomerado Road, and I-15. Major east/west roadways include Ted Williams Parkway, Carmel Mountain Road, and Carmel Ridge Road. A more robust description is provided in Chapter 2, Environmental Setting, Section 2.2.2, Surrounding Roadway Network.

Existing Pedestrian Conditions

The Community of Carmel Mountain Ranch has been fully developed, as it relates to the master planned development outlined in the Carmel Mountain Ranch Community Plan. With development of Carmel Mountain Ranch, a “Bikeway and Trails” plan was provided that outlined the nonvehicular needs of the community. Pedestrian circulation has been master planned to link residences with community facilities, services and open space and to link neighborhoods to one another. A hiking/equestrian trail was provided in the natural open space in the southern portion of the community to provide a connection between proposed trails in the City of Poway and Peñasquitos Canyon. The trail is approximately 15 feet wide and is unpaved.

Pedestrian circulation throughout the study area is mainly provided by contiguous sidewalks. The former golf cart path traverses the site. A pedestrian network inventory was conducted along study area street segments, and there are no identified missing sidewalks or pedestrian obstacles within ½ mile of the project except for 350-foot section on Tradition Street (which is located at a dead end of a residential neighborhood, where pedestrians from the project are not expected to be walking) within ½ mile of the project.

Existing Bicycle Conditions

Bicycle facilities consist of four types of facilities, which are outlined below:

- *Bike or Multi-Use Paths (Class I)* provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians (or exclusively bicycles) with vehicle and pedestrian cross-flow minimized. Generally, the recommended pavement width for a two-directional bike or multi-use path is twelve (12) feet with two feet shoulders.
- *Bike Lanes (Class II)* provide a restricted right-of-way and are designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are at least five (5) feet wide and should be buffered. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.
- *Bike Route or Signed Shared Roadways (Class III)* provide for a right-of-way designated by signs or shared lane pavement markings, or “sharrows,” for shared use with pedestrians or motor vehicles.
- *Separated Bikeways or Cycle Tracks (Class IV)* provide a restricted right-of-way with physical separation and are designated for the use of bicycles with a raised barrier such as curbs or bollards. Separated bikeways are five (5) feet wide with a three (3) foot minimum horizontal and vertical separation area. Adjacent vehicle parking is permitted, and vehicle/pedestrian cross-flow is restricted to selected locations (e.g., driveways) indicated by breaks in the barrier and buffer.

The Community of Carmel Mountain Ranch has been fully developed, as it relates to the master planned development outlined in the Carmel Mountain Ranch Community Plan. With development of Carmel Mountain Ranch, a “Bikeway and Trails” plan was provided that outlined the non-vehicular needs of the community. Bicycle circulation has been master planned to link residences with community facilities, services, open space, and adjacent neighborhoods. Class II bike lanes on select roadways (Carmel Mountain Road, Ted Williams Parkway, Rancho Carmel Drive), were planned for and provided.

Existing Transit Conditions

The San Diego Metropolitan Transit System (MTS) provides bus transit within the Project area. The closest MTS transit center is located 0.25 mile south of Unit 5 and 6, Sabre Springs/Penasquitos Transit Center. Routes include MTS route 235, 280, 290, and 944. Regional transit services including MTS Rapid and Express bus routes serve the Sabre Springs/Penasquitos Transit Station and local bus routes provide service to several bus stops along Carmel Mountain Road. Bus transit in the study area is categorized in following classifications:

- **MTS Bus** – is the main type of local bus service that is provided by MTS in San Diego area. MTS Bus provides service at different headways (between 10 minutes to an hour or more) depending on the demand and location. The Project area is currently served by MTS Bus routes 20 and 944:
 - **MTS Route 20:** Provides service between downtown San Diego and Rancho Bernardo with stops in the project vicinity at Carmel Mountain Road/Rancho Carmel Drive, Stoney Peak Road, and Highland Ranch Road. It operates with 30-minute headways on weekdays and hour headways on weekends.
 - **MTS Route 944:** Provides service between Sabre Springs/Penasquitos Transit Station to Hileary Place (Walmart Station in Poway). It operates with 30-minute headways on weekdays and hour headways on weekends.
- **MTS Express** – are high frequency bus services that have 15-minute headways during peak and non-peak hours. No Express Routes are provided in the area.

- **MTS Rapid** – are high frequency bus services that have 15-minute headways during peak and non-peak hours and provides riders with improved wait time and enhanced comfort and convenience. Route 235 is an MTS Rapid route:
 - **MTS Route 235** provides rapid service between Escondido and downtown San Diego with a stop at the Sabre Springs/Peñasquitos Transit Station. It operates with 15- minute headways on weekdays and 30-minute headways on weekends.
- **MTS Rapid Express/Premium** – operates along the I-15 corridor during weekdays. It provides frequent trips south in the morning (5:00-9:00 AM) and north in the evening (3:00-7:00 PM). Express routes have 15-minute headways during peak and non-peak hours and usually take up to 45 minutes to an hour to get from departure to the final destination. Route 290 is an MTS Rapid Express route:
 - **MTS Route 290** provides express service between Rancho Bernardo and downtown San Diego with a stop at the Sabre Springs/Peñasquitos Transit Station. It operates with 15- minute headways on weekdays and no weekend service.

5.2.2 Regulatory Framework

State

California Department of Transportation

The California Department of Transportation (Caltrans) is the public agency responsible for designing, building, operating, and maintaining California's State highway system, which consists of freeways, highways, expressways, toll roads. Caltrans is also responsible for permitting and regulating the use of State roadways.

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed SB 743 into law changing the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes include elimination of auto delay, Level of Service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. In December 2018, new CEQA Guidelines implementing SB 743 (Section 15064.3), along with the Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts for CEQA, were finalized and made effective. Guidelines Section 15064.3, and the associated OPR Technical Advisory, provide that use of automobile Vehicle Miles Traveled, or VMT, is the preferred CEQA transportation metric, and correspondingly eliminate auto delay/LOS as the metric for assessing significant impacts under CEQA statewide. Under Section 15064.3, statewide application of the new VMT metric is required beginning on July 1, 2020.

The City of San Diego prepared its own guidelines for VMT analysis in compliance with SB 743 – these guidelines are contained in the City's TSM. The City's TSM, which was approved by City Council on November 9, 2020, and is expected to be final (pending the second Council reading on December 8, 2020 and appeal period) in January 2021. The City's guidelines are consistent with the OPR Technical Advisory.

In addition, the City of San Diego has developed regulations for requiring land development projects to incorporate VMT reducing measures into projects or pay an in-lieu fee depending upon their location within the City. The regulations are contained in the Complete Communities: Mobility Choices Program and the intention is that compliance with the regulations can be used as mitigation. The City also prepared an EIR

disclosing that the Complete Communities: Mobility Choices Program would reduce citywide VMT, but since the timing and specific location of improvements is not known the Complete Communities: Mobility Choices Program would have a significant and unavoidable transportation VMT impact. The Complete Communities: Mobility Choices Program was also approved by City Council on November 9, 2020, and is expected to be final in January 2021.

Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA

The December 2018 technical advisory on evaluating transportation impacts in CEQA is one in a series of advisories provided by the Governor’s Office of Planning and Research (OPR) as a service to professional planners, land use officials, and CEQA practitioners. This advisory contains technical recommendations regarding the assessment of VMT-related impacts, thresholds of significance, and mitigation measures. OPR issues technical assistance on issues that broadly affect the practice of land use planning and the CEQA (Pub. Resources Code, § 21000 et seq.). (Gov. Code, § 65040, subds. (g), (l), (m).) The purpose of the technical advisory document is to provide advice and recommendations, which agencies and other entities may use at their discretion. The document does not alter lead agency discretion in preparing environmental documents subject to CEQA and the document should not be construed as legal advice.

Local

General Plan

The Mobility Element (City 2015c) of the City of San Diego General Plan defines policies regarding traffic flow and transportation facility design. The purpose of the Mobility Element is “to improve mobility through development of a balanced, multi-modal transportation network.” The main goals of the Mobility Element pertain to walkable communities, transit first, street and freeway systems, intelligent transportation systems, transportation demand management, bicycling, parking management, airports, passenger rail, goods movement/freight, and regional transportation coordination and financing. The Mobility Element contains policies that help make walking more viable for short trips, in addition to addressing various other transportation choices in a manner that strengthens the City of Villages land use visions and helps to achieve a sustainable environment.

Carmel Mountain Ranch Community Plan

The Community Plan sets forth goals, policies, and proposals to guide future development within Carmel Mountain Ranch. The Community Plan was designed to serve as a guide for the establishment of a balanced community where daily trips to work, shopping and services are internal, which would be achieved through the implementation of the following goals related to transportation, as identified in the Community Plan (City of San Diego 1999):

- Incorporation of adequate means for multi-modal circulation within the community integrated with City and regional transportation planning.
- Incorporation of parks, recreation and open space linked by pedestrian and bike paths to meet the needs and desires of users.

City of San Diego Bicycle Master Plan

The 2013 City of San Diego Bicycle Master Plan, which updates the City's 2002 plan, presents a bicycle network, projects, policies, and programs for improving bicycling through 2030 and beyond, consistent with the City's 2008 General Plan mobility, sustainability, health, economic, and social goals. The goals of the Bicycle Master Plan are to create: a city where bicycling is a viable travel choice, particularly for trips of less than five miles; a safe and comprehensive local and regional bikeway network; and environmental quality, public health, recreation and mobility benefits through increased bicycling. These goals are supported by twelve key policies to help bicycling become a more viable transportation mode for trips of less than five miles, to connect to transit, and for recreation.

The Bicycle Master Plan addresses existing bicycling conditions, the relationship of the Plan to other plans and policies, a bicycle needs analysis, bicycle facility recommendations, bicycle program recommendations, and implementation and funding issues.

City of San Diego Pedestrian Master Plan

The City of San Diego has developed a Pedestrian Master Plan (December 2006) to guide the planning and implementation of pedestrian improvement projects in the City. The Master Plan will help the City enhance neighborhood quality and mobility options by facilitating pedestrian improvement projects, and will identify and prioritize improvement projects based on technical analysis and community input, as well as improve the City's ability to receive grant funding for implementation of pedestrian projects.

The City currently is in Phase 4 of the process discussed in the Master Plan. During Phase 1, the City developed the Master Plan Citywide Framework Report, which provides a foundation for identifying and prioritizing projects in each community. Phases 2 and 3 inventoried seven communities in the city to understand pedestrian needs, identify problems, and create a prioritized list of pedestrian projects specific to each community. Phase 4 continues the inventory process and focuses on seven additional communities. For additional information, please see www.sandiego.gov/planning/programs/transportation/mobility/pedestrian.shtml.

5.2.3 Impacts Analysis

Issue 1: Would the project or plan/policy conflict with an adopted program, plan ordinance or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Threshold(s)

According to the City's Significance Determination Thresholds (City of San Diego 2016), a project is considered to have a significant impact if a project would result in the construction of a roadway that is inconsistent with the General Plan and/or a community plan, or if the proposed roadway would not properly align with other existing or planned roadways.

Impact Analysis

As described in Section 5.1, Land Use, the project has demonstrated consistency with the City's General Plan, and Community Plan related transportation goals and policies (see Table 5.1-3 and 5.1-4).

Further, the City of San Diego requires that improvements be considered at transportation facilities with poor operations with the addition of project traffic.

Pedestrian/Bicycle Analysis

The proposed project would improve the present circulation movements and provide additional public access to open spaces. A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. The majority of the trail system would include paved trails that would be repurposed from the previous golf cart path, and new paved trails would provide connections through new development areas. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Trails would range from five to eight feet in width and all trails would be open for public use.

Sidewalk facilities are provided along all roadways within a 0.25 mile walk of all the Units included as part of the project. There are no sidewalk gaps adjacent to the project site and there are no existing curb ramp deficiencies along the project frontage. The project features an interconnected trail system through the site that will connect to the existing sidewalk network, providing access between the project site and adjacent neighborhoods, the commercial amenities to the north, and the Sabre Springs/Penasquitos Transit Center. Project driveway intersections would be designed to meet accessibility standards, including curb ramps.

All planned bicycle facilities per the Community Plan and Bicycle Master Plan have been constructed and the project is not anticipated to generate enough bicycle demand to warrant additional upgrades to these facilities.

Furthermore, based on the review of the transit network, transit needs assessment, there are no transit facilities planned within the Community of Carmel Mountain Ranch. Based on existing transit services and infrastructure for the MTS bus stops located nearest to the project site, the ridership data indicates the bus stops in the project vicinity would not require more than the standard amenities such as transit sign/pole, ADA accessibility, route designation on sign, and red curbs at transit stop. No further transit network improvements are recommended.

The circulation system within Carmel Mountain Ranch, which makes up most of the study area, is built to its ultimate classification. There are no remaining local infrastructure projects as they relate to the transportation network. The City's LMA Guidelines require that the project contribute to improvements for roadway segments if improvements are identified in the community plan that have not been implemented or if there are planned new circulation element roadways that the project will add traffic to.

Significance of Impact

The project would not substantially alter the present circulation movements in the area. Additionally, the project would not conflict with adopted policies, plans or programs addressing the transportation system. Impacts would be considered **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 2: *Would the project or plan/policy result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual?*

Impact Threshold(s)

The methodology and significance criteria for determining VMT transportation impacts in the City of San Diego is contained in the City's TSM, which was approved by City Council on November 9, 2020, and is expected to be final (pending the second Council reading on December 8, 2020 and appeal period) in January 2021. The TSM outlines the following process for performing analysis:

1. Determine if VMT analysis is necessary by comparing project characteristics to the City's screening criteria.
2. If the project does not meet any of the screening criteria, perform VMT analysis to determine the project's VMT.
3. Compare the project VMT to the significance criteria to determine if there is VMT transportation impact.
4. If there is an impact, identify mitigation measures to reduce the project impact (through compliance with the City's Complete Communities: Mobility Choices Program, compliance with the Climate Action Plan consistency checklist measures, and/or other measures).

The City has established the following significance threshold for VMT transportation impacts for residential projects:

- For residential projects: TSM Table 3 indicates that the threshold is 15% below regional mean (also referred to as average) resident VMT/Capita. Per the TSM Table 3 starred notes, *"The regional mean and total regional VMT are determined using the SANDAG Regional Travel Demand Model. The specific model version and model year will be identified by the Development Services Department's (DSD) Transportation Development Section."* Per direction from DSD Transportation Development Section, the model version and model year that should be used is the SANDAG ABM 2 Series 14 base year (2016) model to determine the regional average resident VMT/Capita. Based on the SANDAG ABM 2 Series 14 base year 2016 model, the regional average VMT/Capita is 19.0. Therefore, the corresponding VMT transportation significance threshold is 16.2 VMT/Capita (15% below 19.0 or $19.0 \times (1 - 0.15) = 16.2$).

As mentioned above, the City of San Diego has prepared guidelines for performing VMT analysis per SB 743, and the proposed methodology is consistent with the OPR Technical Advisory.

Impact Analysis

The first step in performing transportation VMT impact analysis is to review the SANDAG VMT/Capita location-based screening map and to compare the project characteristics to the City's screening criteria to determine if VMT analysis is necessary. As shown in the SANDAG VMT/Capita location-based screening map (VMT Analysis Exhibit 1), the project is in an area where VMT/Capita is between 100 and 125 percent of the regional average. Therefore, the project is not located in a VMT efficient area. The following table, Table 5.2-1 compares the project characteristics to the City's screening criteria to determine if a VMT analysis is necessary.

Table 5.2-1 The Trails VMT Screening Analysis

Screening Criteria	Analysis	Is the Project Screened?
<i>VMT Efficient Location</i>	The Project is not located in a VMT efficient location (see VMT Analysis Exhibit 1).	No
<i>Small Project</i>	<p>The residential component of the project generates:</p> <ul style="list-style-type: none"> 7,928 total daily trips <ul style="list-style-type: none"> 7,208 trips from market rate units 720 trips from affordable units <p>7,928 daily trips are greater than 300 daily trips; therefore, the project is not considered a small project.</p>	No
<i>Affordable Housing</i>	<p>The project includes 120 affordable housing units. The units:</p> <ul style="list-style-type: none"> Have access to transit. The affordable units are located in Units 5 and 6 shown in VMT Analysis Exhibit 1 which, at its furthest point is within 2,000 feet (0.4 miles) of the Sabre Springs/Penasquitos Transit Station. Currently, the area median income (AMI) target for the affordable housing component of the project has not been finalized; therefore, the affordable housing may not meet the requirement that it will be affordable to persons with a household income equal to or less than 50% of the AMI and deed restricted for 55 years. Provide parking equal to the minimum requirement per City Municipal Code. 	No (unless the AMI target is defined as 50%)
<i>Redevelopment Project</i>	The Project is redeveloping the Carmel Mountain Ranch Golf Course and Country Club with 1,200 residential units. Given the nature of a golf course as compared to residential units, the residential units will generate more trips and more VMT than the golf course generated. In addition, this CEQA action does not result in closure of the golf course (it was already closed). Therefore, the project does not meet the screening criteria.	No
<i>Locally Serving Public Facility</i>	The 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library is intended as a community serving use (like a library or community center). The details of the facility ownership (public vs. private) is not known; however, in either case, the facility would be community use and a locally serving public facility.	Yes

Source: Fehr & Peers.

As shown in Table 5.2-1, the residential component of the project does not meet the City's VMT screening criteria. Therefore, VMT analysis is necessary for the residential component of the project to determine if the project results in VMT transportation impacts. The community art gallery/studio component of the project is screened from VMT analysis as it is considered a locally serving public facility.

The anticipated daily trip generation of the residential component of the project was determined per the City of San Diego's Trip Generation Manual. The project is anticipated to generate approximately 8,282 daily trips. The project also includes multi-modal features such as an interconnected trail system available to the public and portions of the project are within 0.4 miles walking distance and biking distance of the Sabre Springs/Penasquitos Transit Station. This multi-modal infrastructure and proximity to transit shows that travel demand management (TDM) measures and site design features that encourage walking, bicycling, and using transit are supported by the infrastructure within the project.

The census tracts containing the project site (170.56, 170.55, and 170.39) have a VMT per capita of 21.7, 21.4, and 23.2, respectively. These values are between 32-43% above the VMT significance threshold of 16.2. While modeling the project in the SANDAG model would provide the project specific estimate of VMT per Capita, it can be inferred from the land use characteristics of the surrounding census tracts and their VMT rates, that it is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions.

Significance of Impact

It is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions. Accordingly, the project would have a **significant impact (Impact TRA-1)** relative to VMT.

Mitigation Monitoring and Reporting

As shown, the residential component of the Project has a significant VMT transportation impact. The project will utilize participation in the Complete Communities, Mobility Choices program for mitigation for Impact TRA-1. The City of San Diego's Complete Communities, Mobility Choices Program requires VMT reducing amenities or payment of an in-lieu fee depending on a project's location. Compliance with the Mobility Choices Program can be used as mitigation for a significant VMT transportation impact. The City prepared an EIR for the Mobility Choices Program and disclosed that even with implementation of the regulations there would still be significant and unavoidable VMT impacts. Projects that utilize the Mobility Choice Program to provide mitigation for VMT transportation impacts are able to tier from the City's EIR, which was certified on November 9, 2020 by the City Council.

The Mobility Choices Program allows a project that has a significant impact to use compliance with the regulation as full, and compliance with the Program along with other available mitigations can be determined to be mitigation "to the extent feasible" for a significant and unavoidable transportation VMT impact. The requirements of the Mobility Choices Program are based on where a project is located in the City. The City is divided into four mobility zones. If a project is in mobility zones 1, 2, or 3 then the project is required to include VMT reducing amenities on or adjacent to the project site. If a project is located in mobility zone 4, the project is required to pay an in-lieu fee that would be used to construct VMT reducing infrastructure in mobility zones 1, 2, or 3. Based on the Mobility Choices Program map, a portion of the project is located in mobility zone 2, and a portion is in mobility zone 4.

MM-TRA-1: Since the regulations define mobility zone 2 as any premises located either partially or entirely in a Transit Priority Area, VMT reduction guidelines for mobility zone 2 were applied to the entire project. Therefore, the project will include VMT reduction measures totaling at least 5 points in accordance with *Land Development Manual, Appendix T* as mitigation.

The project includes several features that qualify for points per Appendix T. Table 5.2-2 describes the specific measures and demonstrates that the project meets the required 5 points. These VMT reducing measures will be identified on the detailed site plans for each Unit as they move forward after the tentative map process, and will be called out on the overall project site plan for the discretionary process.

Table 5.2-2. The Trails VMT Reduction Measures

VMT Reduction Measures	Location within the Project	Points for Measure
<i>Appendix T Measure 12. Providing on-site bicycle repair station.</i>	On-site bicycle repair stations will be located within Unit 9, Unit 10, and Unit 16.	4.5 (1.5 x 3 stations)
<i>Appendix T Measure 16. Providing short-term bicycle parking spaces that are available to the public, at least 10% beyond the minimum requirements.</i>	Each Unit will provide short-term bicycle parking 10% beyond the minimum requirements for public use. For the entire Project, approximately 600 short term bicycle parking spaces are required for residents; therefore, approximately 60 additional bicycle parking spaces will be dispersed throughout the Project Units for public use.	1.5
Total Points		6

Source: Fehr & Peers.

Level of Significance after Mitigation

Since the project is not able to guarantee specific VMT reductions associated with the VMT reduction measures and the transit subsidy measure due to the land use characteristics of the project vicinity and surrounding census tracts, the project will continue to have a **significant and unavoidable** VMT transportation impact.

Issue 3: *Would the project or Plan/Policy substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Impact Threshold(s)

According to the City's Significance Determination Thresholds (City of San Diego 2016), a project is considered to have a significant impact if a project would increase traffic hazards to motor vehicles,

bicyclists or pedestrians due to proposed non-standard design features (e.g., poor sight distance, proposed driveway onto an access-restricted roadway), the impact would be significant.

Impact Analysis

The project does not include any project elements that could potentially create a traffic hazard for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature. The proposed project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. The project's internal roadway network would consist entirely of private roadways. Roadways would be designed as complete streets that accommodate automobiles, bicycles, pedestrians, low-speed vehicles, neighborhood electric vehicles (NEVs), and golf carts. Internal roadways would consist of private drives with and without parking. All private drives would include a sidewalk along one side separated from the roadway by a five-foot-wide landscaped parkway. Motor courts would also be provided as a shared driveway (private drive) for two or more of the designated homes and common access roads would provide access from private drives to parking areas.

Access points would not create a hazard for vehicles or people entering or exiting the site. Additionally, the project would not result in a hazardous roadway design or unsafe roadway configuration; place incompatible uses on existing roadways; or create or place curves, slopes, or walls that impede adequate sight distance on a roadway. Moreover, because the project would be required to comply with City standards for any public street road improvements, the proposed project would not significantly increase hazards due to design features or incompatible uses.

Significance of Impact

Impacts associated with an increase in hazards would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 4: Would the project or plan/policy result in inadequate emergency access?

Impact Threshold(s)

Based on the City's Significance Determination Thresholds (2016a), a project would result in a significant impact if it would result in inadequate emergency access.

Impact Analysis

Individual units will take vehicular access via driveways to the existing street system surrounding the golf course. Individual access for each unit is described in detail below:

Unit 1 (66 Townhomes): A full access unsignalized driveway is proposed on Windcrest Lane. General distribution of project trips from Unit 1 sends 47% to the north toward Rancho Carmel Drive and 53% south on Windcrest Lane to Ted Williams Parkway. The Unit 1 driveway will be designed to meet City sight distance and design standards.

Unit 2 (87 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive. General distribution of project trips from Unit 2 sends 59% north on Shoal Creek Drive to Rancho Carmel Drive and 41% south toward Ted Williams Parkway. The Unit 2 driveway will be designed to meet City sight distance and design standards.

Unit 5 (78 Affordable Apartments): A right-turn in/out only access is proposed on Carmel Mountain Road north of the Carmel Mountain Road/Provencal Place intersection. General distribution of project trips from Unit 5 sends 42% north on Rancho Carmel Drive and 58% south. The Unit 5 driveway will be designed to meet City sight distance and design standards.

Unit 6 (128 Mixed Market Rate & Affordable Apartments): A right-turn in/out only access is proposed on Rancho Carmel Drive, north of the Provencal Place intersection given Rancho Carmel Drive is a Four-Lane Major Road and the project driveway is located less than 600 feet from the signalized intersection of Rancho Carmel Drive/ Provencal Place. General distribution of project trips from Unit 6 sends 100% of project trips north on Rancho Carmel Drive where 58% will make a northbound to southbound U-turn at the unsignalized intersection with the Cambridge residential community, where adequate street width is provided to complete this maneuver. The Unit 6 driveway will be designed to meet City sight distance and design standards.

Unit 8 (98 Townhomes): A full access unsignalized driveway is proposed on Shoal Creek Drive. General distribution of project trips from Unit 2 sends 59% north on Shoal Creek Drive to Rancho Carmel Drive and 41% south toward Ted Williams Parkway. The Unit 8 driveway will be designed to meet City sight distance and design standards.

Unit 9 (300 Market Rate Apartments): A full access unsignalized driveway is proposed on Carmel Ridge Road serving Unit 9. General distribution of project trips from Unit 9 sends 57% south on Carmel Ridge Road and 43% to the north toward Highland Ranch Road. The Unit 9 driveway will be designed to meet City sight distance and design standards.

Units 10 (200 Townhomes): A full access unsignalized driveway is proposed on Carmel Ridge Road serving Unit 10. General distribution of project trips from Unit 10 sends 57% south on Carmel Ridge Road and 43% to the north toward Highland Ranch Road. The Unit 10 driveway will be designed to meet City sight distance and design standards.

Unit 16 (123 Market Rate Apartments): A right-turn in/out only access is proposed on Highland Ranch Road given Highlands Ranch Road is a Four-Lane Major Roadway and the project driveway is proposed less than 600 feet of distance from the Highland Ranch Road/Eastbourne Road signalized intersection. General distribution of project trips sends 100% to the north on Highland Ranch Road for approximately 190 feet where 40% would complete a northbound to southbound U-turn at the Highland Ranch Road/Eastbourne Road signalized intersection ultimately destined to Ted Williams Parkway. The Unit 16 driveway will be designed to meet City sight distance and design standards.

Unit 17 (120 Market Rate Apartments): A full access unsignalized driveway is proposed on Eastbourne Road at its existing southerly cul-de-sac. 100% of project trips will use the Highland Ranch Road/Eastbourne Road signalized intersection with 55% destined to the north and 45% destined to the south on Highland Ranch Road.

The proposed project would not result in inadequate emergency access. As stated in Section 5.19, Wildfire, all private access roads would be constructed in accordance with San Diego Municipal Code Sections 55.8701 and 55.8703, which outline the requirements for fire apparatus access roads and gates to ensure adequate emergency access within the project site. All roadways have been designed or planned based on City of San Diego standards. Consistency with City standards indicates that adequate emergency access is available on these facilities. In addition, the site will include six access points (available to all, not limited to emergency access) to adjacent public streets to facilitate emergency response and evacuation as needed. Additionally, the project is subject to review by the San Diego Fire-Rescue and the SDPD to ensure compliance with applicable safety standards.

Significance of Impact

Impacts associated with an increase in hazards would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

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5.3 Air Quality and Odor

This section describes the existing air quality conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the air quality technical report, prepared by Dudek (September 2020) and included as Appendix H.

5.3.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land. Since the project site is not currently in use, no pollutants are currently being emitted. No cars are traveling to or from the site and the site is not being maintained.

Regional Setting

The project site is located within the San Diego Air Basin (SDAB) and is subject to the San Diego Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is one of 15 air basins that geographically divide the State of California. The weather of the San Diego region, as in most of Southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges (in °F) from the mid-40s to the high 90s. Most of the region's precipitation falls from November to April with infrequent (approximately 10%) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches; the amount increases with elevation as moist air is lifted over the mountains to the east.

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east. Along with local meteorology, the topography influences the dispersal and movement of pollutants in the SDAB. The mountains to the east prohibit dispersal of pollutants in that direction and help trap them in inversion layers as described in the next section.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and influences the direction of prevailing winds (westerly to northwesterly). Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

Meteorological and Topographical Conditions

The SDAB lies in the southwest corner of California, makes up the entire San Diego region (covering approximately 4,260 square miles), and is an area of high air pollution potential. The SDAB experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The climate also drives the pollutant levels. The climate of San Diego is classified as Mediterranean, but it is incredibly diverse due to the topography. The climate is dominated by the Pacific High-pressure system that results in warm, dry summers and mild, wet winters. The Pacific High drives the prevailing winds in the SDAB. The winds tend to blow onshore during the daytime and offshore at night. In the fall months, the SDAB is often impacted by Santa Ana winds. These winds are the result of a high-pressure system over the Nevada–Utah region that overcomes the westerly wind pattern and forces hot, dry winds from the east to the Pacific Ocean (SDAPCD 2015a). The winds blow the air basin's pollutants out to sea. However, a weak Santa Ana can transport air pollution from the South Coast Air Basin and greatly increase San Diego ozone (O₃) concentrations. A strong Santa Ana also primes the vegetation for firestorm conditions.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses can also trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O₃, commonly known as smog.

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to emissions of carbon monoxide (CO) and oxides of nitrogen (NO_x). CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO₂) levels are also generally higher during fall and winter days when O₃ concentrations are lower.

The local climate in the central part of the County of San Diego (County) is characterized as semi-arid with consistently mild, warmer temperatures throughout the year. The average summertime high temperature in the region is approximately 86°F. The average wintertime low temperature is approximately 39°F. Average precipitation in the local area is approximately 13.2 inches per year, with the bulk of precipitation falling between November and March (WRCC 2017).

Criteria Pollutants

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. In general, air pollutants include the following compounds:

- Ozone (O₃)
- Reactive organic gases (ROGs) or volatile organic compounds (VOCs)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO₂)
- Particulate Matter (PM₁₀) and fine particulate matter (PM_{2.5})
- Sulfur dioxide (SO₂)
- Lead (Pb)
- Toxic Air Contaminants

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and, overall, is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors. 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, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). The SDAPCD identifies sensitive receptors as those who are especially susceptible to adverse health effects from exposure to TACs, such as children, the elderly, and the ill. Sensitive receptors include schools (grades Kindergarten through 12), day care centers, nursing homes, retirement homes, health clinics, and hospitals within two kilometers of the facility (SDAPCD 2019). The closest sensitive receptors to the proposed project are residences adjacent to the property boundary.

San Diego Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act (CAA) amendments, the U.S. Environmental Protection Agency (EPA) classifies air basins (or portions thereof) as in "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS. Table 5.3-1 depicts the current attainment status of the SDAB with respect to the NAAQS and CAAQS.

Table 5.3-1. San Diego Air Basin Attainment Classification

Pollutant	Designation/Classification	
	<i>Federal Standards</i>	<i>State Standards</i>
Ozone (O ₃) – 1 hour	Attainment	Nonattainment
O ₃ – (8 hour)	Nonattainment (moderate)	Nonattainment

Table 5.3-1. San Diego Air Basin Attainment Classification

Pollutant	Designation/Classification	
	<i>Federal Standards</i>	<i>State Standards</i>
Nitrogen Dioxide (NO ₂)	Unclassifiable/attainment	Attainment
Carbon Monoxide (CO)	Attainment (maintenance)	Attainment
Sulfur Dioxide (SO ₂)	Unclassifiable/attainment	Attainment
Coarse Particulate Matter (PM ₁₀)	Unclassifiable/attainment	Nonattainment
Fine Particulate Matter (PM _{2.5})	Unclassifiable/attainment	Nonattainment
Lead	Unclassifiable/attainment	Attainment
Hydrogen Sulfide	No federal standard	Attainment
Sulfates	No federal standard	Unclassified
Visibility-Reducing Particles	No federal standard	Unclassified
Vinyl Chloride	No federal standard	No designation

Sources: EPA 2016a (federal); CARB 2016a (state).

Notes: Attainment = meets the standards; Attainment/maintenance = achieve the standards after a nonattainment designation; Nonattainment = does not meet the standards; Unclassified or Unclassifiable = insufficient data to classify; Unclassifiable/attainment = meets the standard or is expected to be meet the standard despite a lack of monitoring data. If nonattainment for federal standards, a clarifying classification will be provided indicating the severity of the nonattainment status.

In summary, the SDAB is designated as an attainment area for the 1997 8-hour O₃ NAAQS and as a nonattainment area for the 2008 8-hour O₃ NAAQS. The SDAB is designated as a nonattainment area for O₃, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}) CAAQS. The portion of the SDAB where the proposed project would be located is designated as attainment or unclassifiable/unclassified for all other criteria pollutants under the NAAQS and CAAQS.

Local Ambient Air Quality

The California Air Resources Board (CARB), air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. Local ambient air quality is monitored by SDAPCD. SDAPCD operates a network of ambient air monitoring stations throughout the County that measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest SDAPCD-operated monitoring station to the proposed project is the Kearny Villa Road monitoring station, which is located approximately 10 miles south of the project site. This Kearny Villa Road monitoring station was used to show the background ambient air quality for O₃, PM₁₀, PM_{2.5}, and NO₂ for the project site. The monitoring station located on First Street was the closest to the proposed project that monitored CO and sulfur dioxide (SO₂) (15 miles south of the project site). Table 5.3-2 presents the most recent background ambient air quality data and number of days exceeding the ambient air quality standards from 2016 to 2018.

Table 5.3-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2016	2017	2018	2016	2017	2018
Ozone (O3) – Kearny Villa Road									
Maximum 1-hour Concentration	ppm	State	0.09	0.087	0.097	0.102	0	2	1
Maximum 8-hour Concentration	ppm	State	0.070	0.075	0.084	0.077	3	6	5
		Federal	0.070	0.075	0.083	0.077	3	6	5
Nitrogen Dioxide (NO2) – Kearny Villa Road									
Maximum 1-hour Concentration	ppm	State	0.18	0.053	0.054	0.045	0	0	0
		Federal	0.100	0.053	0.054	0.045	0	0	0
Annual Concentration	ppm	State	0.030	0.009	0.009	0.008	0	0	0
		Federal	0.053	0.009	0.009	0.008	0	0	0
Carbon Monoxide (CO) – First Street									
Maximum 1-hour Concentration	ppm	State	20	1.6	1.5	1.4	0	0	0
		Federal	35	1.6	1.5	1.4	0	0	0
Maximum 8-hour Concentration	ppm	State	9.0	1.3	1.4	1.1	0	0	0
		Federal	9	1.3	1.4	1.1	0	0	0
Sulfur Dioxide (SO2) – First Street									
Maximum 1-hour Concentration	ppm	Federal	0.075	0.001	0.001	0.004	0	0	0
Maximum 24- hour Concentration	ppm	State	0.04	0.000	0.000	0.000	0	0	0
	ppm	Federal	0.140	0.000	0.000	0.000	0	0	0
Annual Concentration	ppm	Federal	0.030	0.000	0.000	0.000	0	0	0
Coarse Particulate Matter (PM10)a – Kearny Villa Road									
Maximum 24- hour Concentration	µg/m³	State	50	35.0	47.0	38.0	0	0	0
		Federal	150	36.0	46.0	38.0	0	0	0
Annual Concentration	µg/m³	State	20	—	17.6	18.4	0	0	0
Fine Particulate Matter (PM2.5)a – Kearny Villa Road									
Maximum 24- hour Concentration	µg/m³	Federal	35	19.4	27.5	32.2	0	0	0

Table 5.3-2. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2016	2017	2018	2016	2017	2018
Annual Concentration	µg/m ³	State	12	7.8	8.0	8.3	0	0	0
		Federal	12.0	7.5	7.9	8.3	0	0	0

Sources: CARB 2019; EPA 2019.

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter; — = not available.

Data taken from CARB iADAM (<http://www.arb.ca.gov/adam>) and Environmental Protection Agency AirData (<http://www.epa.gov/airdata/>) represent the highest concentrations experienced over a given year.

Daily exceedances for particulate matter are estimated days because PM₁₀ and PM_{2.5} are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour O₃, annual PM₁₀, or 24-hour SO₂, nor is there a state 24-hour standard for PM_{2.5}.

^a Measurements of PM₁₀ and PM_{2.5} are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored.

5.3.2 Regulatory Framework

Federal

Federal Clean Air Act/National Ambient Air Quality Standards

The CAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including setting the NAAQS for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O₃ protection, and enforcement provisions.

Under the CAA, NAAQS are established for the following criteria pollutants: O₃, CO, NO₂, SO₂, PM₁₀, 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 CAA requires the EPA to reassess the NAAQS 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 (SIPs) that demonstrate how those areas will attain the standards within mandated time frames.

National Emission Standards for Hazardous Air Pollutants

The 1977 federal CAA amendments required the EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic compounds (VOCs), pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

State

California Clean Air Act/California Ambient Air Quality Standards

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS 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. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the CAA and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered in attainment if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, 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 NAAQS and CAAQS are presented in Table 5.3-3.

Table 5.3-3. 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/m ³)	—	Same as Primary Standard ^f
	8 hours	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³) ^f	
NO ₂ ^g	1 hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m ³)
	24 hours	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^g	—
	Annual	—	0.030 ppm (for certain areas) ^g	—
PM ₁₀ ⁱ	24 hours	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	
PM _{2.5} ⁱ	24 hours	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³

Table 5.3-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
		Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
Lead ^{d,k}	30-day Average	1.5 µg/m ³	—	—
	Calendar Quarter	—	1.5 µg/m ³ (for certain areas) ^k	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ⁱ	24 hours	0.01 ppm (26 µg/m ³)	—	—
Sulfates	24 hours	25 µg/m ³	—	—
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 the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016b; EPA 2016b.

Notes: O₃ = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO₂ = nitrogen dioxide; CO = carbon monoxide; mg/m³ = milligrams per cubic meter; SO₂ = sulfur dioxide; PM₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California Ambient Air Quality Standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

^b National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, 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 on 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 national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

^g To attain the national 1-hour standard, the three-year average of the annual 98th percentile of the one-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 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 SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the three-year average of the annual 99th percentile of the one-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment 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 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 PM₁₀ standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over three years.
- ^j California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ^k The national standard for lead was revised on October 15, 2008, to a rolling three-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.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined by California law (Section 39655 of the California Health and Safety Code) as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. Federal laws use the hazardous air pollutants to refer to the same types of compounds that are referred to as TACs under state law. California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588).

AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Pursuant to AB 2588, existing facilities that emit air pollutants above specified levels were required to (1) prepare a TAC emission inventory plan and report; (2) prepare a risk assessment if TAC emissions were significant; (3) notify the public of significant risk levels; and (4) if health impacts were above specified levels, prepare and implement risk reduction measures.

The following regulatory measures pertain to the reduction of diesel particulate matter (DPM) and criteria pollutant emissions from off-road equipment and diesel-fueled vehicles.

Idling of Commercial Heavy Duty Trucks (13 CCR 2485)

In July 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to control emissions from idling trucks. The ATCM prohibits idling for more than 5 minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.)

In July 2007, CARB adopted an ATCM for in-use off-road diesel vehicles. This regulation requires that specific fleet average requirements are met for NO_x emissions and for particulate matter emissions. Where average requirements cannot be met, best available control technology requirements apply. The regulation also includes several recordkeeping and reporting requirements.

In response to AB 8 2X, the regulations were revised in July 2009 (effective December 3, 2009) to allow a partial postponement of the compliance schedule in 2011 and 2012 for existing fleets. On December 17, 2010, CARB adopted additional revisions to further delay the deadlines reflecting reductions in diesel emissions due to the poor economy and overestimates of diesel emissions in California. The revisions delayed the first compliance date until no earlier than January 1, 2014, for large fleets, with final compliance by January 1, 2023. The compliance dates for medium fleets were delayed until an initial date of January 1, 2017, and final compliance date of January 1, 2023. The compliance dates for small fleets were delayed until an initial date of January 1, 2019, and final compliance date of January 1, 2028. Correspondingly, the fleet average targets were made more stringent in future compliance years. The revisions also accelerated the phaseout of older equipment with newer equipment added to existing large and medium fleets over time, requiring the addition of Tier 2 or higher engines starting on March 1, 2011, with some exceptions: Tier 2 or higher engines on January 1, 2013, without exception; and Tier 3 or higher engines on January 1, 2018 (January 1, 2023, for small fleets).

On October 28, 2011 (effective December 14, 2011), the executive officer of CARB approved amendments to the regulation. The amendments included revisions to the applicability section and additions and revisions to the definition. The initial date for requiring the addition of Tier 2 or higher engines for large and medium fleets, with some exceptions, was revised to January 1, 2012. New provisions also allow for the removal of emission control devices for safety or visibility purposes. The regulation also was amended to combine the particulate matter and NO_x fleet average targets under one, instead of two, sections. The amended fleet average targets are based on the fleet's NO_x average, and the previous section regarding particulate matter performance requirements was deleted completely. The best available control technology requirements, if a fleet cannot comply with the fleet average requirements, were restructured and clarified. Other amendments to the regulations included minor administrative changes to the regulatory text.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025)

On December 12, 2008, CARB adopted an ATCM to reduce NO_x and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. The original ATCM regulation required fleets of on-road trucks to limit their NO_x and particulate matter emissions through a combination of exhaust retrofit equipment and new vehicles. The regulation limited particulate matter emissions for most fleets by 2011, and limited NO_x emissions for most fleets by 2013. The regulation did not require any vehicle to be replaced before 2012 and never required all vehicles in a fleet be replaced.

In December 2009, the CARB Governing Board directed staff to evaluate amendments that would provide additional flexibility for fleets adversely affected by the struggling California economy. On December 17, 2010, CARB revised this ATCM to delay its implementation along with limited relaxation of its requirements. Starting on January 1, 2015, lighter trucks with a gross vehicle weight rating of 14,001 to 26,000 pounds with 20-year-old or older engines need to be replaced with newer trucks (2010 model year emissions equivalent as defined in the regulation). Trucks with a gross vehicle weight rating greater than 26,000 pounds with 1995

model year or older engines needed to be replaced as of January 1, 2015. Trucks with 1996 to 2006 model year engines must install a Level 3 (85% control) diesel particulate filter starting on January 1, 2012, to January 1, 2014, depending on the model year, and then must be replaced after 8 years. Trucks with 2007 to 2009 model year engines have no requirements until 2023, at which time they must be replaced with 2010 model year emissions-equivalent engines, as defined in the regulation. Trucks with 2010 model year engines would meet the final compliance requirements. The ATCM provides a phase-in option under which a fleet operator would equip a percentage of trucks in the fleet with diesel particulate filters, starting at 30% as of January 1, 2012, with 100% by January 1, 2016. Under each option, delayed compliance is granted to fleet operators who have or will comply with requirements before the required deadlines.

On September 19, 2011 (effective December 14, 2011), the executive officer of CARB approved amendments to the regulations, including revisions to the compliance schedule for vehicles with a gross vehicle weight rating of 26,000 pounds or less to clarify that *all* vehicles must be equipped with 2010 model year emissions equivalent engines by 2023. The amendments included revised and additional credits for fleets that downsize; implement early particulate matter retrofits; incorporate hybrid vehicles, alternative-fueled vehicles, and vehicles with heavy-duty pilot ignition engines; and implement early addition of newer vehicles. The amendments included provisions for additional flexibility, such as for low-usage construction trucks, and revisions to previous exemptions, delays, and extensions. Other amendments to the regulations included minor administrative changes to the regulatory text, such as recordkeeping and reporting requirements related to other revisions.

California Health and Safety Code Section 41700

Section 41700 of the California Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local

San Diego Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources. The project site is located within the SDAB and is subject to the guidelines and regulations of the SDAPCD.

In the County, O₃ and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants have been observed in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM₁₀, PM_{2.5}, and O₃ standards. The SDAB is also a federal O₃ attainment (maintenance) area for 1997 8-hour O₃ standard, an O₃ nonattainment area for the 2008 8-hour O₃ standard, and a CO maintenance area (western and central part of the SDAB only, including the project site).

Federal Attainment Plans

In December 2016, the SDAPCD adopted an update to the Eight-Hour Ozone Attainment Plan for San Diego County (2008 O₃ NAAQS), which indicated that local controls and state programs would allow the region to

reach attainment of the federal 8-hour O₃ standard (1997 O₃ NAAQS) by 2018 (SDAPCD 2016a). In this plan, SDAPCD relies on the Regional Air Quality Strategy (RAQS) to demonstrate how the region will comply with the federal O₃ standard. The RAQS details how the region will manage and reduce O₃ precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these pollutants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

Currently, the County is designated as moderate nonattainment for the 2008 NAAQS and maintenance for the 1997 NAAQS. As documented in the 2016 8-Hour Ozone Attainment Plan for San Diego County, the County has a likely chance of obtaining attainment due to the transition to low-emission cars, stricter new source review rules, and continuing the requirement of general conformity for military growth and the San Diego International Airport. The County will also continue emission control measures, including ongoing implementation of existing regulations in O₃ precursor reduction to stationary and area-wide sources, subsequent inspections of facilities and sources, and the adoption of laws requiring best available retrofit control technology for control of emissions (SDAPCD 2016a).

State Attainment Plans

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The RAQS for the SDAB was initially adopted in 1991 and is updated on a triennial basis, most recently in 2016 (SDAPCD 2016b). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County and the cities in the County, to forecast future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans (SANDAG 2017a, 2017b).

In December 2016, the SDAPCD adopted the revised RAQS for the County. Since 2007, the San Diego region has reduced daily VOC emissions and NO_x emissions by 3.9% and 7.0%, respectively; the SDAPCD expects to continue reductions through 2035 (SDAPCD 2016b). These reductions were achieved through implementation of six VOC control measures and three NO_x control measures adopted in the SDAPCD's 2009 RAQS (SDAPCD 2009a); in addition, the SDAPCD is considering additional measures, including three VOC measures and four control measures to reduce 0.3 daily tons of VOC and 1.2 daily tons of NO_x, provided they are found to be feasible region-wide. In addition, SDAPCD has implemented nine incentive-based programs, has worked with SANDAG to implement regional transportation control measures, and has reaffirmed the state emission offset repeal.

In regards to particulate matter emissions-reduction efforts, in December 2005, the SDAPCD prepared a report titled Measures to Reduce Particulate Matter in San Diego County to address implementation of Senate Bill 656 in the County (Senate Bill 656 required additional controls to reduce ambient concentrations of PM₁₀ and PM_{2.5}) (SDAPCD 2005). In the report, SDAPCD evaluated implementation of source-control measures that would reduce particulate matter emissions associated with residential wood combustion; various construction activities including earthmoving, demolition, and grading; bulk material storage and

handling; carry-out and track-out removal and cleanup methods; inactive disturbed land; disturbed open areas; unpaved parking lots/staging areas; unpaved roads; and windblown dust (SDAPCD 2005).

SDAPCD Rules and Regulations

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of SDAPCD and would apply to the proposed project.

SDAPCD Regulation II: Permits; Rule 20.2: New Source Review Non-Major Stationary Sources

This rule requires new or modified stationary source units (that are not major stationary sources) with the potential to emit 10 pounds per day or more of VOC, NO_x, SO_x, or PM₁₀ to be equipped with best available control technology. For those units with a potential to emit above Air Quality Impact Assessments Trigger Levels, the units must demonstrate that such emissions would not violate or interfere with the attainment of any national air quality standard (SDAPCD 2016b).

The proposed project does not propose specific stationary sources. If stationary sources were to be included as part of the proposed project, or at a later date, those sources would be subject to Rule 20.2 and would require appropriate operating permits from the SDAPCD. Because the SDAPCD has not adopted specific criteria air pollutant thresholds for CEQA analyses, the thresholds identified in Rule 20.2 are utilized in this analysis as screening-level thresholds to evaluate project-level impacts, as discussed in Section 2.4.1, Thresholds of Significance.

SDAPCD Regulation IV: Prohibitions; Rule 50: Visible Emissions

This rule prohibits discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any period of 60 consecutive minutes, which is darker in shade than that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree greater than does smoke of a shade designated as Number 1 on the Ringelmann Chart (SDAPCD 1997).

Construction of the proposed project may result in visible emissions, primarily during earth-disturbing activities, which would be subject to SDAPCD Rule 50. Although visible emissions are less likely to occur during operation of the proposed project, compliance with SDAPCD Rule 50 would be required during both construction and operational phases.

SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance

This rule prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).

Any criteria air pollutant emissions, TAC emissions, or odors that would be generated during construction or operation of the proposed project would be subject to SDAPCD Rule 51. Violations can be reported to the SDAPCD in the form of an air quality complaint by telephone, email, and online form. Complaints are investigated by the SDAPCD as soon as possible.

SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust

This rule regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project area (SDAPCD 2009b).

Construction of the proposed project, primarily during earth-disturbing activities, may result in fugitive dust emissions that would be subject to SDAPCD Rule 55. Fugitive dust emissions are not anticipated during operation of the proposed project.

SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: 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 (SDAPCD 2015b). Construction and operation of the proposed project would include application of architectural coatings (e.g., paint and other finishes), which are subject to SDAPCD Rule 67.0.1. Architectural coatings used in the reapplication of coatings during operation of the proposed project would be subject to the VOC content limits identified in SDAPCD Rule 67.0.1, which applies to coatings manufactured, sold, or distributed within the County.

SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1200: Toxic Air Contaminants - New Source Review

This rule requires new or modified stationary source units with the potential to emit TACs above rule threshold levels to either demonstrate that they will not increase the maximum incremental cancer risk above one in 1 million at every receptor location, demonstrate that toxics best available control technology will be employed if maximum incremental cancer risk is equal to or less than 10 in 1 million, or demonstrate compliance with the SDAPCD's protocol for those sources with an increase in maximum incremental cancer risk at any receptor location of greater than 10 in 1 million but less than 100 in 1 million (SDAPCD 2017a).

The proposed project does not currently include specific stationary sources that would generate TACs that are not commonly associated with residential development projects. If stationary sources with the potential to emit TACs were to be included as part of the proposed project—or if they were added at a later date—those sources would be subject to SDAPCD Rule 1200, and would be subject to new source review requirements.

SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1210: Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction

This rule requires each stationary source required to prepare a public risk assessment to provide written public notice of risks at or above the following levels: maximum incremental cancer risks equal to or greater than 10 in 1 million, cancer burden equal to or greater than 1.0, total acute non-cancer health hazard index equal to or greater than 1.0, or total chronic non-cancer health hazard index equal to or greater than 1.0 (SDAPCD 2017b).

The proposed project does not currently include specific stationary sources that would generate TACs. If stationary sources with the potential to emit TACs were to be included as part of the proposed project—or if

they were added at a later date—those sources would be subject to SDAPCD Rule 1210 and would be subject to public notification and risk reduction requirements.

San Diego Association of Governments

SANDAG is the regional planning agency for the County and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SANDAG serves as the federally designated metropolitan planning organization for the County. With respect to air quality planning and other regional issues, SANDAG has prepared San Diego Forward: The Regional Plan (Regional Plan) for the San Diego region (SANDAG 2015). The Regional Plan combines the big-picture vision for how the region will grow over the next 35 years with an implementation program to help make that vision a reality. The Regional Plan, including its Sustainable Communities Strategy, is built on an integrated set of public policies, strategies, and investments to maintain, manage, and improve the transportation system so that it meets the diverse needs of the San Diego region through 2050.

In regards to air quality, the Regional Plan sets the policy context in which SANDAG participates in and responds to the air district's air quality plans and builds off the air district's air quality plan processes that are designed to meet health-based criteria pollutant standards in several ways (SANDAG 2015). First, it complements air quality plans by providing guidance and incentives for public agencies to consider best practices that support the technology-based control measures in air quality plans. Second, the Regional Plan emphasizes the need for better coordination of land use and transportation planning, which heavily influences the emissions inventory from the transportation sectors of the economy. This also minimizes land use conflicts, such as residential development near freeways, industrial areas, or other sources of air pollution.

On September 23, 2016, SANDAG's Board of Directors adopted the final 2016 Regional Transportation Improvement Program, which is a multibillion dollar, multiyear program of proposed major transportation projects in the San Diego region. Transportation projects funded with federal, state, and TransNet (the San Diego transportation sales tax program) must be included in an approved Regional Transportation Improvement Program. The programming of locally funded projects also may be programmed at the discretion of the agency. The 2016 Regional Transportation Improvement Program covers 5 fiscal years and incrementally implements the Regional Plan (SANDAG 2016).

City of San Diego Municipal Code

The San Diego Municipal Code addresses air quality and odor impacts at Chapter 14, Article 2, Division 7 paragraph 142.0710, Air Contaminant Regulations, which states that air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located (City of San Diego 2010).

5.3.3 Approach and Methodology

Construction

Emissions from the construction phase of the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 (CAPCOA 2017).

As described in Chapter 4, Project Description, the proposed project would develop 1,200 multi-family homes and a mix of open space and recreational uses. For the purposes of modeling, it was assumed that construction of the proposed project would commence in February 2022¹ and would last approximately 56 months, ending in September 2026. The analysis contained herein is based on the subset area schedule assumptions (duration of phases is approximate). The project was assumed to be constructed in four phases. Each phase is based on the grading plan such that soil removed within each phase will be placed within each phase. Each phase is comprised of subphases including grading, wet utilities, building construction, dry utilities, paving, and architectural coating. The assumptions can be found in Table 5.3-4.

The majority of the phases listed in Table 5.3-4 would occur concurrently and would not occur sequentially in isolation. The estimated construction duration was provided by the project applicant. Detailed construction equipment modeling assumptions are provided in Appendix A, CalEEMod Outputs, to Appendix H, Air Quality Technical Report, of this EIR.

The construction equipment mix used for estimating the construction emissions of the proposed project is based on information provided by the project applicant and is shown in Table 5.3-4.

Table 5.3-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Grading – Phase 1	36	4	8,532	Graders	2	8
				Rubber Tired Dozers	4	8
				Rubber Tired Loaders	2	8
				Scrapers	8	8
Grading – Phase 2	18	2	4,900	Graders	1	8
				Rubber Tired Dozers	2	8
				Rubber Tired Loaders	1	8
				Scrapers	4	8

¹ The analysis assumes a construction start date of February 2022, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 5.3-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Wet Utilities – Phase 2	26	12	0	Excavators	2	8
				Rubber Tired Loaders	2	8
				Tractors/Loaders/Backhoes	2	8
Building Construction – Phase 1	452	68	0	Cranes	2	8
				Forklifts	6	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	6	8
				Welders	2	8
Building Construction – Phase 2	226	34	0	Cranes	1	8
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	8
				Welders	1	8
Wet Utilities – Phase 1	52	24	0	Excavators	4	8
				Rubber Tired Loaders	4	8
				Tractors/Loaders/Backhoes	4	8
Dry Utilities – Phase 2	14	6	0	Rubber Tired Loaders	2	8
				Tractors/Loaders/Backhoes	2	8
Dry Utilities – Phase 1	28	12	0	Rubber Tired Loaders	4	8
				Tractors/Loaders/Backhoes	4	8
Paving – Phase 2	16	2	0	Graders	1	8
				Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	8

Table 5.3-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	<i>Average Daily Worker Trips</i>	<i>Average Daily Vendor Truck Trips</i>	<i>Total Haul Truck Trips</i>	<i>Equipment Type</i>	<i>Quantity</i>	<i>Usage Hours</i>
Paving – Phase 1	32	4	0	Graders	2	8
				Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8
				Scrapers	2	8
				Tractors/Loaders/Backhoes	2	8
Demolition – Phase 1	12	4	584	Off-Highway Trucks	2	8
				Rubber Tired Dozers	2	8
				Rubber Tired Loaders	2	8
				Skid Steer Loaders	2	8
Grading – Phase 3	18	2	236	Graders	1	8
				Rubber Tired Dozers	2	8
				Rubber Tired Loaders	1	8
				Scrapers	4	8
Grading – Phase 4	36	4	484	Graders	2	8
				Rubber Tired Dozers	4	8
				Rubber Tired Loaders	2	8
				Scrapers	8	8
Wet Utilities – Phase 3	26	12	0	Excavators	2	8
				Rubber Tired Loaders	2	8
				Tractors/Loaders/Backhoes	2	8
Building Construction – Phase 3	226	34	0	Cranes	1	8
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	8
				Welders	1	8

Table 5.3-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Dry Utilities – Phase 3	14	6	0	Rubber Tired Loaders	2	8
				Tractors/Loaders/Backhoes	2	8
Wet Utilities – Phase 4	52	24	0	Excavators	4	8
				Rubber Tired Loaders	4	8
				Tractors/Loaders/Backhoes	4	8
Building Construction – Phase 4	452	68	0	Cranes	2	8
				Forklifts	6	8
				Generator Sets	2	8
				Tractors/Loaders/Backhoes	6	8
				Welders	2	8
Paving – Phase 3	16	2	0	Graders	1	8
				Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	8
Dry Utilities – Phase 4	28	12	0	Rubber Tired Loaders	4	8
				Tractors/Loaders/Backhoes	4	8
Paving – Phase 4	32	4	0	Graders	2	8
				Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8
				Scrapers	2	8
				Tractors/Loaders/Backhoes	2	8
Architectural Coating – Phase 2	46	2	0	Air Compressors	1	8
Architectural Coating – Phase 3	46	2	0	Air Compressors	1	8

Table 5.3-4. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	<i>Average Daily Worker Trips</i>	<i>Average Daily Vendor Truck Trips</i>	<i>Total Haul Truck Trips</i>	<i>Equipment Type</i>	<i>Quantity</i>	<i>Usage Hours</i>
Architectural Coating – Phase 4	92	4	0	Air Compressors	2	8
Architectural Coating – Phase 1	92	4	0	Air Compressors	2	8

Note: See Appendix H for details.

For the analysis, it was assumed that heavy construction equipment would be operating 5 days per week (22 days per month) during proposed project construction. Construction worker and vendor trips were based on CalEEMod default assumptions and rounded up to the nearest whole number to account for whole round trips.

Proposed project construction would include 957,607 cubic yards of cut and 995,763 cubic yards of fill as represented in the grading phase, which would require 38,156 cubic yards of import. It is anticipated that earth movement would be primarily, if not completely, accomplished using off-road equipment (e.g., scrapers and excavators). Off-road travel was assumed to be 1,000 feet per trip for vendor and haul trucks. The applicant has committed to a construction equipment fleet that meets an average EPA Tier 4 Interim emission standard or better.²

Construction of proposed project components would be subject to SDAPCD Rule 55, Fugitive Dust Control, which requires that proposed construction include steps to restrict visible emissions of fugitive dust beyond the property line (SDAPCD 2009b). Compliance with Rule 55 would limit fugitive dust (PM₁₀ and PM_{2.5}) that may be generated during proposed grading and construction activities.

A detailed depiction of the construction schedule—including information regarding phases and equipment used during each phase—is included in Appendix H of this report. The information contained in Appendix A to Appendix H was used as CalEEMod model inputs.

Health Risk Assessment

A Health Risk Assessment (HRA) was performed to assess the impact of construction on sensitive receptors proximate to the project site as well as future residential receptors onsite (provided as Appendix B to Appendix H). This report includes an HRA associated with emissions from construction of the proposed project based on the methodologies prescribed in the Office of Environmental Health Hazard Assessment (OEHHA) document, Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of

² For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment could be upgraded from a Tier 4 Interim to a higher tier (i.e., Tier 4 Final) or replaced with an alternative-fueled (not diesel-fueled) equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Interim standards.

Health Risk Assessments (OEHHA Guidelines) (OEHHA 2015). To implement the OEHHA Guidelines based on proposed project information, the SDAPCD has developed a three-tiered approach where each successive tier is progressively more refined, with fewer conservative assumptions. The SDAPCD document, Supplemental Guidelines for Submission of Air Toxics “Hot Spots” Program Health Risk Assessments (SDAPCD 2019), provides guidance with which to perform HRAs within the SDAB.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends a carcinogenic (cancer) risk threshold of 10 in one million. Additionally, some TACs increase non-cancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SDAPCD recommends a Chronic Hazard Index significance threshold of 1.0 (project increment). The exhaust from diesel engines is a complex mixture of gases, vapors, and particles, many of which are known human carcinogens. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment. The HRA for the proposed project evaluated the risk to existing residents from diesel emissions from exhaust from on-site construction equipment and diesel haul and vendor trucks.

The dispersion modeling of DPM was performed using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the model SDAPCD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain (EPA 2018). For the proposed project, AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the “X/Q” values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the 1-hour and period-averaging periods. Principal parameters of this modeling are presented in Appendix B to Appendix H, Table 6.

Dispersion model plotfiles from AERMOD were then imported into CARB’s Hotspots Analysis and Reporting Program Version 2 to determine health risk, which requires peak 1-hour emission rates and annual emission rates for all pollutants for each modeling source. The highest year of construction DPM emissions was assumed for the entire construction duration. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy for a duration of 4.7 years. For the onsite receptors, the Phase 1 receptors were modeled to have the highest exposure duration and would start in the third trimester of pregnancy for a duration of 3.75 years. Based on the HRA included in Appendix B of Appendix H, the maximally exposed individual resident offsite would be located at the north end of the project site on Boca Raton Lane. The results of the HRA are provided in Section 5.3.5, Impact Analysis, and detailed results and methodology are provided in Appendix B to Appendix H.

Operation

Emissions from the operational phase of the proposed project were estimated using CalEEMod. Operational year 2027 was assumed as it would be the first full year following completion of proposed construction.

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 for the buildings 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. Consumer products associated with the parking lot and other asphalt surfaces include degreasers, which were estimated based on the square footage of the parking lot and the default factor of pounds of VOC per 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 SDAPCD's Rule 67.0.1 (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 (SDAPCD 2015b). The proposed project would use architectural coatings that would not exceed 50 grams per liter for interior applications and 100 grams per liter for exterior applications consistent with SDAPCD Rule 67.0.1. 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).

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.

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 proposed project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of the residents of the proposed project. The

maximum weekday trip rates were taken from the Local Mobility Analysis for the project (Appendix C). The weekend trip rates were adjusted based on CalEEMod default trip rates. CalEEMod default data, including trip characteristics and emissions factors, were 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 CalEEMod. Emission factors representing the vehicle mix and emissions for 2027 were used to estimate emissions associated with vehicular sources.

Stationary Sources

The art studio/gallery would include the use of a wood-burning ceramic kiln. The kiln was assumed to be rated at 8 million British thermal units per hour (MMBtu/hr). The wood fired kiln would include the use of a filterless smoke zapper or the equivalent which reduces particulate matter emissions by 95 percent (Smoki USA 2019). Emissions were estimated using emission factors from the US EPA AP-42 Section 1.6 assuming the use of dry wood.

Roadway Health Risk Assessment

For informational purposes only, an HRA was performed to evaluate potential health risks of the proximate Interstate (I) 15 freeway to future sensitive receptors of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting operational HRA documentation, including detailed assumptions, is presented in Appendix B to Appendix H.

Operational year 2027 was evaluated consistent with the anticipated completion date of project construction. Emissions during the operation of the project include vehicles traveling on the I-15 freeway. For risk assessment purposes, PM₁₀ in diesel exhaust is considered DPM, originating from diesel vehicles traveling on the I-15 freeway.

Emissions of DPM from motor vehicles on the I-15 freeway have the highest potential for cancer risk due to the high volume of heavy-duty vehicle traffic and proximity to the project site. Traffic data was attained from California Department of Transportation Performance Measurement System January 2019–December 2019 traffic volumes on California state highways (Caltrans 2020). The annual vehicle miles traveled for the northbound and southbound portions of the I-15 freeway was calculated based on the segment length and traffic count volumes.

Data from the EPA-approved version of CARB's mobile source emission inventory, EMFAC2017, were used to determine the composition of diesel vehicles within the overall vehicle fleet for San Diego County: Light-Duty Automobiles (identified as LDA), Light-Duty Trucks (identified as LDT1 and LDT2), Light-Heavy Duty Trucks (identified as LHDT1 and LHDT2), Medium-Heavy Duty Trucks (identified as MDV, MH, MHDT, OBUS, and SBUS), and Heavy-Heavy Duty Trucks (identified as HHDT). EMFAC2017 can generate emission factors (also referred to as emission rates) in grams per mile for the fleet in a class of motor vehicles within a county for a particular geographical study year.

EMFAC2017 was run assuming an aggregate speed for each vehicle class, and a vehicle miles traveled-weighted average emission factor was estimated for diesel-fueled vehicles of the following classes: LHDT1/LHDT2, MHDT, HHDT, and Non-Trucks. Vehicle miles traveled was calculated by taking the average daily traffic and multiplying it by the distance of the roadway segment evaluated. The I-15 freeway northbound was modeled a total length of 1.86 miles and the I-15 freeway southbound was modeled a total length of 1.86 miles. The total exhaust PM₁₀ emissions (in pounds per hour and pounds per year) were then calculated for each roadway segment by multiplying the emission factor by the vehicle miles traveled.

For this analysis, San Diego County and calendar year 2027 were selected. The annual vehicle growth rate on the I-15 freeway would decrease 0.53% per year (SANDAG 2013a) from 2020 to 2050 and the EMFAC2017 vehicle DPM emission factors would decrease over time due to regulatory requirements and fleet turnover (ranging from 0.13% to 56.36%); therefore, assuming the first operational year of 2027 for the analysis would present a conservative analysis. Furthermore, the volume of diesel vehicles will also decrease over time as more zero and near-zero emissions vehicles enter the fleet.

The Sacramento Metropolitan Air Quality Management District's Recommended Protocol for Evaluation of the Location of Sensitive Land Uses Adjacent to Major Roadways (Protocol; SMAQMD 2011) provides a methodology for the assessment and disclosure of potential cancer risk from DPM attributable to siting sensitive land uses adjacent to freeways and major roadways. This guidance builds on the CARB 2005 Land Use and Air Quality Handbook: A Community Health Perspective. The Protocol defines a stepwise process that indicates the need for and methodology to conduct a site-specific HRA. Of particular note, the Protocol recommends a screening threshold of 100,000 vehicles per day for high traffic volume roadways. The Protocol also recommends that the length of the roadway should be at least 10,000 feet (5,000 feet for each link) to ensure pollutant capture (SMAQMD 2011).

Similar to the construction scenario as summarized in Section 2.4.2.1 of Appendix H, air dispersion modeling methodology was based on generally accepted modeling practices of SDAPCD (SDAPCD 2019). Air dispersion modeling was performed using the EPA's AERMOD Version 19191 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 9.8.3. The HRA followed OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the SCAQMD and EPA guidance and identified as representative of the project site and project activities. Principal parameters of this modeling are presented in Table 7 of Appendix H.

Regarding receptors, the roadway scenario placed receptors at 20 meter spacing on the project site where the residential land uses are proposed. Similar to the construction scenario as summarized in Section 2.4.2.1 of Appendix H, the health risk calculations were performed using the HARP2 ADMRT (dated 19121). AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was modeled with 1 gram per second evenly partitioned across each volume source. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual and the noncancerous chronic health index.

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. Maximum Individual Cancer Risk is the estimated probability of a maximally exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years, operational lifetime, for residential receptor locations. For the roadway HRA, the TAC exposure period was assumed to be from third trimester to 30 years for all receptor locations. The mandatory exposure pathways were selected.

The SDAPCD has also established noncarcinogenic risk parameters for use in HRAs since some TACs increase noncancerous health risk due to long-term (chronic) exposures and some TACs increase noncancerous health risk due to short-term (acute) exposures. Noncarcinogenic risks are quantified by calculating a hazard index, expressed as the ratio between the ambient pollutant concentration and its toxicity or Chronic Reference Exposure Level, which is a concentration at or below which health effects are not likely to occur. The chronic hazard index is the sum of the individual substance chronic hazard

indices for all TACs affecting the same target organ system, similarly calculated for acute hazard index. A hazard index less of than 1.0 means that adverse health effects are not expected. No short-term, acute relative exposure level has been established for DPM; therefore, acute impacts of DPM are not addressed in this assessment.

The exposure duration for a resident from third trimester to 30 years is more conservative than a student ages 14 through 15 at a high school; therefore, the calculated Residential Maximum Individual Cancer Risk and the Residential Chronic Hazard Index are the worst-case scenario for a resident and student.

As a condition of approval, the applicant or its successor will locate air intake vents on the residential buildings such that they do not face the I-15 freeway and are as far from I-15 freeway as practicable to reduce the potential for an impact due to emissions from the nearby I-15 freeway on future residents of the project.

5.3.4 Impacts Analysis

Issue 1: Would the proposal conflict with or obstruct implementation of the applicable air quality plan?

Impact Thresholds

To determine the significance of the proposed project's emissions on the environment, the City of San Diego (City) CEQA Significance Determination Thresholds (City of San Diego 2016) were used. Per the City's thresholds, the project would have a significant impact on air quality if the project would: Conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis

As mentioned in Section 5.3.2, the SDAPCD and SANDAG are responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the basin—specifically, the SIP and RAQS.³ The federal O₃ maintenance plan, which is part of the SIP, was adopted in 2012. The most recent O₃ attainment plan was adopted in 2016. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the SDAB based on the NAAQS. The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in 2016). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County as a whole and the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans.

If a project proposes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a

³ For the purpose of this discussion, the relevant federal air quality plan is the ozone maintenance plan (SDAPCD 2012). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

potentially significant cumulative impact on air quality. Implementation of the proposed project would result in an increase in 1,200 residential units. SANDAG's 2050 Regional Growth Forecast was adopted in October 2013 and is the current growth forecast; it estimates that the City would have 559,143 units in 2020, and 640,668 units in 2035 (SANDAG 2013b). This would equate to an additional 5,435 units per year from 2020 to 2035. The proposed project is expected to bring 1,200 units to market in 2027. Therefore, the proposed project would not conflict with SANDAG's regional growth forecast for the City, which accounts for residential growth in the City.

Significance of Impact

The proposed project would not conflict with SANDAG's regional growth forecast for the City, which accounts for residential growth in the City. A less than significant impact would occur.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 2: Would the proposal result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Issue 3: Would the proposal exceed 100 pounds per day of particulate matter (PM) (dust)?

Impact Threshold(s)

To determine the significance of the proposed project's emissions on the environment, the City of San Diego (City) CEQA Significance Determination Thresholds (City of San Diego 2016) were used. Per the City's thresholds, the project would have a significant impact on air quality if the project would:

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors)

As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of air quality impact assessments for permitted stationary sources (SDAPCD 2016c). The SDAPCD sets forth quantitative emissions thresholds below which a stationary source would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 5.3-5 are exceeded.

Table 5.3-5. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions			
Pollutant	Total Emissions (Pounds per Day)		
Respirable Particulate Matter (PM ₁₀)	100		
Fine Particulate Matter (PM _{2.5})	55		
Oxides of Nitrogen (NO _x)	250		
Oxides of Sulfur (SO _x)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	137 ^a		
Operational Emissions			
Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM ₁₀	—	100	15
PM _{2.5}	—	55	10
NO _x	25	250	40
SO _x	25	250	40
CO	100	550	100
Operational Emissions			
Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
Lead and Lead Compounds	—	3.2	0.6
VOCs	—	137 ^a	15

Sources: City of San Diego 2016; SDAPCD 2016b.

Notes: — = not available.

^a VOC threshold based on the threshold of significance for VOCs from the South Coast Air Quality Management District and the Monterey Bay APCD as stated in the City of San Diego's Guidelines for Determining Significance.

The thresholds listed in Table 5.3-4 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. The SDAPCD Air Quality Significance Thresholds shown in Table 5.3-4 were used to determine significance of proposed project-generated

construction and operational criteria air pollutants; specifically, the proposed project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 5.3-4, the proposed project could have the potential to result in a cumulatively considerable net increase in these pollutants and, thus, could have a significant impact on the ambient air quality.

With respect to odors, SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

The SDAPCD document Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments provides guidance with which to perform health risk assessments (HRAs) within the SDAB. The current SDAPCD thresholds of significance for TAC emissions from the operations of both permitted and non-permitted sources are combined and are less than 10 in 1 million for cancer and less than 1.0 for the chronic hazard index (SDAPCD 2019).

Impact Analysis

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. A cumulative analysis regarding air quality is provided in Chapter 6, Cumulative Impacts.

Construction Emissions

Construction of the proposed project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (worker vehicle trips). Construction emissions can vary substantially day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

Criteria air pollutant emissions associated with construction activities were quantified using CalEEMod. Default values provided by the program were used where detailed proposed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, haul trucks, vendor trucks, and worker vehicles—is included in Section 2.4.2.1 of Appendix H. The information contained in Appendix A to Appendix H was used as CalEEMod inputs.

Development of the proposed project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, asphalt pavement application, and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM₁₀ and PM_{2.5} emissions. The proposed project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the proposed project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM₁₀ and PM_{2.5}) generated

during grading and construction activities. The proposed project would ensure that active sites be watered at least three times daily and required as a condition of approval.

Exhaust from internal combustion engines used by construction equipment and vehicles would result in emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. The application of asphalt pavement and architectural coatings would also produce VOC emissions. To reduce emissions from construction equipment, the proposed project would require construction equipment over 75 horsepower to be rated EPA Tier 4 Interim or better, where available and made as a condition of project approval.

Table 5.3-6 shows the estimated maximum daily construction emissions associated with construction of the proposed project. Complete details of the emissions calculations are provided in Appendix A to Appendix H.

Table 5.3-6. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Year	<i>Pounds per day</i>					
2022	12.96	78.01	137.03	0.28	34.46	9.06
2023	12.41	32.24	147.64	0.33	47.74	7.17
2024	7.12	31.79	145.48	0.32	47.74	7.17
2025	48.00	31.77	146.88	0.33	48.48	7.31
2026	63.87	21.44	101.24	0.23	33.30	5.07
Maximum	63.87	78.01	147.64	0.33	48.48	9.06
<i>City Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; CalEEMod = California Emissions Estimator Model.

See Appendix H for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. Although not considered mitigation, these emissions reflect the CalEEMod “mitigated” output, which accounts for the required compliance with SDAPCD Rule 55 (Fugitive Dust) and Rule 67.0.1 (Architectural Coatings).

As shown in Table 5.3-6, daily construction emissions would not exceed the significance thresholds for any criteria air pollutant. Particulate matter emissions would also not exceed 100 pounds per day.

Operational Emissions

Operation of the proposed project would generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from mobile sources (vehicle trips), area sources (consumer products, landscape maintenance equipment), and energy sources. As discussed in Section 2.4.2.2, Operation, of Appendix H, pollutant emissions associated with long-term operations were quantified using CalEEMod. Project-generated mobile source emissions were estimated in CalEEMod based on project-specific trip rates. CalEEMod default values were used to estimate emissions from the project site and energy sources.

Table 5.3-7 presents the maximum daily area, energy, and mobile source emissions associated with operation (Year 2027) of the proposed project without mitigation. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix H.

Table 5.3-7. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	<i>Pounds per day</i>					
Area	34.35	21.05	107.60	0.13	2.16	2.16
Energy	0.26	2.18	0.93	0.01	0.18	0.18
Mobile	9.63	37.74	108.44	0.43	43.61	11.86
Stationary Source – Kiln	3.26	94.08	115.20	4.80	3.46	2.98
Total	47.50	155.05	332.17	5.37	49.41	17.18
<i>City Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; CalEEMod = California Emissions Estimator Model.

See Appendix H for complete results.

The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect the CalEEMod “mitigated” output, which accounts for compliance with SDAPCD Rule 67.0.1 (Architectural Coatings).

As shown in Table 5.3-7, the combined daily area, energy, and mobile source emissions would not exceed the City's operational thresholds for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Particulate matter emissions would also not exceed 100 pounds per day. Impacts during operation would be less than significant.

Furthermore, as the project would be built out in 4 phases, the overlap of construction and operational emissions was evaluated to determine the peak day. This assumes maximum construction operations would occur at the same time as maximum operational emissions. This is highly conservative as the maximum operational emissions won't be achieved until construction is complete. Table 5.3-8 shows the maximum overlap of construction and operational emissions from the proposed project.

Table 5.3-8. Estimated Maximum Daily Overlap between Construction and Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	<i>Pounds per day</i>					
Construction	63.87	78.01	147.64	0.33	48.48	9.06
Operation	44.23	155.05	332.17	5.37	49.41	17.18
Total	111.37	233.06	479.81	5.70	97.89	26.24
<i>City Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; CalEEMod = California Emissions Estimator Model.

See Appendix H for complete results.

The values shown are the maximum construction emissions shown in Table 5.3-6 and maximum operational emissions shown in Table 5.3-7.

As shown in Table 5.3-8, maximum daily overlap of construction and operation would not exceed the operational emissions threshold or the 100 pounds per day threshold of PM₁₀.

Significance of Impact

Maximum daily overlap of construction and operation would not exceed the operational emissions threshold or the 100 pounds per day threshold of PM₁₀. Impacts would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 4: Would the proposal expose sensitive receptors to substantial pollutant concentrations?

Impact Threshold(s)

To determine the significance of the proposed project's emissions on the environment, the City of San Diego (City) CEQA Significance Determination Thresholds (City of San Diego 2016) were used. Per the City's thresholds, the project would have a significant impact on air quality if the project would:

- Expose sensitive receptors to substantial pollutant concentration including air toxics such as diesel particulates...As adopted by the South Coast Air Quality Management District (SCAQMD) in their CEQA Air Quality Handbook (Chapter 4), a sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant than is the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, toxic air contaminants or odors are of particular concern. Examples include: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playground, child care centers, and athletic facilities.

Impact Analysis

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. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed sensitive receptors are the most serious hazards of 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, as identified by the City (City of San Diego 2016), include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptors to the proposed project are residences adjacent to the property boundaries. The proposed project would also introduce new on-site sensitive receptors (residences) to the area.

Health Impacts of Toxic Air Contaminants

Construction Health Risk

Incremental cancer risk is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard OEHHA risk-assessment methodology (OEHHA 2015). In addition, some TACs have noncarcinogenic effects. TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB ATCMs to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of proposed construction activities (approximately 56 months) would only constitute a small percentage of the total long-term exposure period and would not result in exposure of proximate sensitive receptors to substantial TACs. After proposed construction is completed, there would be no long-term source of TAC emissions during operation.

However, as a precautionary measure, an HRA was performed to evaluate the risk from diesel exhaust emissions on existing sensitive receptors and future onsite receptors from construction activities. The HRA methodology was described in Section 2.4.2.1 of Appendix H, and the detailed assessment is provided in Appendix B to Appendix H. Table 5.3-9 summarizes the results of the HRA for proposed project construction.

Table 5.3-9. Construction Activity Health Risk Assessment Results

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Offsite				
Cancer Risk	Per Million	5.11	10.0	Less than Significant
HIC	Not Applicable	0.002	1.0	Less than Significant
Onsite				
Cancer Risk	Per Million	0.4	10.0	Less than Significant
HIC	Not Applicable	0.0002	1.0	Less than Significant

Source: Appendix B to Appendix H.

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

The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in cancer risk on site below the 10 in 1 million threshold and a Chronic Hazard Index less than 1.0. Therefore, TAC emissions from construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Roadway Health Risk

As discussed in Section 2.4.2.2 of Appendix H, an HRA was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index for residential receptors as a result of emissions from the I-15 freeway on future sensitive receptors of the project. As a condition of approval, the applicant or its successor shall locate air intake vents on the residential buildings such that they do not face the I-15

freeway and are as far from I-15 freeway as practicable. The EPA reported that Minimum Efficiency Reporting Value-13 filters remove 90% of particles ranging from 1 to 10 microns (EPA 2018). For this analysis, Dudek assumed a 90% particulate matter reduction for the air filters. These filters are required for residential construction in accordance with the 2019 Title 24 building code. The National Human Activity Pattern Survey was conducted in support by the EPA to study where people spend their time. The results of the survey showed that on average people spend 87% of their time in enclosed buildings and 6% of their time in enclosed vehicles (Kleipeis et al. 2001). This assessment of risk with mitigation includes the accounting for time spent indoors as identified in the National Human Activity Pattern Survey and the time spent away from home as recommended by OEHHA (OEHHA 2015). Accounting for the actual time spent indoors and exposure related to the residents within the project provides a more realistic exposure scenario from TAC emissions from the I-15 freeway. Results of the roadway HRA are presented in Table 5.3-10.

Table 5.3-10. Roadway Health Risk Assessment Results

Impact Parameter	Units	Impact Level	CEQA Threshold
Maximum Individual Cancer Risk – Residential	Per Million	7.2	10
Chronic Hazard Index – Residential	Index Value	0.002	1.0

Source: SDAPCD 2019.

Notes: CEQA = California Environmental Quality Act.

See Appendix C to Appendix H.

As shown in Table 5.3-10, the DPM emissions from the I-15 freeway would result in a Residential Maximum Individual Cancer Risk of 7.2 in 1 million and a Residential Chronic Hazard Index of 0.002. These impact levels would be less than the SDAPCD significance threshold.

Health Impacts of Carbon Monoxide

Mobile-source impacts occur on two basic scales of motion. Regionally, project-related travel would add to regional trip generation and increase the VMT within the local airshed and the SDAB. Locally, project-related traffic would be added to the City's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates 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. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the proposed project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted based on the City's Significance Determination Thresholds (City of San Diego 2016) CO hotspot screening guidance. The City recommends that a quantitative analysis of CO hotspots be performed if a proposed development causes a six-lane or four-lane roadway to deteriorate to a LOS E or worse, causes a six-lane roadway to drop to LOS F, or if a proposed development is within 400 feet of a sensitive receptor and the LOS is D or worse. The project's Local Mobility Analysis determined that the proposed project would not exceed the City's screening guidance for CO hotspots (Fehr & Peers 2020).

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the proposed project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Regarding VOCs, some VOCs are associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD's thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings for both construction and operational applications.

In addition, VOCs and NO_x are precursors to O₃, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O₃ NAAQS standard and 1997 8-hour NAAQS standard). The health effects associated with O₃, as discussed in Section 2.1.2, Pollutants and Effects, of Appendix H, are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SDAB due to O₃ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O₃ ambient air quality standards tend to occur between April and October when solar radiation is highest.

Regarding NO₂, according to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO₂. As described in Section 2.1.2 of Appendix H, health impacts from exposure to NO₂ and NO_x are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these operations would be relatively short term. Additionally, off-road construction equipment would operate at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO_x impacts.

The VOC and NO_x emissions, as described previously, would minimally contribute to regional O₃ concentrations and its associated health effects. In addition to O₃, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO₂. As shown in Table 5.3-2, the existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the proposed project's operational NO_x emissions would result in exceedances of the NO₂ standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant. Likewise, PM₁₀ and PM_{2.5} would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects associated with particulates.

Significance of Impact

Construction Health Risk

The results of the HRA demonstrate that the TAC exposure from construction diesel exhaust emissions would result in cancer risk on site below the 10 in 1 million threshold and a Chronic Hazard Index less than 1.0. Therefore, TAC emissions from construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations and would result in a **less than significant** impact.

Roadway Health Risk

As shown in Table 5.3-10, the DPM emissions from the I-15 freeway would result in a Residential Maximum Individual Cancer Risk of 7.2 in 1 million and a Residential Chronic Hazard Index of 0.002. These impact levels would be less than the SDAPCD significance threshold. Impacts would be **less than significant**.

Health Impacts of Carbon Monoxide

The project's Local Mobility Analysis determined that without mitigation the proposed project would not exceed the City's screening guidance for CO hotspots. This would be a **less than significant** impact prior to mitigation.

Health Impacts of Other Criteria Air Pollutants

Based on the preceding considerations, health impacts associated with criteria air pollutants would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation is required.

Issue 5: Would the proposal create objectionable odors affecting a substantial number of people?

Impact Threshold(s)

To determine the significance of the proposed project's emissions on the environment, the City of San Diego (City) CEQA Significance Determination Thresholds (City of San Diego 2016) were used. Per the City's thresholds, the project would have a significant impact on air quality if the project would: Create objectionable odors affecting a substantial number of people. The City also states that the significance of potential odor impacts should be determined based on what is known about the quantity of the odor compound(s) that would result from the project's proposed use(s), the types of neighboring uses potentially affected, the distance(s) between the project's point source(s) and the neighboring uses such as sensitive receptors, and the resultant concentration(s) at the receptors.

Impact Analysis

Section 41700 of the California Health and Safety Code and SDAPCD Rule 51 (Public Nuisance) prohibit emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are very subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. As a result, this

guideline is qualitative and will focus on the existing and potential surrounding uses and location of sensitive receptors.

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, cause distress among the public, and generate citizen complaints.

Construction

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during proposed construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

Operation

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The proposed project includes residential uses.

Significance of Impact

Impacts associated with odors during construction and/or operation would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 6: Would the proposal result in a substantial alteration of air movement in the area of the project?

Impact Threshold(s)

Impacts would be significant if the project results in a substantial alteration of air movement in the area of the project.

Impact Analysis

This issue is usually associated with placement of high structures in proximity to one-another that can result in tunneling of air movement in an area that was previously unobstructed. In the case of the Project, structures would be placed within the site and is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land. Residential structures would range from 37 to 48 feet in height. Project buildings also be of consistent and considerable massing. Some buildings would be stand alone, and others would vary in placement, orientation, and specifics in massing. They also would be at different elevations associated

with underlying pads. Approximately 111.0 acres of development would be composed of parkland, open space, and buffer area. This area includes approximately 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland; 78.1 acres of open space; and 25.0 acres of buffer area. A multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. These would retain general air flow patterns travelling unobstructed predominantly from the west. All of these considerations result in air flow continuing to follow geographic cues in this area and winding through and around project related built structures. Although localized effects would vary from the existing condition of the open mined area, substantial alteration of air movement would not occur.

Significance of Impact

Impacts relating to substantial alternations of air movement would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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5.4 Biological Resources

This section describes the existing biological resources conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, as applicable, related to implementation of the project. The following discussion is based on the Biological Resources Technical Report prepared by Dudek (August 2020) and included as Appendix I.

5.4.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species), including Chicarita Creek. Surrounding land uses include residential development in all directions, with some adjacent park land.

Vegetation Communities

A total of 13 vegetation communities (11 native and 2 non-native) were identified on the project site: coastal sage scrub, coastal sage scrub (disturbed), coastal sage scrub (*Baccharis*-dominated), coastal and valley freshwater marsh, disturbed wetland, eucalyptus woodland, southern arroyo willow riparian forest, southern coast live oak riparian forest, southern cottonwood–willow riparian forest, southern sycamore–alder riparian woodland, southern willow scrub (disturbed), southern willow scrub, and undifferentiated open woodland. In addition, two land cover types were found on the project site: developed land/disturbed habitat and unvegetated channel. The golf course contains areas of hardscape such as golf cart pathways, along with areas of landscaping and native habitat. The areas associated with the golf course (planted trees and other landscaping, fallowed greens, and hardscape) are all grouped under the category developed/disturbed habitat. The mapped vegetation communities on the project site are shown on Figures 5.4-1A through 5.4-1M, and their acreages are detailed in Tables 5.4-1 and 5.4-2. The vegetation communities and land cover types recorded on the project site are described below.

Table 5.4-1. Upland Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier	Acreage
Native Vegetation Communities			
Coastal sage scrub	Coastal sage scrub	II	3.35
Disturbed coastal sage scrub	Coastal sage scrub	II	0.48
Coastal sage scrub (<i>Baccharis</i> -dominated)	Coastal sage scrub	II	1.79
Undifferentiated open woodland	Oak woodland	I	0.42

Table 5.4-1. Upland Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier	Acreage
Southern sycamore–alder riparian woodland ^b	Ornamental plantings	IV	0.16
<i>Non-Native Vegetation Communities and Land Covers</i>			
Developed land/disturbed habitat	Disturbed land	N/A–IV ^a	151.76
Eucalyptus woodland	Eucalyptus woodland	IV	0.27
Total^c			158.22

Source: City of San Diego 2018a.

Notes: N/A = not applicable.

- ^a Disturbed habitat is considered a Tier IV habitat per the City's Biology Guidelines and developed land does not have a habitat tier.
- ^b This habitat type would normally be considered a Wetland in the City's Biology Guidelines (City of San Diego 2018a); however, this is an artificially created wetland in a historically non-wetland area.
- ^c Total may not sum precisely due to rounding.

Table 5.4-2. Wetland Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Designation^a	Acreage
<i>Native Vegetation Communities</i>			
Coastal and valley freshwater marsh	Freshwater marsh	Wetland	1.48
Southern arroyo willow riparian forest	Riparian forest or woodland	Wetland	2.24
Southern coast live oak riparian forest	Riparian forest or woodland	Wetland	0.08
Southern cottonwood–willow riparian forest	Riparian forest or woodland	Wetland	1.38
Disturbed southern willow scrub	Riparian scrub	Wetland	0.19
Southern willow scrub	Riparian scrub	Wetland	0.47
Unvegetated channel	Natural flood channel	Wetland	0.36
<i>Non-Native Vegetation Communities and Land Covers</i>			
Disturbed wetland	Disturbed wetlands	Wetland	0.09
Total			6.29

Note:

- ^a City of San Diego 2018a.

Coastal Sage Scrub (Including Disturbed)

Coastal sage scrub is a native vegetation community composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonade sumac (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*).

Coastal sage scrub occupies a total of 3.83 acres on the project site. This vegetation community occurs primarily on the western side of the project site adjacent to riparian areas along Chicarita Creek. One area of disturbed coastal sage scrub was mapped along the southern boundary of the project site, and is largely composed of coastal deerweed (*Acmispon glaber* var. *glaber*), California buckwheat, and heavy cover of black mustard (*Brassica nigra*). Coastal sage scrub (including disturbed forms) is considered a Tier II habitat by the City of San Diego (City) Biology Guidelines (City of San Diego 2018a).

Coastal Sage Scrub (Baccharis-Dominated)

Coastal sage scrub (*Baccharis*-dominated) is a native vegetation community that typically occurs in nutrient-poor soils and is composed primarily of broom baccharis (*Baccharis sarothroides*) or coyote bush (*Baccharis pilularis*). Other drought-deciduous species may also be sparsely intermixed—such as California sagebrush, California buckwheat, and saw toothed goldenbush (*Hazardia squarrosa*).

Coastal sage scrub (*Baccharis*-dominated) occupies a total of 1.79 acres on the project site. This community is found in patches along Chicarita Creek and a small area is mapped on the eastern edge of the project site and is associated with a larger area of coastal sage scrub located off site. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between coastal sage scrub (*Baccharis*-dominated) and general coastal sage scrub; therefore, it is considered a Tier II habitat.

Undifferentiated Open Woodland

Undifferentiated open woodland is characterized by a fairly open canopy including oak trees (*Quercus* spp.) and other plant species, where species composition is generally unknown but the structural characteristics of the vegetation are known. This vegetation community was mapped along a disturbed portion of Chicarita Creek and occupies 0.42 acres on the project site. The vegetation community contained coast live oaks, ornamental pines, California bay, eucalyptus trees and laurel sumac. The area could be a remnant of native habitat associated with Chicarita Creek and was therefore not included in the developed land/disturbed category. Undifferentiated open woodland is not included in the City's Biology Guidelines. However, due to the presence of oak trees within this vegetation community, this area is considered a Tier I habitat by the City's Biology Guidelines (City of San Diego 2018a).

Developed Land/Disturbed Habitat

Developed Land/Disturbed Habitat “Urban/developed land” represents areas that have been constructed upon or otherwise physically altered to such an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. “Disturbed land” and or “disturbed habitat” refers to areas that are not developed yet lack vegetation, and these areas generally are the result of severe or repeated mechanical perturbation.

Areas mapped as developed land/disturbed habitat occupy 151.76 acres of the project site. These areas occupy a majority of the project site (92%) and consist of all graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course and fuel modification zones between the golf course and adjacent housing. Since these two land covers overlap frequently throughout the project site they, developed land and disturbed habitat, were not mapped separately. Disturbed habitat is considered a Tier IV habitat per the City's Biology Guidelines (City of San Diego 2018a) and development lands (ornamental plantings) does not have a habitat tier.

Eucalyptus Woodland

Eucalyptus woodland is a “naturalized” vegetation community that is fairly widespread in Southern California. It typically consists of monotypic stands of introduced Australian-introduced trees from the genus *Eucalyptus* that might consist of a variety of subspecies. The understory is either depauperate or absent due to high leaf litter, which restricts growth in understory as a result of high levels of allelochemicals. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species.

Areas mapped as eucalyptus woodland occupy 0.27 acres within the western portion of the project site along Chicarita Creek. These stands of eucalyptus woodland were mapped because they are directly associated with Chicarita Creek. Eucalyptus trees also occur within the golf course but are mapped as developed/disturbed in that location. Eucalyptus woodland is considered a Tier IV habitat per the City's Biology Guidelines (City of San Diego 2018a).

Coastal and Valley Freshwater Marsh

Coastal and valley freshwater marsh is a wetland habitat type that develops where the water table is at or just above the ground surface, such as around the margins of lakes, ponds, slow-moving streams, ditches, and seepages. Due to being permanently flooded by freshwater, there is an accumulation of deep, peaty soils. This habitat type typically is dominated by species such as cattails (*Typha* spp.), sedges (*Carex* spp.), and bulrushes (*Scirpus* spp.).

The areas mapped as coastal and valley freshwater marsh occupy 1.48 acres on the project site along Chicarita Creek, and also in the east and southeast portions of the project site associated with unnamed stream channels. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between coastal and valley freshwater marsh and general freshwater marsh; therefore, all marsh land is classified as a wetland habitat.

Disturbed Wetland

Disturbed wetlands are areas permanently or periodically inundated by water that have been substantially modified by human activity. Disturbed wetland (Palm-dominated) refers to a vegetation community that often consists of monotypic stands of palm species (Arecaceae) such as Washington fan palm (*Washingtonia robusta*) or canary date palm (*Phoenix canariensis*). Some other characteristic non-native species may also be sparsely intermixed, including giant reed (*Arundo donax*), tamarisk (*Tamarix* spp.), pampas grass (*Cortaderia* spp.), and Bermuda grass (*Cynodon dactylon*).

The areas mapped as disturbed wetland occupy 0.09 acres in a small pocket located on the eastern edge of the project site. Per the City's Biology Guidelines (City of San Diego 2018a), disturbed wetland is classified as a wetland habitat.

Southern Arroyo Willow Riparian Forest

Southern arroyo willow riparian forest is a vegetation community dominated by broad-leafed willow trees, often tall, with a closed or nearly closed canopy, which may have an understory of shrubby willows. Dominant species are often arroyo willow (*Salix lasiolepis*) and Goodding's black willow (*Salix gooddingii*). Other species besides willows that might also be found in southern willow riparian forest communities include Douglas' sagewort (*Artemisia douglasiana*), mulefat (*Baccharis salicifolia*), manroot (*Marah macrocarpus*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), black cottonwood (*Populus trichocarpa*), and narrowleaf willow (*Salix exigua*).

The area mapped as southern arroyo willow riparian forest occupies 2.24 acres primarily along Chicarita Creek but also along a small developing channel, and in isolated patches at Units 12 and 13. Within the project site, this vegetation community is dominated by arroyo willow and is mapped as southern arroyo willow riparian forest. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between southern willow riparian forest and general riparian forest; therefore, all riparian forest is classified as a wetland habitat.

Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest is characterized as locally dense evergreen sclerophyllous riparian woodland dominated by coast live oak (*Quercus agrifolia*). This community is typically richer in herbaceous plants and poorer in shrubs than other riparian communities. Some other characteristic species that may occur include Douglas' sagewort, toyon (*Heteromeles arbutifolia*), manroot, and poison oak (*Toxicodendron diversilobum*).

The area mapped as southern coast live oak riparian forest occupies 0.08 acres in one small area along the stretch of Chicarita Creek in the western section of the project site. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between southern coast live oak riparian forest and general riparian forest; therefore, all forest land is classified as a wetland habitat.

Southern Cottonwood-Willow Riparian Forest

Southern cottonwood-willow riparian forest is characterized as an open, broad-leafed, winter-deciduous riparian forest dominated by Fremont cottonwood and several tree willows. The understory is usually shrubby willows. Other species that might also be found in southern cottonwood-willow riparian forest communities include Douglas' sagewort, mulefat, manroot, western sycamore, Goodding's willow, and arroyo willow.

The area on site mapped as southern cottonwood-willow riparian forest occupies 1.38 acres in two areas, one associated with Chicarita Creek and the other associated with the unnamed channel along the eastern boundary of the project site. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between southern cottonwood-willow riparian forest and general riparian forest; therefore, all forest land is classified as a wetland habitat.

Southern Sycamore–Alder Riparian Woodland

Southern sycamore–alder riparian woodland is described as a tall, open, broad-leaved, winter-deciduous streamside woodland dominated by well-spaced western sycamore and often white alder (*Alnus rhombifolia*). Seldom forming closed-canopy forests, these stands may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species and are subject to seasonal high-intensity flooding. Characteristic species of this habitat type include Douglas' sagewort, coast live oak, California blackberry (*Rubus ursinus*), California laurel (*Umbellularia californica*), and stinging nettle (*Urtica dioica*).

The area mapped as southern sycamore–alder riparian woodland occupies 0.16 acres in the eastern portion of the project site. This area consists primarily of western sycamore, is not associated with hydrologic indicators, and appears to have been planted as ornamental plantings in association with the golf course. The intent of the City's Biology Guidelines (City of San Diego 2018a) is not to regulate artificially created wetlands in historically non-wetland areas. Therefore, since the area mapped as sycamore–alder riparian woodland has not been delineated as a wetland by the U.S. Army Corps of Engineers (ACOE) or the California Department of Fish and Wildlife (CDFW) and was artificially created, it would not be considered a City wetland.

Southern Willow Scrub (including Disturbed)

Southern willow scrub has been described as a dense, broad-leaved, winter-deciduous riparian thicket dominated by several species of willow (*Salix* spp.), with scattered emergent Fremont cottonwood and western sycamore. Most stands are too dense to allow much understory development. This habitat is considered seral due to repeated disturbance/flooding and is therefore unable to develop into the taller southern cottonwood–willow riparian forest.

The areas mapped as southern willow scrub, including disturbed southern willow scrub, occupy 0.19 acres in the southern portion of the project site and in one small drainage in the central portion. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between this variety and general riparian scrub; therefore, all riparian scrub is classified as a wetland habitat.

Unvegetated Channel

An unvegetated channel (or stream channel) refers to ephemeral and intermittent stream channels that are barren or sparsely vegetated, and thus do not fit into other wetland habitat categories. The lack of vegetation may be due to the scouring effects of floods, or human-caused vegetation removal for flood control, access, or other purposes.

The area on site mapped as unvegetated channel occupies 0.36 acres, including one channel in the northwestern section of the project site; it is a part of Chicarita Creek, which occurs within the golf course. According to the City's Biology Guidelines (City of San Diego 2018a), since this channel appears to have been disturbed by golf course development and is likely lacking wetland-dependent vegetation due to these activities, the channel would not be considered a City wetland.

Jurisdictional Resources

Dudek biologists completed a formal jurisdictional aquatic resource delineation in July 2019, which delineated the extent of jurisdictional aquatic features on the project site. A total of 6.44 acres of

jurisdictional aquatic resources were mapped during the formal delineation conducted on the project site. The southern sycamore–alder riparian woodland vegetation community mapped on the project site would typically be classified through the City's Biological Guidelines (City of San Diego 2018a) as a wetland habitat, since it would fall under the general category of riparian woodland. However, the sycamore trees within this community are rooted far upslope from the adjacent disturbed wetland and unnamed stream channel, and appear to have been planted as landscaping for the golf course. Thus, this area was artificially created and is not included in the 6.44 acres of jurisdictional aquatic resources on the project site.

The jurisdictional aquatic resources mapped on the project site include a total of 5.12 acres of ACOE wetlands and 0.43 acres of ACOE non-wetland waters, 5.93 acres of Regional Water Quality Control Board (RWQCB) wetlands and 0.51 acres of RWQCB non-wetland waters, 5.93 acres of CDFW wetlands and 0.51 acres of CDFW non-wetland waters, and 6.29 acres of City wetlands. The wetland waters are composed of freshwater marsh (coastal and valley freshwater marsh), disturbed wetland, and riparian forest (southern arroyo willow forest, southern coast live oak forest, and southern cottonwood–willow riparian forest). Isolated wetland waters regulated by RWQCB, CDFW, and the City include freshwater marsh (coastal and valley freshwater marsh) and riparian scrub (southern willow scrub and disturbed southern willow scrub). These areas generally include areas with at least one of the three wetlands indicators but isolated from a tributary of navigable water through lack of evidence of surface water hydrology. Non-wetland waters on the project site under the jurisdiction of all three resource agencies (CDFW, RWQCB and USACE) and the City include an unvegetated stream channel associated with Chicarita Creek. Chicarita Creek is regulated by the City as a wetland due to the presence of wetland vegetation and year-round water flow. There are earthen and concrete-lined non-wetland waters located throughout the project area that are under the jurisdiction of ACOE, RWQCB, and CDFW only. In addition, there are isolated earthen and concrete-lined non-wetland waters under the jurisdiction of RWQCB and CDFW. None of these features are regulated by the City as wetlands.

City Wetlands

Wetlands regulated by the City of San Diego occur throughout the project area. This section provides additional detail regarding the City wetlands within the project area. City regulated wetlands are identified as Features A, E, I, J, M, N, O, Q, and R on Figures 2 and 2a–2m. The delineation of these features are described in Appendix I.

Chicarita Creek - Feature A

Feature A refers to Chicarita Creek as shown on BTR Figures 2a and 2b. Chicarita Creek is a north–south trending perennial blue-line stream that connects with Los Peñasquitos Creek and eventually on to Los Peñasquitos Lagoon, where flows discharge directly into the Pacific Ocean, a traditional navigable water, approximately 13 river miles downstream and southwest of the project area. Chicarita Creek supports a combination of perennial and intermittent surface flows within a well-defined, riparian-vegetated streambed. Historical imagery suggests that the reach was modified in the late 1980s as part of the golf course development, but it is still meandering along the general same historic alignment seen as far back as 1953 (Historical Aerials 2019). Chicarita Creek supports areas mapped as southern willow riparian forest, freshwater marsh and southern sycamore–alder riparian woodland. The entire span of Chicarita Creek is a City wetlands, including the portion mapped as unvegetated channel. According to the City's Biology Guidelines (City of San Diego 2018a), since this channel appears to have been disturbed by golf course development and is likely lacking wetland dependent vegetation due to these activities, the channel would be considered a City wetland.

Central Wetland Feature (Feature E)

Feature E refers to a narrow, meandering channel that originates from a small, 6-inch to 8-inch pipe and winds through former playing holes until it reaches a remnant golf cart path (See BTR Figure 2e). Once the channel reaches the golf cart path, any flows that remain likely dissipate through evaporation. Feature E supports recently developed southern willow scrub vegetation with arroyo willow, Goodding's black willow, and narrow-leaved willow saplings coupled with a disturbed understory comprised of pampas grass (*Cortaderia selloana*) and bristly ox-tongue. The presence of wetland vegetation within the channel make this feature a City regulated wetland.

Unnamed tributary to Los Peñasquitos Creek (Features I, J, M, N and O)

Features I, J, and M comprise an unnamed tributary to Los Peñasquitos Creek that was visible on historic aerial imagery dating as far back as 1953 (Historical Aerials 2019). Historical imagery suggests that this drainage was modified in the late 1980s as part of the golf course construction and residential subdivision development. Carmel Ridge Road bisects the tributary. The segments of the drainage which remain open continue to meander along the same general historic alignment. This feature is now fed solely by stormwater runoff and discharges from pipe culverts. Features I, J, and M are dominated by dense, nearly impassable stands of emergent hydrophytic vegetation, including cattail (*Typha longifolia*), tamarisk (*Tamarix* sp.) and pale spikerush (*Eleocharis macrostachya*).

Features I, J, and M comprise portions of the drainage system that flows across three holes of the former golf course before flowing off site and southeast toward Los Peñasquitos Creek (BTR Figures 2I, 2J and 2K). These features support perennial surface flows within a well-defined, highly incised, densely vegetated wetland streambed. These three features are City of San Diego regulated wetlands.

Feature N is the downstream extension of Feature M (BTR Figure 2j). Feature N supports a dense, mature stand of southern cottonwood willow riparian forest within an incised, well-defined streambed that flows off site to Los Peñasquitos Creek. Feature N tested positive for hydrophytic vegetation and hydrology (i.e., bed and bank and drift lines); hydric soils were not evaluated due to access constraints. However, hydric soils are assumed to be present.

Feature O refers to a small pocket of disturbed wetlands vegetation dominated by Washington fan palm (*Washingtonia robusta*) and canary date palm (*Phoenix canariensis*). Some other characteristic non-native species include giant reed (*Arundo donax*), tamarisk (*Tamarix* spp.), pampas grass (*Cortaderia selloana*), and Bermuda grass (*Cynodon dactylon*). This wetland is associated with the unnamed tributary to Los Peñasquitos Creek.

Isolated Wetlands (Features Q and R)

Features Q and R refer to two man-made, earthen ponds that are situated near the southeast corner of the golf course at two former playing holes (BTR Figure 2m). While a culvert exists connecting these two features to each other, there is no visible outlet to convey flows off site to downstream tributaries. Therefore, Features Q and R are considered to be isolated, artificially constructed wetlands. Historical imagery suggests that Feature Q was constructed as part of the initial golf course development in the late 1980s, while Feature R was constructed sometime between 1996 and 2002 as part of continued golf course modifications/improvements (HELIX 2018). Feature Q is dominated by a combination of freshwater emergent wetlands and disturbed southern willow scrub vegetation. Feature R is dominated solely by

southern willow scrub vegetation. These features are considered City wetlands due to the dominance of wetland vegetation.

Wetland Buffers

Currently, the project area consists of a golf course with no established avoidance buffers between the City designated wetlands and development. The golf course greens, pathways and/or landscaping directly abuts the central wetlands, the unnamed tributary to Los Peñasquitos Creek and the isolated wetland features. Therefore, there are no protection or transitional zones between development and these wetlands.

Small pockets of native upland habitat comprise the wetland buffer along Chicarita Creek. These areas occur between the creek and I-15. However, these patches of native vegetation are not continuous along the creek due to the presence of golf greens and associated landscaping and trails. Residential development exists to the north and east of Chicarita Creek; no protection or transitional vegetation exists between development and wetlands in these areas.

Floral Diversity

A total of 40 species of native or naturalized plants, 22 native (55%) and 18 non-native (45%), were recorded during the biological reconnaissance survey for the project. A cumulative list of all common and sensitive plant species observed on the project site is provided in Appendix I.

Special-Status Plants

Plant species are considered special status if they have been listed or proposed for listing by the federal or state government as rare, endangered, or threatened ("listed species"); have a California Rare Plant Rank of 1–4; are listed as a Multiple Species Conservation Program (MSCP)-covered species; and/or have been adopted by the City as narrow endemic plant species. The project footprint will avoid all areas of natural habitat and sensitive vegetation communities where the species listed below could occur. Therefore, focused rare plant surveys were not conducted.

The potential for sensitive plant species to occur within the native habitat associated with the project area are described in the Biological Resources Technical Report (Appendix I). Appendix C of the report provides the primary habitat association, life form, blooming period and elevation range for each species that could occur within areas of native vegetation. Sensitive plant species that were determined to have moderate to high potential to occur on the project site include the following: California adolphia (*Adolphia californica*), San Diego sagewort (*Artemisia palmeri*), Coulter's saltbush (*Atriplex coulteri*), San Diego County viguiera (*Bahiopsis laciniata*), San Diego barrel cactus (*Ferocactus viridescens*), graceful tarplant (*Holocarpha virgata* ssp. *elongata*), San Diego marsh-elder (*Iva hayesiana*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), Brewer's calandrinia (*Calandrinia breweri*), small-flowered morning glory (*Convolvulus simulans*), snake cholla (*Cylindropuntia californica* var. *californica*), western dichondra (*Dichondra occidentalis*), Palmer's grapplinghook (*Harpagonella palmeri*), Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*), golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*), Nuttall's scrub oak (*Quercus dumosa*), chaparral ragwort (*Senecio aphanactis*), San Diego County needle grass (*Stipa diegoensis*), and rush-like bristleweed (*Xanthisma junceum*).

Wildlife Diversity

The project site primarily supports habitat for upland species in coastal sage scrub and disturbed habitat. These upland habitats provide foraging and nesting habitat for migratory and resident bird species and other wildlife species. Suitable habitat for sensitive riparian species is present in riparian scrub (southern willow scrub and disturbed southern willow scrub), riparian forest (southern arroyo willow forest, southern coast live oak forest, southern cottonwood–willow forest, southern willow forest), and riparian woodland (southern sycamore–alder woodland) habitats. Wetland and freshwater marsh habitats (disturbed wetland, coastal and valley freshwater marsh) are also present on the project site and may support sensitive wetland species. The majority of riparian or wetland habitat suitable for supporting wildlife, including special-status riparian bird species, occurs in the western portion of the project site associated with Chicarita Creek. Some of these riparian or wetland habitats are limited to narrow areas following drainages near the eastern boundary of the project site. The range of vegetated communities within the western and eastern sections of the project site also likely provides cover and foraging opportunities for wildlife species, including reptiles and mammals.

A total of 18 wildlife species, including 15 birds, 2 butterflies, and 1 mammal, were recorded during the biological reconnaissance surveys for the project site. Of the total 18 wildlife species observed during the reconnaissance survey, 1 special-status and MSCP-covered species was observed: the coastal California gnatcatcher (*Poliophtila californica californica*). A cumulative list of all common and sensitive plant species observed on the project site is provided in Appendix I.

Special-Status Wildlife

Special-status wildlife species are those listed as federally/state endangered or threatened, proposed for listing, fully protected by CDFW, California watch list (WL), California species of special concern (SSC), or MSCP covered species. Special-status wildlife species determined to have moderate to high potential to occur on the project site include the following: Cooper's hawk (*Accipiter cooperii*; MSCP Covered species), San Diego desert woodrat (*Neotoma lepida intermedia*), southern California legless lizard (*Anniella stebbinsi*), orange-throated whiptail (*Aspidoscelis hyperythra*; MSCP Covered species), Blainville's horned lizard (*Phrynosoma blainvillii*; MSCP Covered species), white-tailed kite (*Elanus leucurus*), coastal California gnatcatcher (MSCP Covered species), yellow warbler (*Setophaga petechia*), least Bell's vireo (*Vireo bellii pusillus*; MSCP Covered species), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and Townsend's big-eared bat (*Corynorhinus townsendii*; MSCP Covered species). A description of species with moderate to high potential to occur, or known to occur, is provided below.

Cooper's Hawk

Cooper's hawk is a state Watch List and a MSCP Covered species. Cooper's hawks inhabit live oak, riparian deciduous, and other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation. Nests are built in dense stands with moderate crown depths, usually in second-growth conifer or deciduous riparian areas. Nests in deciduous trees are typically located in crotches 20 to 50 feet above the ground; in conifers, nests are in horizontal branches or the main crotch. Cooper's hawks use patchy woodlands and edges with snags for perching and hunting small birds, small mammals, reptiles, and amphibians (Zeiner et al. 1990). Cooper's hawks are diurnally active and year-round residents. Breeding occurs from March through August, with peak activity in May through July. Males defend an area about 330 feet around potential nest sites (Zeiner et al. 1990).

Cooper's hawk could utilize any of the riparian woodlands in the project area for foraging or potentially for nesting during the breeding season.

San Diego Desert Woodrat

The San Diego desert woodrat is a California SSC. Desert woodrats are found in a variety of shrub and desert habitats and are primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth (Bleich 1973; Bleich and Schwartz 1975; Brown et al. 1972; Cameron and Rainey 1972; Thompson 1982). Desert woodrats are noted for their opportunistic and flexible behavior in using various materials, such as twigs and other debris (sticks, rocks, dung), to build elaborate dens or middens, which typically include several chambers for nesting and food as well as several entrances. Middens may be used by several generations of woodrats (Cameron and Rainey 1972).

San Diego desert woodrat would most likely inhabit coastal sage scrub habitat within the project area.

Southern California Legless Lizard

Southern California legless lizard is a SSC species. Southern California legless lizard inhabits coastal scrub, coastal dune, valley-foothill, and chaparral habitat types (Zeiner et al. 1990). This species ranges from Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties west of the Peninsular ranges. Southern California legless lizard occurs in moist warm loose soil with plant cover and uses leaf litter or rocks for cover.

Southern California legless lizard has moderate potential to occur in suitable sparse coastal sage scrub or woodland habitats within the project area.

Orange-Throated Whiptail

Orange-throated whiptail is a California WL and an MSCP covered species. Orange-throated whiptail inhabits low-elevation coastal scrub, chamise-redshank chaparral, and valley--foothill hardwood habitats. This species uses dense vegetation or other surface objects such as rocks, logs, decaying vegetation, and boards as cover. It has moderate potential to occur in suitable coastal sage scrub habitat on the project site.

Blainville's Horned Lizard

Blainville's horned lizard is a California SSC and an MSCP covered species. It is found from the Sierra Nevada foothills and Central California to coastal Southern California. It is often associated with coastal sage scrub, especially areas of level to gently sloping ground with well-drained loose or sandy soil, but it can also be found in annual grasslands, chaparral, oak woodland, riparian woodland, and coniferous forest between 30 and 7,030 feet above mean sea level. It has moderate potential to occur on the project site in suitable coastal sage scrub habitat where soil is sandy.

White-Tailed Kite

White-tailed kite is a state Fully Protected species. White-tailed kite occurs mainly in lowlands of southern and northwestern cismontane California in savannah, open woodland, marshes, cultivated fields, and partially cleared lands (Zeiner et al. 1990). White-tailed kite hunts in the morning and late afternoon for voles and mice, usually near farmlands. It is non-migratory but can be nomadic and dispersive in its movements, and often occurs in communal roosts (Unitt 2004). Nests are made of piled

sticks and twigs and placed near the tops of oak, willow, or other trees near marshes and foraging areas (Zeiner et al. 1990).

White-tailed kit has moderate potential to forage in suitable coastal sage scrub or disturbed habitat within the project area.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally threatened species, a California SSC, and an MSCP covered species. It primarily occupies open coastal sage scrub habitat that is dominated by California sagebrush. This species is relatively absent from coastal sage scrub habitats dominated by black sage (*Salvia mellifera*), white sage (*Salvia apiana*), or sugar sumac (*Rhus ovata*). Coastal California gnatcatcher was observed in the coastal sage scrub habitat located off site along the eastern edge of the project site and then again on the project site. Suitable habitat on the project site has the potential to support the federally threatened coastal California gnatcatcher. This habitat is located on the outer edges of the golf course in areas that are not proposed to be directly impacted by development.

Yellow Warbler

Yellow warbler is a USFWS Bird of Conservation Concern and SCC species. Yellow warbler inhabits riparian woodland in coastal and desert lowlands, montane chaparral, open ponderosa pine, and mixed conifer habitats (Zeiner et al. 1990). This species breeds along the coast of California west of the Sierra Nevada, and eastern California from Lake Tahoe south to Inyo County. Yellow warbler occurs in medium-density woodlands and forests with heavy brush understory, and migrates to sparse to dense woodland and forest habitats.

Yellow warbler has moderate potential to occur within riparian woodland along Chicarita Creek.

Least Bell's Vireo

Least Bell's vireo is a federally endangered, state endangered, and MSCP covered species. The breeding range of least Bell's vireo includes coastal and inland Southern California (including the western edge of Southern California's southern deserts), a small area within California's Central Valley, and extreme northern Baja California, Mexico. It primarily occupies riverine riparian habitats along water, including dry portions of intermittent streams that typically provide dense cover within 1 to 2 meters (3 to 6 feet) off the ground, often adjacent to a complex, stratified canopy. Least Bell's vireo nesting habitats include southern willow scrub; mulefat scrub; arroyo willow riparian forest edge; wild blackberry thickets; and more rarely, cottonwood forest, sycamore alluvial woodland, and southern coast live oak riparian forest. It has moderate potential to occur on the project site within riparian habitat along Chicarita Creek.

Northwestern San Diego Pocket Mouse

Northwestern San Diego pocket mouse is a SSC species. Northwestern San Diego pocket mouse is a subspecies and inhabits sandy herbaceous areas in association with rocks and coarse gravel (Grinnell 1933; Miller and Stebbins 1964). This subspecies occurs in arid coastal and desert border areas in southwestern California (Zeiner et al. 1990). Typical habitats for the northwestern San Diego pocket mouse include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.

Northwestern San Diego pocket mouse has moderate potential to occur in suitable coastal sage scrub habitat within the project area.

Townsend's Big-Eared Bat

Townsend's big-eared bat is an SSC and an MSCP covered species. This species requires caves, tunnels, buildings, or other built structures for roosting. Townsend's big-eared bat roosts in relatively warm sites and in small clusters or groups of females and young, usually fewer than 100 individuals. It has low-to-moderate potential to occur within man-made structures and riparian habitat on the project site.

Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for animals to travel between these larger open space areas. Wildlife corridors contribute to population viability by ensuring the continual exchange of genes between populations, which helps maintain genetic diversity; providing access to adjacent habitat areas, representing additional territory for foraging and mating; allowing for a greater carrying capacity; and providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes.

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage does represent a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat "islands" that function as steppingstones for dispersal.

Of the 164.5 acre project area, only 12.5 acres are comprised of native vegetation communities. These areas are primarily associated with Chicarita Creek, patches of upland habitat west of the creek, and the unnamed tributary to Los Peñasquitos Creek located in the eastern portion of the project area. There is very little native vegetation within the remainder of the project area. Outside of these two areas, the project area likely provides limited refuge and cover for wildlife species and their movements. It is unlikely to be a wildlife corridor due to the disturbed condition of the majority of land throughout the project area as a former golf course, and the fact that the project area consists of sections of land surrounded by chain-link fencing and interwoven throughout a residential neighborhood.

Chicarita Creek provides wildlife habitat and may support wildlife species movement; however, the upper limit of the creek and its associated habitat ends at the project area's northern boundary and therefore this part of the project area would be a dead end for wildlife movement. Wildlife could move between the habitat along the eastern boundary of the project area and the adjacent land just east of the project area, however this natural habitat is bounded on all sides by roads and residential development and therefore movement would be restricted.

The portions of the unnamed tributary to Los Peñasquitos Creek that occur within the project area are encroached upon by residential development located just outside of the project area. Carmel Ridge Road bisects the channel as it flows from the northern portion of the project area to the south (BTR Figure 2J). Modification to the tributary have resulted in disjointed patches of habitat intertwined with golf greens and trails. Smaller urban wildlife could potentially use these areas of the tributary for live-in habitat and foraging, but movement would be constrained by development and lack of vegetation coverage.

The Multi-Habitat Planning Area (MHPA) of the MSCP was designed to include key biological core and linkage areas within the City (City of San Diego 1997). The project site is not within the designated MHPA and has been determined not to be a biological core or linkage area. The MHPA boundary is approximately 0.25 miles southeast of the project site and is therefore not adjacent to the project site.

5.4.2 Regulatory Framework

Federal

Federal Endangered Species Act

Under the federal Endangered Species Act of 1973 (ESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 USC 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the planning area, and determine whether the project would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3][4]). The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service are responsible for implementation of the ESA.

USFWS also publishes a list of candidate species. Species on this list receive special attention from federal agencies during environmental review, although they are not protected otherwise under the ESA. The candidate species are those for which USFWS has sufficient biological information to support a proposal to list them as endangered or threatened.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, “take” is defined as “pursue, hunt, shoot, wound, kill trap, capture, or collect, or any attempt to carry out these activities” (16 USC 703 et seq.). Additionally, Executive Order 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds,” requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). Executive Order 13186 requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species. Currently, birds are considered to be nesting under the Migratory Bird Treaty Act only when there are eggs or chicks that are dependent on the nest. This project will comply with all requirements of the Migratory Bird Treaty Act.

State

California Endangered Species Act

The California ESA establishes state policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. Under the California ESA, CDFW is responsible for maintaining a list of threatened species and endangered species (California Fish and Game Code, Section 2070). CDFW also

maintains a list of candidate species, which are species that CDFW has formally noticed as under review for addition to the threatened or endangered species list. CDFW also maintains lists of California species of special concern, which serve as watch lists. Pursuant to the requirements of the California ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the area, and determine whether the proposed project would have a potentially significant impact on such species. CDFW encourages informal consultation on any proposed project that may impact a candidate species.

California Fish and Game Code

Under the California Fish and Game Code, CDFW provides protection from take for a variety of species, including fully protected species. “Fully protected” is a legal protective designation administered by CDFW and intended to conserve wildlife species that risk extinction within California. Lists have been created for birds, mammals, fish, amphibians, and reptiles.

Birds of prey are protected in California under California Fish and Game Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW. Section 3511 prohibits take or possession of a fully protected species. In addition, Section 3513 states “It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory [Bird] Treaty Act.” Any loss of fertile eggs or nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Non-raptor native birds receive similar protection under California Fish and Game Code Section 3503. Project impacts to these species would not be considered significant unless the species are known to, or have a high potential to, nest in the area or rely on it for primary foraging.

The Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.) gives CDFW authority to designate state endangered, threatened, and rare plants, and provides specific protection measures for identified populations.

CDFW also protects streams, water bodies, and riparian corridors through the Streambed Alteration Agreement process under Sections 1601–1606 of the California Fish and Game Code. The California Fish and Game Code stipulates that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. Through policy, CDFW asserts jurisdiction to the top of banks of all streams, including intermittent and ephemeral streams, extending laterally to the upland edge of adjacent riparian vegetation. CDFW uses the Cowardin system for wetland identification and classification, which typically results in a larger jurisdictional area than federal jurisdiction under the Clean Water Act. Under this system, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Local

Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for San Diego County. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans that describe specific implementing mechanisms. The City's MSCP Subarea Plan, approved in March 1997, is a plan and process for the issuance of permits under the federal and California ESAs and the California Natural Community Conservation Planning Act of 1991. The primary goal of the MSCP Subarea Plan is to conserve viable populations of special-status species and to conserve regional biodiversity while allowing for reasonable economic growth.

In July 1997, the City signed an implementing agreement with USFWS and CDFW. The implementing agreement serves as a binding contract between the City, USFWS, and CDFW that identifies the roles and responsibilities of the parties to implement the MSCP and Subarea Plan. The agreement allows the City to issue incidental take authorizations under the provisions of the MSCP. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.

Multi-Habitat Planning Area

One of the primary objectives of the MSCP is to identify and maintain a preserve system that allows animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life, which are known as "core biological resource areas." Linkages between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. Input from responsible agencies and other interested participants resulted in creation of the City's MHPA. The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources. MHPA lands are considered by the City to be sensitive biological resources. In accordance with the MSCP, for parcels located outside the MHPA, there is no limit on encroachments into sensitive biological resources, with the exception of wetlands and listed noncovered species' habitat. Regardless, impacts to sensitive biological resources are to be assessed, and mitigation, where necessary, must be provided in conformance with the City's Biology Guidelines (City of San Diego 2018a).

To address the integrity of the MHPA, guidelines were developed to manage land uses adjacent to the MHPA. The adjacency guidelines are intended to be addressed on a project-by-project basis, either in the planning stage or the management stage. These guidelines address the issues of drainage, toxics, lighting, noise, invasives, brush management, access to MHPA, and grading/land development.

As described previously, MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource.

Environmentally Sensitive Lands Regulations

Environmentally Sensitive Lands (ESL) regulations are supplemental development regulations that are part of the San Diego Municipal Code, Chapter 14, Article 3, Division 1. These regulations are intended to

ensure that development occurs in a manner that protects the overall quality of resources (San Diego Municipal Code 143.0101). The City's Biology Guidelines were developed to aid in the interpretation and implementation of the ESL regulations and to be used as part of the environmental review process to meet the requirements of the California Environmental Quality Act (CEQA) and the MSCP. ESL include lands within the MHPA, as well as lands that contain wetlands; vegetation communities classified as Tier I, II, IIIA, or IIIB; and habitat for rare, endangered, or threatened species or narrow endemic species (City of San Diego 2018a). The Biology Guidelines provide guidance on permits required for projects that encroach on ESL. The Biology Guidelines also address requirements for project impacts analysis pertaining to wetlands and buffer limits within and outside the Coastal Overlay Zone, siting requirements to avoid the most sensitive portion of a site, and requirements for development outside the MHPA (City of San Diego 2018a).

5.4.3 Impacts Analysis

Issue 1: *Would the project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?*

Issue 2: *Would the project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?*

Impact Threshold(s)

According to the City's Significance Determination Thresholds, potential impacts to biological resources are assessed through review of the project's consistency with the City's ESL Regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City's Significance Determination Thresholds, proceeds in two steps: (1) determine if significant biological resources are present; and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

1. Sensitive biological resources are defined by the City of San Diego Municipal Code as:
 - Lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997);
 - Wetlands (as defined by the Municipal Code, Section 113.0103);
 - Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines (July 2002 or current edition) of the Land Development manual;
 - Lands supporting species or subspecies listed as rare, endangered, or threatened;
 - Lands containing habitats with narrow endemic species as listed in the Biology Guidelines of the Land Development manual; and

- Lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.
- 2. Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.

A. Direct Impacts

- Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.
- Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered significant.
- Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to State or Federally listed species and all narrow endemics should be considered significant.
- Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B. Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

- Introduction of urban meso-predators into a biological system
- Introduction of urban runoff into a biological system
- Introduction of invasive exotic plant species into a biological system
- Noise and lighting impacts
- Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
- Loss of a wetland buffer that includes no environmentally sensitive lands.

Impact Analysis

Direct Impacts

Vegetation Communities and Land Covers

Implementation of the proposed project would result in direct impacts to approximately 70.88 acres of developed land/disturbed land. Table 5.4-3 describes direct impacts to upland vegetation communities and provides a list of the corresponding Biology Guidelines vegetation communities, as well as the corresponding Subarea Plan tier or Subarea Plan designation. The proposed project would not have any permanent or temporary direct impacts to natural vegetation communities, including any sensitive vegetation communities.

All Zone 2 brush management areas, would be considered impact neutral.

Table 5.4-3. Direct Impacts to Upland Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community/Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier^a	Existing Acreage	Direct Impacts
<i>Native Vegetation Communities</i>				
Coastal sage scrub	Coastal sage scrub	II	3.35	—
Coastal sage scrub (disturbed)	Coastal sage scrub	II	0.48	—
Coastal sage scrub (<i>Baccharis</i> -dominated)	Coastal sage scrub	II	1.79	—
Undifferentiated open woodland	Oak woodland	I	0.42	—
Southern sycamore–alder riparian woodland	Ornamental plantings	IV	0.16	—
<i>Non-Native Vegetation Communities and Land Covers</i>				
Developed land/disturbed habitat	Disturbed land	IV	151.76	70.88
Eucalyptus woodland	Eucalyptus woodland	IV	0.27	—
Total^b			158.22	70.88

Note:

^a City of San Diego 2018a.

^b Totals may not sum precisely due to rounding. The proposed project would result in direct impacts to approximately 71 acres of developed land/disturbed habitat (Tier IV) and would not result in impacts to Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitat.

Special-Status Plant Species

No special-status plant species were detected within the proposed project footprint during reconnaissance surveys. No focused plant surveys were conducted; however, no special-status plant species are expected to occur within the proposed project footprint due to the level of habitat disturbance on the former golf course. The impact footprint of the proposed project would avoid all areas of natural habitat and sensitive vegetation communities. No impact would occur.

Special-Status Wildlife Species

Coastal California gnatcatcher was observed only in a portion of the project site that will not be developed; therefore, this species would not be directly impacted by the proposed project. The 11 special-status species that could be present on the project site would be restricted to the native habitat that occurs outside the proposed project development. No direct impacts would occur.

Indirect Impacts

Vegetation Communities, Land Covers, and Special-Status Plants

No indirect impacts to upland vegetation communities or special status plants would occur. The project would incorporate methods to control runoff, including site design, source control, and treatment control best management practices (BMPs). The project would be required to meet National Pollutant Discharge Elimination System (NPDES) regulations and incorporate BMPs during construction and permanent BMPs as defined by the City of San Diego's (City's) Storm Water Standards Manual as part of the project development. Prior to proposed construction mobilization, the project contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the state's General Construction Stormwater Permit – 99-08-DWQ, and implement the plan during construction.

Special-Status Wildlife Species

Indirect impacts to breeding wildlife from construction-related noise may occur if construction occurs during the breeding season (generally, February 1 through September 15). Wildlife that would be significantly affected by noise, based on suitable habitat in the project vicinity and in accordance with the City's Biology Guidelines (City of San Diego 2018a), may occur up to 300 feet from the project work areas. Special-status species whose breeding/nesting could be significantly impacted by noise include Cooper's hawk, yellow warbler (*Setophaga petechia*), and least Bell's vireo.

Significance of Impact

Direct Impacts

Vegetation Communities and Land Covers

The proposed project would not result in direct impacts to sensitive vegetation communities. No impact would occur.

Special-Status Plant Species

The proposed project would not directly impact f special-status plant species. No impact would occur.

Special-Status Wildlife Species

The project would not result in direct impacts to special-status wildlife species. No impact would occur.

Indirect Impacts

Vegetation Communities, Land Covers, and Special-Status Plants

The proposed project would not result in indirect impacts to sensitive vegetation communities. No impact would occur.

Special-Status Wildlife Species

Construction-related noise may impact breeding wildlife, including two MSCP-covered species, least Bell's vireo, and Cooper's hawk and yellow warbler, if construction occurs during the breeding season. Impacts would be **significant**.

Mitigation Monitoring and Reporting

MM-BIO-1 Biological Resources (Protection During Construction)

I. Prior to Construction

- A. Biologist Verification:** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2018), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.
- B. Preconstruction Meeting:** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.
- C. Biological Documents:** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance (ESL), project permit conditions; California Environmental Quality Act (CEQA); endangered species acts (ESAs); and/or other local, state or federal requirements.
- D. BCME:** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.
- E. Avian Protection Requirements:** To avoid any direct impacts to the least Bell's vireo, Cooper Hawk, and yellow warbler, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The survey area shall cover the limits of disturbance and 300 feet from the area of disturbance. The applicant shall submit the results of the pre-construction survey to City DSD for review and approval prior to initiating any construction activities. If nesting least Bell's vireo, Cooper Hawk, and yellow

warbler are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of the least Bell's vireo, Cooper Hawk, and yellow warbler or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

- F. Resource Delineation:** Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including least Bell's vireo, Cooper Hawk, and yellow warbler) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
- G. Education:** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

- A. Monitoring:** All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSV). The CSV shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.
- B. Subsequent Resource Identification:** The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access, etc). If active nests of the least Bell's vireo, Cooper Hawk, and yellow warbler or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

- A.** In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

Biological Resources – least Bell's vireo (State Endangered/Federally Protected)

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur between March 15 and September 15, the breeding season of the Least Bell's vireo, until the following requirements have been met to the satisfaction of the City Manager:

A qualified biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those wetland areas that would be subject to construction noise levels exceeding 60 decibels [db(a)] hourly average for the presence of the least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service within the breeding season prior to the commencement of construction.

- a. If the least Bell's vireo is present, then the following conditions must be met:
 - I. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and
 - II. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 db(a) hourly average at the edge of occupied least bell's vireo or habitat. An analysis showing that noise generated by construction activities would not exceed 60 db (a) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of any of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
 - III. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 db(a) hourly average at the edge of habitat occupied by the least bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 db (a) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

*Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly

average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- b. If least Bell's vireo are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the City Manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows:
 - I. If this evidence indicates the potential is high for least bell's vireo to be present based on historical records or site conditions, then condition a.iii shall be adhered to as specified above.
 - II. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

Significance After Mitigation

Implementation of MM-BIO-1 would reduce indirect impacts to sensitive wildlife species to below a level of significance.

Issue 3: Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds (2016a), the project would have a significant impact if it would:

- Result in substantial adverse impacts on wetlands through direct removal, filling, hydrological interruption, or other means.

Impact Analysis

Direct Impacts

With regard to wetland vegetation communities and land cover types, implementation of the proposed project would not result in direct impacts wetlands or non-wetland waters. Table 5.4-4 describes impacts to wetland vegetation communities and provides a list of the corresponding Biology Guidelines vegetation communities and the corresponding Subarea Plan tier or Subarea Plan designation.

Table 5.4-4. Direct Impacts to Wetland Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community/Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Designation^a	Existing Acreage	Direct Impacts
<i>Native Vegetation Communities</i>				
Coastal and valley freshwater marsh	Freshwater marsh	Wetlands	1.48	—
Southern arroyo willow riparian forest	Riparian forest or woodland	Wetlands	2.24	—
Southern coast live oak riparian forest	Riparian forest or woodland	Wetlands	0.08	—
Southern cottonwood–willow riparian forest	Riparian forest or woodland	Wetlands	1.38	—
Southern willow scrub (disturbed)	Riparian scrub	Wetlands	0.19	—
Southern willow scrub	Riparian scrub	Wetlands	0.47	—
Unvegetated channel	Natural flood channel	Wetlands	0.36	0.001 ^b
<i>Non-Native Vegetation Communities and Land Covers</i>				
Disturbed wetland	Disturbed wetlands	Wetlands	0.09	—
Total^c			6.29	0.001^b

Notes:

^a City of San Diego 2018a.

^b This describes the location where an arch culvert will span an existing concrete-lined brow ditch, resulting in no alteration of structure or function of the feature. This is not considered an impact.

No wetland impacts are anticipated from spanning the existing concrete-lined brow ditch. This brow ditch, has been identified as Feature G and is delineated as a non-wetland waters under the jurisdiction of RWQCB and CDFW. Because the installation of the arch culvert would not alter the structure or function of the concrete-lined channel, no significant impact would occur. No impacts to ACOE, RWQCB, CDFW or City wetlands are anticipated.

No wetland impacts are anticipated from the five pedestrian bridges/cart paths that cross over Chicarita Creek. One of the bridges, located in the southern portion of Chicarita Creek, has partially collapsed. The collapsed bridge segments in Chicarita Creek will remain undisturbed. Repair, removal and replacement of damaged portions of the bridge will occur entirely outside of jurisdictional resources to ensure no impacts to the creek. Any new bridge construction would span the creek with bridge footings placed outside of the creek to avoid impacts to jurisdictional resources. Thus, the project proposes no disturbance to jurisdictional resources regulated by the ACOE, RWQCB, CDFW or City.

No wetlands will be impacted by proposed maintenance activities required within the wetland buffer. All wetlands would be permanently staked, with signage directing open space use away from the wetland. Repair of existing trails/paths would result in no impacts to jurisdictional resources. Though repair and

maintenance would occur within the wetland buffer, all activities would remain outside of the 5-foot “no touch” zone around the wetland buffer.

No impacts to jurisdictional habitats result from brush management. Periodic brush management also would remain outside of the 5-foot “no touch” zone established directly adjacent to wetlands on-site. Therefore, there are no impacts to City wetlands.

Indirect Impacts

The project site contains jurisdictional resources (wetlands and non-wetland waters) that are regulated by ACOE, RWQCB, CDFW, and the City. , the project would incorporate methods to control runoff, including site design, source control, and treatment control best management practices (BMPs). Long-term indirect impacts to aquatic resources are not anticipated to result from implementation of the proposed project, as buffers varying in width from 30 to 100 feet would be provided for each wetland area on the project site. In addition, a landscaping plan would be prepared for the proposed project that would include native plantings within and surrounding the wetland buffers to further protect and preserve these areas. Therefore, the project would not have any indirect impacts to jurisdictional resources.

Significance of Impact

Direct Impacts

No direct impacts to jurisdictional resources would result.

Indirect Impacts

No indirect impacts to jurisdictional resources would result.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 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, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds, the project would have a significant impact if it would:

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites.

Impact Analysis

The proposed project would not Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites. As discussed in Section 5.4.1,

Existing Conditions, the project site is not within the designated MHPA and is not located within a designated key biological core and linkage area, as noted in the City's MSCP Subarea Plan (City of San Diego 1997). In addition, since the project site is mostly disturbed and is surrounded by existing residential development, it does not provide for considerable wildlife movement or serve as a habitat linkage or nursery site for wildlife species. The habitat associated with Chicarita Creek may support wildlife species movement; however, the upper limit of the creek and its associated habitat ends at the project site's northern boundary. Therefore, this part of the project site would be a dead end for wildlife movement. Wildlife could move between the habitat along the eastern boundary of the project site and the adjacent land; however, this natural habitat is bounded on all sides by roads and residential development and therefore movement would be restricted.

Significance of Impact

No direct or indirect impacts to wildlife movement, wildlife corridors, or nursery sites are expected with implementation of the project. No impacts would occur.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 5: *Would the project result in a conflict with provisions of adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan, either within the MSCP plan area or in the surrounding region?*

Issue 6: *Would the project introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects?*

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds, the project would have a significant impact if it would:

- Result in a conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects.

Impact Analysis

The project would not create impacts that would result in a conflict with the provisions of the MSCP. The project would not result in impacts to areas delineated as MHPA and would not result direct impacts to any of the 85 plant and animal species covered under the plan. As described above under issues 1 and 2, indirect impacts to MSCP covered species could occur; however, with mitigation impacts would be less than significant.

The project would/would not result in impacts that would result in a conflict with the provisions of the MSCP. The impact footprint associated with the project would not occur within or adjacent to designated MHPA lands. The City's MSCP Land Use Adjacency Guidelines would not be applicable to the project, and no significant adverse edge effects associated with the introduction of a land use within an area adjacent to the MHPA would occur.

Significance of Impact

The project would not create impacts that would result in a conflict with the provisions of the MSCP; impacts would be less than significant.

The project would not result in a land use within or adjacent to the MHPA that would result in edge effects; no impact would occur.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 7: Would the project conflict with any local policies or ordinances protecting biological resources?

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds (2016a), the project would have a significant impact if it would:

- Result in a conflict with any local policies or ordinances protecting biological resources.

Impact Analysis

The project would comply with the City's ESL Regulations and Biology Guidelines as discussed under issue s 1 through 6. As discussed under Land Use, the project would be consistent with applicable plans and policies. Refer to Land Use, Section 5.1, for further detail.

Significance of Impact

Impacts resulting from a conflict with any local policies or ordinances protecting biological resources would not occur as the project would be consistent with the City's ESL Regulations and Biology Guidelines. **No impact would occur.**

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 8: Would the project introduce invasive species of plants into natural open space area?

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds (2016a), the project would have a significant impact if it would:

- Introduce invasive species of plants into natural open space area.

Impact Analysis

The project site is not adjacent to a natural open space area; therefore, implementation of the project would not introduce invasive species of plants into natural open space areas. No long-term direct or indirect impacts associated with invasive species would occur, because the project would implement a landscaping plan that includes native plantings within the wetland buffer areas on the project site. In addition, the landscape plan for the proposed project precludes the use of non-native invasive plant species.

Significance of Impact

The project does not result in impacts related to the introduction of invasive plant species to natural open space area. No impact would occur.

Mitigation Monitoring and Reporting

No mitigation would be required.

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SOURCE: SANGIS 2017; Project Design 2020

FIGURE 5.4-1A

Biological Resources

Trails at Carmel Mountain Ranch

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SOURCE: SANGIS 2017; Project Design 2020

FIGURE 5.4-1B
Biological Resources
 Trails at Carmel Mountain Ranch

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SOURCE: SANGIS 2017; Project Design 2020

FIGURE 5.4-1G

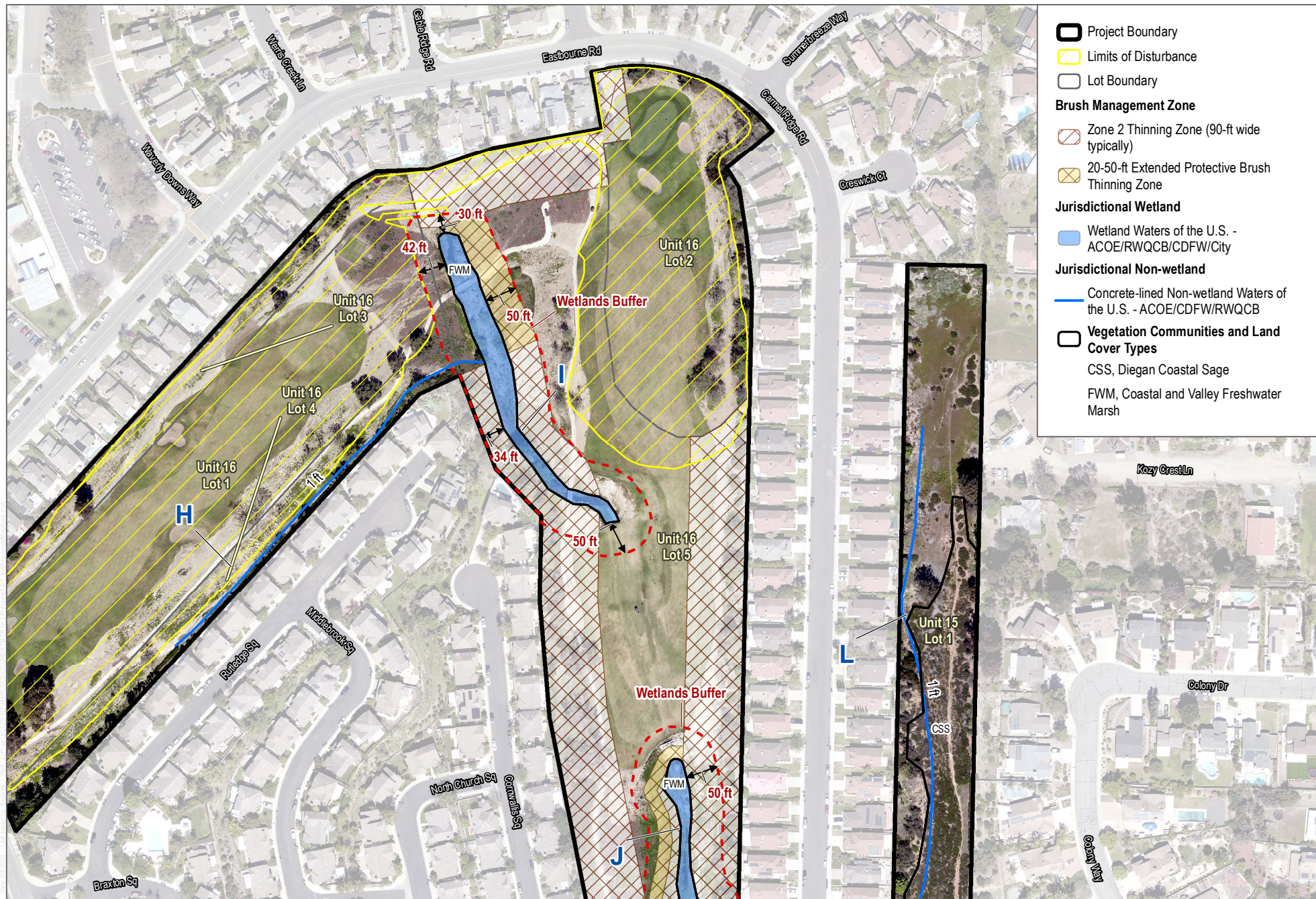
Biological Resources

Trails at Carmel Mountain Ranch

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SOURCE: SANGIS 2017; Project Design 2020

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SOURCE: SANGIS 2017; Project Design 2020

FIGURE 5.4-1L

Biological Resources

Trails at Carmel Mountain Ranch

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SOURCE: SANGIS 2017; Project Design 2020

FIGURE 5.4-1M

Biological Resources

Trails at Carmel Mountain Ranch

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5.5 Energy

This section describes the existing energy production/consumption conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory framework, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is consistent with and fulfills the intent of the CEQA Guidelines Appendix F, and is based on information from the air quality report, prepared by DUDEK (August 2020; Appendix H) and technical data (i.e., California Energy Demand (CED) 2018-2030 Revised Forecast (California Energy Commission [CEC] 2018a); and the CEC's 2018 Integrated Energy Policy Report Update (CEC 2018b)).

5.5.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Since the project site is not in use, no energy use is occurring onsite.

Environmental Setting

The environmental setting for the proposed project related to electricity, natural gas, and petroleum—including associated service providers, supply sources, and estimated consumption—is discussed below. In summary, in 2018 (the latest calendar year for which data is uniformly available for all three types of energy sources), California's estimated annual energy use included the following:

- Approximately 284,436 gigawatt hours of electricity (CEC 2019a)
- Approximately 13 billion therms of natural gas (CEC 2019b)
- Approximately 16 billion gallons of gasoline (CARB 2019)

Electricity

Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2016).

San Diego Gas & Electric Company (SDG&E) provides electric services to 3.6 million customers through 1.4 million electric meters located in a 4,100-square-mile service area that includes San Diego County and southern Orange County (SDG&E 2020). SDG&E is a subsidiary of Sempra Energy and would provide

electricity to the proposed project. According to the California Public Utilities Commission (CPUC), SDG&E customers consumed approximately 19,169 million kilowatt-hours (kWh) of electricity in 2015 (CPUC 2016).

SDG&E receives electric power from a variety of sources. In 2017, 44% of SDG&E's power came from eligible renewable energy sources, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources. This is an improvement of 9% over the 2015 mix (CPUC 2016, 2020).

Based on recent energy supply and demand projections in California, statewide annual peak electricity demand is projected to grow an average of 890 megawatts per year for the next decade, or 1.4% annually, and consumption per capita is expected to remain relatively constant at 7,200 kWh to 7,800 kWh per person (CEC 2016).

In San Diego County, the California Energy Commission (CEC) reported an annual electrical consumption of approximately 6 billion kWh in 2018 for residential use (CEC 2019a).

Natural Gas

CPUC regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from Pacific Gas & Electric, Southern California Gas (SoCalGas), SDG&E, Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage (CPUC 2020). SDG&E provides natural gas service to San Diego and Orange Counties. SDG&E is a wholesale customer of SoCalGas and currently receives all of its natural gas from the SoCalGas system (CPUC 2020).

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2020).

In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California (CPUC 2020). Natural gas from out-of-state production basins is delivered into California through the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Southern Trails, and Mojave Pipeline. The North Baja-Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers it through California into Mexico. The Federal Energy Regulatory Commission regulates the transportation of natural gas on interstate pipelines, and CPUC often participates in Federal Energy Regulatory Commission proceedings to represent the interests of California natural gas consumers (CPUC 2020).

Most of the natural gas transported through interstate pipelines, and some California-produced natural gas, is delivered through the Pacific Gas & Electric and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the backbone pipeline system is then delivered into local transmission and distribution pipeline systems or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline system, and some core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the natural gas delivered to California's gas consumers in 2012 (CPUC 2020).

Pacific Gas & Electric and SoCalGas own and operate several natural gas storage fields that are located in Northern and Southern California. These storage fields and four independently owned storage utilities—Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage—help meet peak-season natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently (CPUC 2020).

California's regulated utilities do not own any natural gas production facilities. All natural gas sold by these utilities must be purchased from suppliers or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the Federal Energy Regulatory Commission in the mid-1980s and is determined by market forces. However, CPUC decides whether California's utilities have taken reasonable steps to minimize the cost of natural gas purchased on behalf of its core customers (CPUC 2020).

As indicated in the preceding discussion, natural gas is available from a variety of in-state and out-of-state sources, and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas (a mixture of gases produced by the breakdown of organic matter) may soon be available through existing delivery systems, thereby increasing the availability and reliability of resources.

Petroleum

There are more than 35 million registered vehicles in California, and those vehicles consume an estimated 18 billion gallons of fuel each year (CEC 2017). Gasoline and other vehicle fuels are commercially provided commodities and would be available to the proposed project through commercial outlets.

Petroleum currently accounts for approximately 92% of California's transportation energy consumption (CEC 2017). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels and energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate (CEC 2017). Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state.

Existing Infrastructure

The proposed project is located on the site of a currently vacant golf course, and falls within the SDG&E service area. . Any proposed new infrastructure needed to serve the project would be connected to existing dry utilities (gas and electricity) systems.

5.5.2 Regulatory Framework

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, CPUC and CEC are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized below.

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 is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following 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 (the RFS) to replace petroleum (EPA 2013). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that 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 EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. 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 U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green” jobs.

State

The discussion below focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Refer to Section 5.7, Greenhouse Gas Emissions, of this EIR for a discussion of various policies, regulations, and laws targeted to the reduction of GHG emissions that are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

Warren-Alquist Act

The California Legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the CEC and incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation’s first energy conservation standards for both buildings constructed and appliances sold in California.
- It removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- It directed the CEC to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided to consumers. The plan also identified policies, strategies, and actions that are cost-effective and environmentally sound for California’s consumers and taxpayers. In 2005, CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state’s energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, CEC and CPUC prepared an update that examines the state’s ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

Senate Bill (SB) 1078 established the California Renewables Portfolio Standard (RPS) Program, and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), and 100 (2018)

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) increased the standards set forth in SB 350 by establishing targets for the total electricity sold to retail customers in California per year be secured from qualifying renewable energy sources on the following schedule: 44% by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% percent of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from nonrenewable resources is expected to be reduced based on implementation of the 60% RPS in 2030. Therefore, any project's reliance on nonrenewable energy sources would also be reduced.

Assembly Bill 1007 (2005)

AB 1007 (2005) required CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG-reduction planning targets from 2020 to 2030,

requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (e.g., gasoline and diesel). As such, the state's GHG emissions-reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.7.2 of this EIR.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and nonresidential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

Title 24 also includes Part 11, 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.

In general, single-family residences built to the 2019 Title 24 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards will use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018).

Integrated Energy Policy Report

CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The CEC's 2015 Integrated Energy Policy Report discusses the state's policy goal to require that new residential construction be designed to achieve zero net energy standards by 2020, and that new nonresidential construction be designed to achieve zero net energy standards by 2030 (CEC 2016), which is relevant to this EIR. Refer to Section 4.7 of this EIR for additional information on the state's zero net energy objectives and how the state's achievement of its objectives would serve to beneficially reduce the proposed project's GHG emissions profile and energy consumption.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO₂) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions 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 emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009 through 2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013 through 2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2012).

Although the focus of the state’s vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions-reduction mandates. As codified in California Government Code Section 65080, SB 375 requires metropolitan planning organizations (e.g., San Diego Association of Governments) to include a sustainable communities strategy in their regional transportation plan. The main focus of the sustainable communities strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and vehicle miles traveled, which influence the consumption of petroleum-based fuels.

Local

SDG&E Individual Integrated Resource Plan

SDG&E’s Conforming Portfolio identifies a need for approximately 700 gigawatt-hours of incremental renewable power in addition to the assumed increases in energy efficiency and behind-the-meter solar, to meet the 2030 planning target (approximately 4% of the total energy in the portfolio) (SDG&E 2020). SDG&E’s Conforming Portfolio demonstrates that the utility has reduced its GHG emissions in the early years of the planning period, reflecting its current position in relation to its RPS targets—in 2018, approximately 45% of its energy mix came from delivering renewable resources (compared to an RPS requirement of 29%), it has aggressively adopted energy storage, and does not utilize coal resources. SDG&E is fully compliant with RPS and long-term contracting requirements. SDG&E continues its efforts to meet resource-specific renewable procurement mandates, as required, but does not expect to procure additional resources for RPS compliance purposes until after 2030. SDG&E is forecasted to reach 49% renewable energy in 2021, 98% of which will be from long-term contracts (SDG&E 2020).

City of San Diego General Plan

The following policies contained in the Conservation Element of the 2008 City General Plan (City of San Diego 2008) are applicable to the project’s energy use (refer to Section 5.9, Land Use, for a consistency analysis related to goals and policies applicable to the project):

- CE-A.5. Employ sustainable or “green” building techniques for the construction and operation of buildings.

Climate Action Plan

The City adopted a Climate Action Plan (CAP) in December 2015 (City of San Diego 2015). The CAP quantifies GHG emissions, establishes Citywide reduction targets for 2020 and 2035, identifies strategies and measures to reduce GHG levels, and provides guidance for monitoring progress on an annual basis. The City CAP identifies a comprehensive set of goals and actions, including ordinances, policies, resolutions,

programs, and incentives, that the City can use to reduce GHG emissions. Many of these goals and actions would have the effect of reducing energy use. The City of San Diego evaluates GHG significance based on a project's consistency with the City's CAP using the CAP Consistency Checklist. As analyzed in Section 5.5, Greenhouse Gas Emissions, the proposed project would be consistent with Steps 1, 2, and 3 of the City's CAP Consistency Checklist.

5.5.3 Impacts Analysis

Issue 1: *Would the proposal result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix F, a project would result in a significant impact to energy conservation if it would:

- Substantially increase the consumption of electricity, natural gas, gasoline, diesel, or other non-renewable energy types such that the construction of new facilities and sources of energy or major improvements to local infrastructure would be required.

Impact Analysis

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 have a negligible contribution to the proposed 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, electronics, and other uses associated with the proposed project's residential land uses and art studio.

California Emissions Estimator Model (CalEEMod) (version 2016.3.2) was used to estimate project emissions from energy uses. Default electricity generation rates in CalEEMod were used (for the proposed land use and climate zone) based on compliance with 2019 Title 24. It was estimated that the proposed project would consume approximately 274,311 kWh per year. This equates to approximately 0.27 gigawatt-hours per year. In 2018, the total electricity demand for San Diego County was 19,749 gigawatt-hours (CEC 2019a).

As described above, the electricity demand calculation for the proposed project assumes compliance with Title 24 standards for 2019. The proposed project would be required to meet the California Building Energy Efficiency Standards (24 CCR 6), which improve the energy efficiency of residential and nonresidential buildings. The Title 24, Part 6, standards are updated every 3 years.

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 the proposed project under the CALGreen Code. Prior to project approval, the City would ensure that the project meets Title 24 requirements applicable at that time, as required by state regulations through their plan review process.

The project would implement all Step 2 measures as required under the City's CAP Consistency Checklist, as discussed in Section 5.5, Greenhouse Gas Emissions. These measures help to minimize a projects greenhouse gas emissions and energy use. These measures would include the installation of roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than that provided in Table 1 of Attachment A of the CAP Checklist. The measures also include low-flow water fixtures and appliances that would indirectly reduce electricity consumption.

Natural Gas

Construction Use

Natural gas is not anticipated to be required during project construction. 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 proposed project's overall energy consumption.

Operational Use

Natural gas consumption during operation would be required for various purposes, including, but not limited to, cooking and 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 2019 Title 24. According to these estimations, the proposed project would consume approximately 86,416 therms per year. In comparison, the total natural gas demand for San Diego County in 2018 was 482,524,487 therms (CEC 2019b).

Although natural gas consumption would increase due to the implementation of the proposed project, it would be designed to maximize energy performance. The proposed 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 the proposed project under the CALGreen Code. Prior to project approval, the City would ensure that the proposed project meets Title 24 requirements applicable at that time, as required by state regulations through their plan review process. Additionally, the project would implement all Step 2 measures as required under the City's CAP Consistency Checklist, as discussed in Section 5.5, Greenhouse Gas Emissions and above which would minimize the use of natural gas on site.

Petroleum

Construction Use

Petroleum would be consumed throughout construction of the proposed project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled 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 H of this EIR. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 426,832 hours, as summarized in Table 5.5-1.

Table 5.5-1. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Grading – Phase 1	1,920
Grading – Phase 2	1,600
Grading – Phase 3	1,472
Grading – Phase 4	3,968
Building Construction – Phase 1	170,640
Building Construction – Phase 2	57,600
Building Construction – Phase 3	39,672
Building Construction – Phase 4	128,160
Wet Utilities – Phase 1	3,264
Wet Utilities – Phase 2	2,832
Wet Utilities – Phase 3	1,296
Wet Utilities – Phase 4	4,032
Dry Utilities – Phase 1	832
Dry Utilities – Phase 2	416
Dry Utilities – Phase 3	320
Dry Utilities – Phase 4	960
Paving – Phase 1	1,056
Paving – Phase 2	768
Paving – Phase 3	480
Paving – Phase 4	1,152
Demolition – Phase 1	1,280
Architectural Coating – Phase 1	1,344

Table 5.5-1. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Architectural Coating – Phase 2	432
Architectural Coating – Phase 3	328
Architectural Coating – Phase 4	1,008
Total	426,832

Source: Appendix H.

Fuel consumption from construction equipment was estimated by converting the total emissions from each construction phase to gallons using conversion factors for carbon dioxide (CO₂) to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO₂ per gallon (The Climate Registry 2019). The estimated diesel fuel use from construction equipment is shown in Table 5.5-2.

Table 5.5-2. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Grading – Phase 1	16	55.35	10.21	5,421.29
Grading – Phase 2	8	46.13	10.21	4,517.75
Grading – Phase 3	8	42.44	10.21	4,156.33
Grading – Phase 4	16	114.39	10.21	11,204.01
Building Construction – Phase 1	18	2,944.06	10.21	288,350.44
Building Construction – Phase 2	9	993.62	10.21	97,317.88
Building Construction – Phase 3	9	684.48	10.21	67,040.31
Building Construction – Phase 4	18	2,211.49	10.21	216,600.14
Wet Utilities – Phase 1	12	80.14	10.21	7,849.34
Wet Utilities – Phase 2	6	69.53	10.21	6,810.46
Wet Utilities – Phase 3	6	31.82	10.21	3,116.65
Wet Utilities – Phase 4	12	99.01	10.21	9,697.27
Dry Utilities – Phase 1	8	24.69	10.21	2,417.80
Dry Utilities – Phase 2	4	12.34	10.21	1,208.89
Dry Utilities – Phase 3	4	9.49	10.21	929.92
Dry Utilities – Phase 4	8	28.49	10.21	2,790.54
Paving – Phase 1	12	37.63	10.21	3,686.05
Paving – Phase 2	6	27.37	10.21	2,680.76
Paving – Phase 3	6	17.10	10.21	1,675.28
Paving – Phase 4	12	41.05	10.21	4,020
Demolition – Phase 1	8	55.02	10.21	5,389.00
Architectural Coating – Phase 1	2	28.60	10.21	2,800.82

Table 5.5-2. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Architectural Coating – Phase 2	1	9.19	10.21	900.26
Architectural Coating – Phase 3	1	6.98	10.21	683.54
Architectural Coating – Phase 4	2	21.45	10.21	2,100.62
Total				753,365.35

Sources:^a Appendix H.^b The Climate Registry 2019.**Notes:** CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker and vendor trips was estimated by converting the total CO₂ emissions from the construction phase to gallons using the conversion factors for CO₂ 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, vendor, and hauler fuel consumption are provided in Table 5.5-3, Table 5.5-4, and Table 5.5-5.

Table 5.5-3. Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Grading – Phase 1	540	1.82	8.78	207.53
Grading – Phase 2	450	1.52	8.78	172.94
Grading – Phase 3	414	1.40	8.78	159.10
Grading – Phase 4	1,116	3.76	8.78	428.88
Building Construction – Phase 1	535,620	1,677.01	8.78	191,003.05
Building Construction – Phase 2	180,800	581.75	8.78	66,258.84
Building Construction – Phase 3	124,526	390.43	8.78	44,467.56
Building Construction – Phase 4	402,280	1,230.08	8.78	140,099.72
Wet Utilities – Phase 1	1,768	5.97	8.78	679.45
Wet Utilities – Phase 2	1,534	5.18	8.78	589.53
Wet Utilities – Phase 3	702	2.37	8.78	269.78
Wet Utilities – Phase 4	2,184	7.19	8.78	818.71
Dry Utilities – Phase 1	364	1.23	8.78	139.89
Dry Utilities – Phase 2	182	0.61	8.78	69.94
Dry Utilities – Phase 3	140	0.47	8.78	53.80
Dry Utilities – Phase 4	420	1.36	8.78	155.24
Paving – Phase 1	352	1.19	8.78	135.27
Paving – Phase 2	256	0.86	8.78	98.38
Paving – Phase 3	160	0.52	8.78	59.15

Table 5.5-3. Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Paving – Phase 4	384	1.25	8.78	141.94
Demolition – Phase 1	240	0.81	8.78	92.23
Architectural Coating – Phase 1	7,728	22.27	8.78	2,536.66
Architectural Coating – Phase 2	2,484	7.43	8.78	846.36
Architectural Coating – Phase 3	1,886	5.64	8.78	642.60
Architectural Coating – Phase 4	5,796	16.70	8.78	1,902.49
Total				452,029.04

Sources:^a Appendix H.^b The Climate Registry 2019.**Notes:** CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.**Table 5.5-4. Construction Vendor Diesel Demand**

Phase	Trips	Vehicle CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Grading – Phase 1	60	0.78	10.21	76.09
Grading – Phase 2	50	0.65	10.21	63.41
Grading – Phase 3	46	0.60	10.21	58.33
Grading – Phase 4	124	1.61	10.21	157.26
Building Construction – Phase 1	80,580	1,015.10	10.21	99,422.20
Building Construction – Phase 2	27,200	344.64	10.21	33,755.31
Building Construction – Phase 3	18,734	235.18	10.21	23,034.40
Building Construction – Phase 4	60,520	756.82	10.21	74,125.84
Wet Utilities – Phase 1	816	10.57	10.21	1,034.84
Wet Utilities – Phase 2	708	9.17	10.21	897.87
Wet Utilities – Phase 3	324	4.20	10.21	410.89
Wet Utilities – Phase 4	1,008	12.84	10.21	1,257.65
Dry Utilities – Phase 1	156	2.02	10.21	197.84
Dry Utilities – Phase 2	78	1.01	10.21	98.92
Dry Utilities – Phase 3	60	0.78	10.21	76.09
Dry Utilities – Phase 4	180	2.27	10.21	222.53
Paving – Phase 1	44	0.57	10.21	55.80
Paving – Phase 2	32	0.41	10.21	40.58
Paving – Phase 3	20	0.25	10.21	24.73
Paving – Phase 4	48	0.61	10.21	59.34
Demolition – Phase 1	80	1.04	10.21	101.46

Table 5.5-4. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Architectural Coating – Phase 1	336	4.16	10.21	407.88
Architectural Coating – Phase 2	108	1.35	10.21	131.86
Architectural Coating – Phase 3	82	1.02	10.21	100.12
Architectural Coating – Phase 4	252	3.12	10.21	305.92
Total				236,117.16

Sources:^a Appendix H.^b The Climate Registry 2019.**Notes:** CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.**Table 5.5-5. Construction Haul Truck Diesel Demand**

Phase	Trips	Vehicle CO ₂ (MT) ^a	kg CO ₂ /Gallon ^b	Gallons
Grading – Phase 1	8,532	44.86	10.21	4,393.49
Grading – Phase 2	4,900	25.76	10.21	2,523.21
Grading – Phase 3	236	1.24	10.21	121.53
Grading – Phase 4	484	2.54	10.21	249.24
Demolition – Phase 1	584	21.95	10.21	2,149.62
Total				9,437.09

Sources:^a Appendix H.^b The Climate Registry 2019.**Notes:** CO₂ = carbon dioxide; MT = metric ton; kg = kilogram. All other construction phases not identified in Table X.X-5 would not generate construction haul trips, and are therefore not included in this table.

As shown in Tables 5.5-2 through 5.5-5, the proposed project is estimated to consume approximately 1,189,879 gallons of petroleum during the construction phase. In 2018, the total petroleum consumption within the County of San Diego was 1.6 billion gallons (CARB 2019). The proposed project would also be required to comply with CARB's Airborne Toxics Control Measures, which restrict heavy-duty diesel vehicle idling time to 5 minutes.

Operational Use

The majority of fuel consumption resulting from the project's operational phase would be attributable to employees, visitors, and residents traveling to and from the project site. Calculations for annual fuel consumption are provided in Table 5.5-6. Mobile sources from the proposed project would result in approximately 708,087 gallons of gasoline per year and 49,504 gallons of diesel per year, for a total of 757,591 gallons of petroleum consumed per year beginning in 2026 after project buildout. It is forecasted that in 2026, approximately 1.4 billion gallons of petroleum in San Diego County will be consumed (CARB 2019).

Table 5.5-6. Petroleum Consumption – Operation

Fuel	Vehicle CO₂ (MT)^a	kg CO₂/Gallon^b	Gallons
Gasoline	6,217	8.78	708,086.84
Diesel	505.44	10.21	49,504.36
Total			757,591.2

Sources:^a Appendix H.^b The Climate Registry 2019.**Notes:** MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

Over the lifetime of the project, the fuel efficiency of the vehicles being used by the residents 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, as mentioned previously, 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 San Diego Association of Governments. As such, operation of the proposed project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

Additionally, the project would implement all Step 2 measures as required under the City's CAP Consistency Checklist, as discussed in Section 5.5, Greenhouse Gas Emissions to minimize petroleum use during operation. Moreover, the proposed project would conform with Step 3 of the CAP checklist (which reduces operational VMT of a project through TDM strategies) by increasing residential density within a Transit Priority Area. Since the proposed project is located in close proximity to the Metropolitan Transit System Sabre Springs/Peñasquitos Transit Station (1,000 feet) and the Interstate 15 High Occupancy Vehicle (HOV) access (2,000 feet), the development supports the General Plan's City of Villages strategy by increasing density within a Transit Priority Area. The proposed project would also include a number of features designed to reduce vehicle miles traveled, which are incorporated into project design, such as creating a multi-modal trail system that would provide internal connections throughout the project site and connect residents to the neighborhoods and commercial developments surrounding the project. The multi-modal trail would allow both walking and bicycling opportunities. The trail network would also include enhancements to the existing Class II bicycle lanes. These project components would work to further reduce petroleum consumption over time.

Significance of Impact***Electricity***

The electricity used for construction activities would be temporary and would have a negligible contribution to the proposed project's overall energy consumption. In addition, for the reasons described above, the electricity consumption of the proposed project during operation would not be inefficient or wasteful, and impacts would be **less than significant**.

Natural Gas

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 proposed project's overall energy consumption. For the reasons described above, the natural gas consumption of the proposed project would not be inefficient or wasteful, and impacts would be **less than significant**.

Petroleum

In summary, although the proposed project would increase petroleum use during operation as a result of employees and customers commuting to the site and vendor trucks, the use would be a small fraction of the countywide use and, due to efficiency increases, would diminish over time. Given the considerations described above, petroleum consumption associated with construction and operation of the proposed project would not be inefficient or wasteful and would result in a **less than significant** impact.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 2: *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix F, a project would result in a significant impact to energy conservation if it would:

- Cause the use of large amounts of electricity and natural gas in a manner that is wasteful or otherwise inconsistent with adopted plans or policies.

Impact Analysis

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 proposed project would comply with Title 24, Part 6, per state regulations. In addition, Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the proposed project under the CALGreen Code. As discussed under the previous threshold, the proposed project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with Title 24, Part 11, mandatory compliance, the applicant would: (a) divert 50% of its construction and demolition waste from landfills, (b) include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (this may include green roofs), (c) use low pollutant-emitting exterior and interior finish materials, and (d) include low-flow fixtures and appliances consistent with the requirements of the CAP Checklist. Compliance with all of these mandatory measures would decrease the

consumption of electricity, natural gas, and petroleum. Additionally, irrigation of the project site, where practical, will use reclaimed water applied via low precipitation rate spray heads, drip emitters, or other highly efficient systems.

In accordance with the City's General Plan Conservation Element, the project will reduce its "environmental footprint" through a variety of sustainable features (refer to Chapter 4, Project Description for a list of project design features) and compliance with the Uniform Building Code and Title 24 requirements for building materials and insulation in order to reduce unnecessary loss of energy.

As discussed in Issue 1, the project would implement all applicable measures within Steps 2 and 3 of the City's CAP Checklist which would further minimize use of energy from the project. As such, the proposed project would not conflict with the City's CAP.

Significance of Impact

Because the proposed project would comply with Title 24, Part 6 and Part 11, would be consistent with the City's General Plan Conservation Element policies pertaining to energy use, and would implement the required components identified within Step 2 and Step 3 of the City's CAP Checklist, no conflict with existing energy standards and regulations would occur. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

5.6 Geologic Conditions

This section describes the existing geological conditions on the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the geotechnical investigation, prepared by Geocon Inc. (October 2019) and included as Appendix J.

5.6.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Soils and Geologic Conditions

Topographically, the project site consists of gently to moderately sloping terrain. According to the geotechnical investigation, the project site is underlain by surficial deposits such as golf course fill, topsoil, alluvium and colluvium, and weathered bedrock. More specifically, nine geologic units are present on site, including golf course fill, previously placed compacted fill, topsoil, alluvium, colluvium, Mission Valley Formation, Stadium Conglomerate, Friars Formation, and granitic rock, which are all described below.

Golf Course Fill (Qgcf)

Fill deposits associated with the previous golf course grading are widespread across the site and vary in thickness from a thin veneer to approximately 34 feet. The materials encountered during the geotechnical investigation consisted of mixtures of silty to clayey sands to silty to sandy clays with minor amounts of gravel, cobble, and boulder-size rock fragments. In addition, portions of the fills contain construction debris and vegetation that would require special handling, mechanical and/or hand removal, and exportation from the site.

The majority of these fill deposits are unsuitable for additional fill loads and will require remedial grading. However, portions of the deeper fill deposits (below 10 feet) observed and evaluated on Units 2 and 8, located in the middle portion of the project site, are suitable in their present condition to support the proposed project.

Previously Placed Compacted Fill (Qpf)

Previously placed compacted fill associated with the surrounding residential developments is located along the perimeter of the existing golf course. In some cases, the previously placed compacted fill extends farther into the existing golf course. The previously placed compacted fill consists of mixtures of silty to clayey sands to silty to sandy clays. Boulders and rock fill were also encountered within the portion of the site south of Shoal Creek Drive.

Topsoil (Unmapped)

Topsoil with a maximum thickness of 5 feet was encountered in several of the exploratory borings and trenches within the northern portion of the site. The topsoil is characterized as loose to stiff silty/clayey sands and sandy clays with varying amounts of gravel and cobble. A relatively limited thickness of topsoil was also encountered beneath the embankments on Units 2 and 8, in the middle portion of the project site. These deposits are very stiff to medium dense and moist to very moist.

Alluvium (Qal)

Alluvium is present within the low-lying drainage areas on Units 5 and 15, located in the southern and northern portion of the project site, respectively. Where encountered, these deposits have a maximum thickness of 12 feet and primarily consist of silty to sandy clays and silty to clayey sands with varying amounts of gravel and cobble. Alluvium was also encountered beneath the embankments on Unit 8. These deposits are very stiff to medium dense and moist.

Colluvium (Qc)

Colluvial deposits with a maximum thickness of 17 feet were encountered in several of the exploratory borings and trenches present in the southern portion of the site. These deposits, in general, consist of silty to clayey sands and silty to sandy clays.

Mission Valley Formation (Tmv)

The Eocene-age Mission Valley Formation was encountered throughout the project site, specifically at Units 1, 2, 10, 11, 16, 17, and 18. The Eocene-age Mission Valley Formation consists of hard claystones and siltstones and dense sandstones. The claystones and siltstones typically possess a medium to high expansion potential and low shear strength, compared to the sandstone units, which have a low expansion potential and higher shear strength properties. Proposed cut slopes within the Eocene-age Mission Valley Formation that would result in exposing the weaker claystones and siltstones are prone to surficial instability and may require stability fills. In addition, some portions of the borings encountered during the geotechnical investigation revealed weathered bedrock zones, which would require deeper remedial grading in order to provide a competent surface to support proposed fills.

The Mission Valley Formation often exhibits highly cemented zones, which may result in excavation difficulty during grading and construction of site improvements (e.g., underground utility lines, building foundations). Although blasting is not anticipated to occur under the proposed project, moderate to heavy ripping should be expected in portions of this formation to facilitate excavation. Generation of oversized materials requiring special handling and placement techniques should also be expected.

Stadium Conglomerate (Tst)

The Eocene-age Stadium Conglomerate was encountered at the project site during the geotechnical investigation on Units 15 and 16, located in the northern portion of the project site, which overlies the Friars Formation and underlies the Mission Valley Formation. As encountered in exploratory borings and trenches, this deposit generally consists of a sandy to clayey conglomerate with interbedded silty to gravelly sandstone. In addition, some of the excavations advanced through this geologic unit encountered difficulty and refusal due to cemented layers and boulders.

Friars Formation (Tf)

The Eocene-age Friars Formation was encountered on site within the southern portion of Unit 15 and underlies the Stadium Conglomerate. This formation typically consists of dense sandstones, hard claystones, and siltstones. Based on the limited extent of this unit on site and the location of the proposed development, excavations within the Friars Formation are not anticipated.

Granitic Rock (Kgr)

Cretaceous-age granitic rock is present throughout the project site, specifically near Units 1, 2, 7, 8, and 13. Based on the subsurface excavations, site reconnaissance, and experience with similar geologic conditions in the area, the rock materials exhibit a variable weathering pattern ranging from completely weathered decomposed granite to outcrops of fresh, extremely strong, hard rock.

The soils derived from excavations within the decomposed granitic rock are expected to consist of very low to low, expansive, silty, medium- to coarse-grained sands. Excavations within the bedrock will generate boulders and oversized materials (rocks greater than 12 inches in diameter) that will require special handling and placement as recommended and discussed in the geotechnical investigation.

Geologic Hazards***Faulting and Seismicity***

According to the Public Facilities, Services, and Safety Element of the City's General Plan, faults influencing local seismicity within the City include the Elsinore, San Jacinto, Coronado Bank, San Diego Trough, San Clemente, and La Nación Faults. In addition, the downtown area of the City is underlain by the active Rose Canyon Fault. Further, local geologic maps show that most neighborhoods in San Diego are underlain by numerous smaller faults. Being situated in such proximity to large faults creates a significant seismic risk to the City (City of San Diego 2018). The California Geological Survey (CGS) considers a fault seismically active when evidence suggests seismic activity within roughly the last 11,700 years. According to the geotechnical investigation, the project site is not located within any "active," "potentially active," or "inactive" fault traces, as defined by CGS. The nearest known active faults to the project site are the Newport–Inglewood Fault and Rose Canyon Fault, which are both located approximately 13 miles west of the site. The CGS-designated portions of the Rose Canyon Fault Zone are within the Alquist–Priolo Earthquake Fault Zone. Historically, earthquakes that occurred near the Newport–Inglewood Fault have had a maximum magnitude of 7.5, while the maximum earthquake magnitude near Rose Canyon Fault is 6.9 (Appendix J). Damage to structures and improvements caused by a major earthquake will depend on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction (City of San Diego 2018).

Liquefaction

Liquefaction typically occurs when a site is located in a zone with seismic activity, on-site soils are cohesionless, groundwater is encountered within 50 feet of the surface, and soil densities are less than about 70% of the maximum dry densities. If all four criteria are met, a seismic event could result in a rapid increase in pore water pressure from the earthquake-generated ground accelerations. The potential for liquefaction at the project site is considered to be negligible due to the dense formational material encountered, remedial grading recommended, and lack of a shallow groundwater condition (Appendix J).

Landslides

According to the City's General Plan, landslides constitute significant hazard risks within the City (City of San Diego 2018). However, no evidence of landslide deposits was encountered at the project site during the geotechnical investigation (Appendix J).

Expansive Soils

Expansive soils are clay soils that expand in volume with an increase in moisture content. Existing soils at the project site are considered to be both non-expansive and expansive, according to the 2016 California Building Code (CBC). Soil samples collected and tested for expansion index in the geotechnical investigation indicate a very low to very high expansion potential (Appendix J).

Tsunamis and Seiches

Tsunamis consist of a series of long-period ocean waves generated by sources such as underwater earthquakes, volcanic eruptions, or slope failures. Associated potential impacts include coastal inundation and water- or debris-related structural damage. Because the project site is located approximately 10.3 miles inland, the potential for on-site tsunami hazards is considered low.

Seiches are defined as wave-like sloshing movements in enclosed or semi-enclosed bodies of water such as lakes or reservoirs, and are most typically associated with seismic activity. Seiches can result in flooding damage and related effects (e.g., erosion) in surrounding areas from spilling or sloshing water, as well as increased pressure on containment structures. Because the project site is not located near or downstream of surface water bodies susceptible to seiche effects, associated hazard potential attributed to seiches would be negligible.

Groundwater

Groundwater and seepage were encountered in several of the exploratory trenches and borings performed during the geotechnical investigation. Groundwater and seepage was found as shallow as 7 feet below ground surface in the northern portion of the site (Trench 126) and as deep as 32 feet below ground surface in Boring Number LB-14, located in the middle portion of the project site. However, due to the geologic conditions and the natural and artificial water sources on the property, groundwater conditions are expected to fluctuate seasonally.

5.6.2 Regulatory Framework

Federal***International Building Code***

The International Building Code (IBC) is a model building code developed by the International Code Council. It has been adopted for use as a base code standard by most jurisdictions in the United States. The code provisions are intended to protect public health and safety while avoiding both unnecessary costs and preferential treatment of specific materials or methods of construction.

U.S. Geological Survey National Landslide Hazards Program

In fulfillment of the requirements of Public Law 106-113, the U.S. Geological Survey created the National Landslide Hazards 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 understanding of the causes of ground failure and suggesting mitigation strategies. 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***Alquist-Priolo Earthquake Fault Zoning Act***

The Alquist-Priolo Earthquake Fault Zoning Act (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 published maps showing these zones. Earthquake fault zones are designated by CGS and are delineated along traces of faults where mapping demonstrates that surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic exploration 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.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (California Public Resources Code, Chapter 7.8, Section 2690 et seq.) directs CGS to protect the public from earthquake-induced liquefaction and landslide hazards (these hazards are distinct from fault surface rupture hazard, which is 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 exploration of the site must be conducted and appropriate mitigation measures incorporated into the design of proposed projects. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with the Guidelines for Evaluating and Mitigating Seismic Hazards in California, adopted by the State Mining and Geology Board on March 13, 1997, and updated in 2008 (CGS 2008).

As of 2012, Seismic Hazard Zone Maps had been prepared for portions of populated areas of Southern California and the San Francisco Bay Area; however, the project site is not located on these Seismic Hazard Zone Maps (CGS 2020). As a result, the provisions of the Seismic Hazards Mapping Act would not apply to the proposed project.

California Building Code

The CBC (24 CCR Part 2) is administered by the California Building Standards Commission, which is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they 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, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The CBC is based on the International Building Code, published by the International Code Conference. The CBC contains California amendments based on the American Society of Civil Engineers Minimum Design Standards 7-05, which provides requirements for general structural design and includes means for determining earthquake loads and other loads (such as wind loads) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

Local

City of San Diego Municipal Code (Seismic Safety Maps)

San Diego Municipal Code Article 5, Division 18, Section 145.1803 and Appendix D of the City Land Development Manual outline specific requirements related to the nature and level of required geotechnical investigations for new development. Requirements include incorporation of appropriate recommendations for mitigation of geologic hazards, when identified, and incorporation of these recommendations into the design of the project, before issuance of a building permit. In addition to the regulatory standards listed above, City requirements related to geologic and geotechnical issues include obtaining a grading permit (San Diego Municipal Code Article 9, Division 6, Section 129.0601, et seq.), and conformance with applicable elements of the City Storm Water Standards Manual and related documents (San Diego Municipal Code Article 3, Division 3, Section 43.0301, et seq.), with stormwater standards discussed in more detail in Section 5.8, Hydrology, and Section 5.18, Water Quality, of this EIR.

City of San Diego General Plan

The Public Facilities, Services and Safety Element of the City General Plan (2018) identifies a number of applicable policies related to seismic, geologic, and structural considerations. Specifically, Policies PF-Q.1 and PF-Q.2 include measures regarding conformance with state laws related to seismic and geologic hazards, conducting/reviewing geotechnical investigations, and maintaining structural integrity with respect to geologic hazards.

PF-Q.1. Protect public health and safety through the application of effective seismic, geologic and structural considerations.

- a. Ensure that current and future community planning and other specific land use planning studies continue to include consideration of seismic and other geologic hazards. This information should be disclosed, when applicable, in the California Environmental Quality Act (CEQA) document accompanying a discretionary action.
- b. Maintain updated citywide maps showing faults, geologic hazards, and land use capabilities, and related studies used to determine suitable land uses.
- c. Require the submission of geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever seismic or geologic problems are suspected.
- d. Utilize the findings of a beach and cliff erosion survey to determine the appropriate rate and amount of coastline modification permissible in the City.

- e. Coordinate with other jurisdictions to establish and maintain a geologic “data bank” for the San Diego area.
- f. Regularly review local lifeline utility systems to ascertain their vulnerability to disruption caused by seismic or geologic hazards and implement measures to reduce any vulnerability.
- g. Adhere to state laws pertaining to seismic and geologic hazards.

PF-Q.2. Maintain or improve integrity of structures to protect residents and preserve communities.

- a. Abate structures that present seismic or structural hazards with consideration of the desirability of preserving historical and unique structures and their architectural appendages, special geologic and soils hazards, and the socio-economic consequences of the attendant relocation and housing programs.
- b. Continue to consult with qualified geologists and seismologists to review geologic and seismic studies submitted to the City as project requirements.
- c. Support legislation that would empower local governing bodies to require structural inspections for all existing pre-Riley Act (1933) buildings, and any necessary remedial work to be completed within a reasonable time.

5.6.3 Impacts Analysis

Issue 1: *Would the proposal expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?*

Impact Threshold

Based on the City’s Significance Determination Thresholds (City 2016a), impacts related to geology and soils would be significant if a project would:

- Expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards.

Impact Analysis

Potential for Hazards from Earthquakes

Surface/Fault Rupture

As previously described in Section 5.6.1, the project site is not located on any known active, potentially active, or inactive fault traces, as defined by CGS. CGS considers a fault seismically active when evidence suggests seismic activity within roughly the last 11,700 years. According to the results of the geotechnical investigation (Appendix J), seven known active faults are located within 50 miles of the project site. The nearest known active faults are the Newport–Inglewood and Rose Canyon Fault Zones, which are both located approximately 13 miles west of the site and are the dominant sources of potential ground motion. Table 5.6-1 lists the estimated maximum earthquake magnitudes and peak ground accelerations for the most dominant faults for the site location calculated for Site Class D, as defined by Table 1613.3.2 of the 2016 CBC.

Table 5.6-1. Estimated Earthquake Effects per Fault

Fault Name	Distance from Project Site (miles)	Maximum Earthquake Magnitude (Mw)	Peak Ground Acceleration		
			Source 1	Source 2	Source 3
Newport-Inglewood	13	7.5	0.19	0.19	0.23
Rose Canyon	13	6.9	0.17	0.17	0.18
Elsinore	25	7.85	0.13	0.13	0.17
Coronado Banks	27	7.4	0.11	0.11	0.12
Palos Verdes	2	7.7	0.12	0.12	0.15
Earthquake Valley	32	6.8	0.08	0.08	0.07
San Jacinto	46	7.88	0.09	0.09	0.11

Source: Appendix J.

Notes: Source 1 = Boore-Atkinson (2008); Source 2 = Campbell-Bozorgnia (2008); Source 3 = Chiou-Youngs (2008).

A site-specific probabilistic seismic hazard analysis was completed as part of the geotechnical investigation (Appendix J). The site-specific probabilistic seismic hazard analysis calculated the expected accelerations from considered earthquake sources using a program that calculates the total average annual expected number of occurrences of site acceleration greater than a specified value. Given the distance of the nearest fault and magnitude of past seismic activity, the proposed project would not expose people or structures to potential substantial adverse effects associated with the rupture of a known earthquake fault. Furthermore, all proposed residences and structures on site would be designed and constructed in accordance with the CBC guidelines.

Ground Shaking

As stated above, the Newport-Inglewood and Rose Canyon Fault Zones, located approximately 13 miles west of the project site, are the closest known active faults. The results of the site-specific probabilistic seismic hazard analysis are summarized in Table 5.6-2.

Table 5.6-2. Seismic Hazard Probability

Probability of Exceedance	Peak Ground Acceleration		
	Source 1	Source 2	Source 3
2% in a 50-year period	0.45	0.37	0.42
5% in a 50-year period	0.35	0.28	0.31
10% in a 50-year period	0.28	0.22	0.24

Source: Appendix J.

Notes: Source 1 = Boore and Atkinson 2008; Source 2 = Campbell and Bozorgnia 2008; Source 3 = Chiou and Youngs 2008.

While listing peak accelerations is useful for comparison of potential effects of fault activity in a region, other considerations are important in seismic design, including the frequency and duration of motion and the soil conditions underlying the site. The project site is likely to be subjected to strong ground motion from seismic activity similar to that of the rest of the City and Southern California, due to the seismic activity of the region as a whole. However, compliance with the CBC and the seismic design criteria recommendations of the geotechnical investigation would reduce exposure of people or structures to potential substantial adverse effects from seismic ground shaking.

Landslides

As discussed in Section 5.6.1, no evidence of landslide deposits was encountered at the site during the geotechnical investigation (Appendix J). Additionally, the proposed project would be designed in accordance with the latest CBC, which would minimize potential risks associated with landslides.

Liquefaction and Seismically Induced Settlement

As discussed in Section 5.6.1, liquefaction typically occurs when a site is located in a zone with seismic activity, on-site soils are cohesionless, groundwater is encountered within 50 feet of the surface, and soil densities are less than about 70% of the maximum dry densities. Per the geotechnical investigation, the potential for liquefaction at the site is considered to be negligible due to the dense formational material encountered, the remedial grading recommended, and the lack of a shallow groundwater condition (Appendix J).

Tsunamis and Seiches

As previously described, the project site is located approximately 10.3 miles inland and is not located near or downstream of surface water bodies susceptible to seiche effects. As a result, no impacts related to tsunami and seiche hazards are expected to occur.

Significance Determination

Per the geotechnical investigation, no soils or geologic conditions were encountered that would preclude the development of the project site as proposed, with incorporation of the recommendations outlined in the geotechnical investigation. Further, the proposed project would be required to comply with requirements of the CBC, which would further reduce impacts related to geologic hazards. Nonetheless, the construction plans for the proposed project have not yet been finalized. Once the construction plans are submitted to the City, the Applicant shall prepare a more detailed geotechnical investigation to ensure compliance with regulations and existing geologic conditions on site. With implementation of the recommendations and appropriate building design measures consistent with the IBC/CBD, the risk of potential effects from geologic hazards would be reduced to an acceptable level of risk. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 2: Would the proposal result in a substantial increase in wind or water erosion of soils, either on or off the site?

Impact Threshold(s)

Based on the City's Significance Determination Thresholds (2016a), impacts related to geology and soils would be significant if a project would result in a substantial increase in wind or water erosion of soils.

Impact Analysis

Potential erosion and sedimentation impacts would be temporarily increased during proposed construction, through activities such as excavation, grading, and removal of surface stabilizing features (e.g., vegetation and pavement). Extensive or prolonged erosion can result in effects such as damaging or destabilizing slopes, soil loss, and deposition of eroded material in roadways or drainage structures. In addition, the off-site transport of sediment can potentially result in effects to downstream receiving water quality, such as increased turbidity and the provision of a transport mechanism for other contaminants that tend to adhere to sediment particles (e.g., hydrocarbons). Additional discussion of potential water quality effects related to erosion and sedimentation is provided in Section 5.18.

Developed areas would be most susceptible to erosion between the beginning of grading/construction and the installation of pavement or establishment of permanent cover in landscaped areas. However, developed areas introduced on site under the proposed project would be stabilized through installation of structures/hardscape and drought-tolerant, naturalized landscaping.

Short-term erosion and sedimentation impacts would be addressed through conformance with applicable elements of the City stormwater program and related National Pollutant Discharge Elimination System (NPDES) standards. Specifically, this would entail conformance with applicable City regulatory codes as outlined in Section 5.6.2, as well as the NPDES Construction General Permit. Pursuant to the discussion of construction-related water quality concerns in Section 5.18, this would entail implementing an approved stormwater pollution prevention plan (SWPPP) and related plans and best management practices (BMPs), including appropriate measures to address erosion and sedimentation.

Significance Determination

Based on implementation of appropriate erosion and sediment control BMPs as part of, and in conformance with, an approved SWPPP and related City and NPDES requirements, associated potential erosion and sedimentation impacts from implementation of the project would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 3: *Would the proposal 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?*

Impact Threshold

Based on the City Significance Determination Thresholds (2016a), impacts related to geology and soils would be significant if a project would be located on a geological unit or soil that is unstable or that would become unstable as a result of the project and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse.

Impact Analysis

As outlined in Section 5.6.1 and the geotechnical investigation (Appendix J), the project site is underlain by surficial units that include golf course fill, previously compacted fill, and alluvial and colluvial deposits. The potential for liquefaction or landslides to occur on site is considered negligible. However, proposed cut slopes within the Eocene-age Mission Valley Formation would result in exposing the weaker claystones and siltstones, which are prone to surficial instability and may require stability fills. In addition, some portions of the borings encountered during the geotechnical investigation in weathered bedrock zones would require deeper remedial grading in order to provide a competent surface to support proposed fills. The proposed project would be required to implement the recommendations included in the geotechnical investigation, which include specific requirements for cut slopes within these areas, which would reduce potential impacts resulting from unstable soils and minimize potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Additionally, the proposed project would not be approved or built without adequately demonstrating compliance with the CBC and applicable geologic hazards regulations. 5.6

Significance Determination

Through implementation of associated design/construction recommendations set forth in the project Geotechnical Investigation, and mandatory conformance with applicable regulatory/industry standard and codes, including the IBC/CBC and pertinent City criteria would reduce the risk of potential effects from geologic hazards to acceptable levels. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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5.7 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) emissions for the proposed Trails at Carmel Mountain Ranch Project (project) of the site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable related to implementation of the project. The following discussion is based on the Climate Action Plan (CAP) Consistency Checklist and included as Appendix K.

5.7.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Since the project site is not in use, no existing emission occur from onsite activities. Regarding the old clubhouse onsite that may be used for special events, as described in the project description, it is unknown what the frequency and size of these events would be; thus, to be conservative in analyzing the change in emissions from current to proposed conditions, the site is assumed not to be in use. Therefore, it is assumed that no cars are traveling to or from the site and the site is not being maintained.

Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, that lasts for an extended period of time (typically decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the Sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017).

The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (troposphere). The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and are the most significant driver of observed climate change (EPA 2017; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013).

Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), water vapor, black carbon, aerosols, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Some GHGs, such as CO₂, CH₄, and N₂O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases (e.g., HFCs, HCFCs, PFCs, and SF₆), which are associated with certain industrial products and processes.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (EPA 2017). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO₂e). The current version of California Emissions Estimator Model (CalEEMod) (Version 2016.3.2) assumes that the GWP for CH₄ is 25 (so emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed project.

5.7.2 Regulatory Framework

Federal

Massachusetts v. U.S. Environmental Protection Agency

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the U.S. Environmental Protection Agency (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 December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is the “endangerment finding.”
- The administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is 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.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- 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 in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- 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.

Federal Vehicle Standards

In response to the *Massachusetts v. EPA* ruling, the George W. Bush Administration issued Executive Order (EO) 13432 in 2007 directing EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011. In 2010, EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG emissions reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG emissions and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO₂ 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 through 2021 (77 FR 62624–63200), and NHTSA intends to set standards for model years 2022 through 2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 FR 57106–57513).

In August 2016, 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 of sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

The Current Administration

On September 19, 2019, NHTSA and EPA issued a final action entitled the “One National Program Rule” to enable the federal government to provide nationwide uniform fuel economy and GHG emission standards for automobiles and light-duty trucks. This action finalizes critical parts of the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule that was first proposed in August 2018. This action makes clear that federal law preempts state and local tailpipe GHG emissions standards as well as zero emission vehicle (ZEV) mandates. California and other states have challenged federal actions that would delay or eliminate GHG emissions reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. The timing and consequences of these types of federal decisions and subsequent challenges are speculative at this time,

State

Executive Order S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

Assembly Bill 32 and the Climate Change Scoping Plan

In furtherance of the goals established in EO S-3-05, the California State Legislature enacted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. Assembly Bill 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, the California Air Resources Board (CARB) is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. AB 32 also authorizes 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.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons [MMT] CO₂e). CARB's adoption of this limit is in accordance with the California Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with the California Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020 (CARB 2008). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 29% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations [referred to as "business-as-usual"]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document (Final Supplement), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG-reduction regulations (CARB 2011a). Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 22% (down from 29%) from the business-as-usual conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009 through 2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 29%) from the business-as-usual conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing

its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050” (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified “six key focus areas comprising major components of the state’s economy to evaluate and describe the larger transformative actions that will be needed to meet the state’s more expansive emission reduction needs by 2050.” Those six areas are energy, transportation (e.g., vehicles/equipment, sustainable communities, housing, fuels, infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05’s 2050 reduction goal (CARB 2014).

Based on CARB’s research efforts presented in the First Update, it has a “strong sense of the mix of technologies needed to reduce emissions through 2050.” Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies (CARB 2014).

As part of the First Update, CARB recalculated the state’s 1990 emissions level using more recent GWPs identified by IPCC. Using the recalculated 1990 emissions level (431 MMT CO₂e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 29% or 16%) from the business-as-usual conditions (CARB 2014).

On January 20, 2017, CARB released the 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017a). This update proposed CARB’s strategy for achieving the state’s 2030 GHG target as established in SB 32 (discussed below), including continuing the cap-and-trade program through 2030. The Second Update incorporated approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document adopted by CARB in March 2017; SLCP Reduction Strategy), and acknowledged the need for reducing emissions in agriculture and highlighted the work underway to ensure that California’s natural and working lands increasingly sequester carbon (CARB 2017b). During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2017 Scoping Plan Update (CARB 2017a). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update stated, “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 [the California Environmental Quality Act (CEQA)]” (CARB 2017a). The Second Update was approved by CARB’s Governing Board on December 14, 2017.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide 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 statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 called for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO₂e. The EO also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets, made changes to CARB's membership and increased legislative oversight of CARB's climate change-based activities, and expanded dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring 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 California State Senate and three members of the California State Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the California State Legislature to CARB as nonvoting members; required CARB to make available and update (at least annually through its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and required CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state, and SB 1383 (2016) required CARB to approve and implement the SLCP Reduction Strategy. SB 1383 also established specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH₄ and HFCs, and 50% below 2013 levels by 2030 for human-caused black carbon), and provided direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, in March 2017 CARB adopted its SLCP Reduction Strategy, which established a framework for the statewide reduction of emissions of black carbon, CH₄, and fluorinated gases.

Executive Order B-55-18

EO B-55-18 (September 2018) established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." This executive order directed CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

Title 24, Part 6 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. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of

energy” (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402[d]), and cost effectiveness (California Public Resources Code, Sections 25402[b][2] and 25402[b][3]). These standards are updated to consider and incorporate new energy-efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The 2019 standards continue to improve upon the 2016 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 standards went into effect on January 1, 2020.

Title 24, Part 11 of the California Code of Regulations

In addition to the CEC’s efforts, in 2008, the California Building Standards Commission adopted the nation’s first green building standards. The California Green Building Standards Code (24 CCR 11) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. 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, schools, and hospitals. The CALGreen 2019 standards went into effect on January 1, 2020, and continue to improve on the 2016 CALGreen standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

Title 20 of the California Code of Regulations

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Assembly Bill 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Senate Bill 1078

SB 1078 (2002) established the RPS program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

Senate Bill 1368

SB 1368 (2006) required CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. This effort helps 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.

Senate Bill X1 2

SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year be secured from qualified renewable energy sources by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under SB X1 2, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

Senate Bill 350

SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualified renewable energy sources. In addition, SB 350 included the goal of doubling the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or classes of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also required the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

Senate Bill 100

SB 100 (2018) increased the standards set forth in SB 350, which established that 44% of the total electricity sold to retail customers in California per year be secured from qualified renewable energy sources by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. Under SB 100, it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that achievement of 100% zero-carbon electricity resources not increase the carbon emissions elsewhere in the western grid and that achievement of this goal not occur through resource shuffling.

Executive Order S-1-07

Issued on January 18, 2007, EO S-1-07 set a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources such as algae, wood, and agricultural waste.

Senate Bill 375

SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations were then responsible for preparing a sustainable communities strategy (SCS) within their regional transportation plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, would achieve, if feasible, the GHG reduction targets. If a 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.

Pursuant to Government Code, Section 65080(b)(2)(K), an SCS does not (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for San Diego Association of Governments (SANDAG) are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SANDAG completed and adopted its 2050 RTP/SCS in October 2011 (SANDAG 2011). In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the 2050 RTP/SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

In October 2015, SANDAG adopted San Diego Forward: The Regional Plan (Regional Plan; SANDAG 2015). Like the 2050 RTP/SCS, the Regional Plan meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the Regional Plan would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

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 2011b). To improve air quality, CARB has implemented 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 before 2012. To reduce GHG emissions, CARB, in conjunction with EPA and NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles that are estimated to reduce GHG emissions by 34% in 2025. The 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 (EVs) in the 2018 to 2025 model years.

Executive Order B-16-12

EO B-16-12 (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of ZEVs. This EO also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this EO, the Governor convened an interagency working group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

Assembly Bill 1236

AB 1236 (2015) requires local land use jurisdictions to approve applications for the installation of EV charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific adverse impact on public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. The bill provides for appeal of that decision to the planning commission, as specified. AB 1236 requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for EV charging stations, as specified. The City of San Diego (City) added Section 86.0151, Electric Vehicle Parking Regulations, to the San Diego Municipal Code in August 2015 in response to the AB 1236 requirements.

Senate Bill 350

In 2015, SB 350—the Clean Energy and Pollution Reduction Act—was enacted into law. As one of its elements, SB 350 established a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see California Public Utilities Code, Section 740.12).

Executive Order B-48-18

EO B-48-18 (2018) launched an 8-year initiative to accelerate the sale of EVs through a mix of rebate programs and infrastructure improvements. The order also set a new EV target of 5 million EVs in California by 2030. EO B-48-18 included funding for multiple state agencies, including CEC, to increase EV charging infrastructure and for CARB to provide rebates for the purchase of new EVs and purchase incentives for low-income customers.

Assembly Bill 939 and Assembly Bill 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a

disposal reporting system. AB 939 mandated a reduction of waste being disposed of, in which jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

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. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the state's policy goal. The California Department of Resources Recycling and Recovery has conducted multiple workshops and published documents that identify priority strategies that it believes would assist the state in reaching the 75% goal by 2020 (CalRecycle 2015).

Executive Order B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. EO B-29-15 includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance, that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Senate Bill 97

SB 97 (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resources Agency (CNRA) adopted the CEQA Guidelines amendments related to GHG in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

With respect to GHG emissions, the CEQA Guidelines, Section 15064.4(a), state that lead agencies should “make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a “model or methodology” to quantify the emissions or by relying on “qualitative analysis or other performance based standards” (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California’s response to the impacts of global climate change, particularly sea-level rise. Therefore, EO S-13-08 directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009b), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state’s vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

Biological Diversity v. California Department of Fish and Wildlife

In its decision in *Center for Biological Diversity v. California Department of Fish and Wildlife (Newhall)* 62 Cal.4th 204 (2015), the California Supreme Court set forth several options that lead agencies may consider for evaluating the cumulative significance of a proposed project’s GHG emissions:

- A calculation of emissions reductions compared to a “business-as-usual” scenario based on the emissions reductions in CARB’s Scoping Plan, including examination of the data 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
- Assessment of consistency with AB 32’s goals by looking at compliance with regulatory programs designed to reduce GHG emissions from particular activities
- Use of geographically specific GHG emissions reduction plans to provide a basis for tiering and streamlining of project-level CEQA analysis
- Reliance on existing numerical thresholds of significance for GHG emissions, though use of such thresholds is not required

The Newhall decision specifically found that use of a numerical threshold is not required.

Local

City of San Diego General Plan

The State of California requires cities and counties to prepare and adopt a general plan to set out a long-range vision and comprehensive policy framework for its future. The state also mandates that the plan be updated periodically to ensure relevance and utility. The City's General Plan 2008 (General Plan) was unanimously adopted by the City Council on March 10, 2008. The General Plan builds on many of the goals and strategies of the former 1979 General Plan, in addition to offering new policy direction in the areas of urban form, neighborhood character, historic preservation, public facilities, recreation, conservation, mobility, housing affordability, economic prosperity, and equitable development. It recognizes and explains the critical role of the community planning project as the vehicle to tailor the City of Villages strategy for each neighborhood. It also outlines the plan amendment process, and other implementation strategies, and considers the continued growth of the City beyond the year 2020 (City of San Diego 2008).

Conservation Element. The Conservation Element contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, that help define the City's identity, and that are relied on for continued economic prosperity. The purpose of this element is to help the City become an international model of sustainable development and conservation and to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City's identity, contribute to its economy, and improve its quality of life.

The City has adopted the following General Plan policies (City of San Diego 2008) related to climate change (refer to Section 5.9, Land Use, for a consistency analysis for policies applicable to the project):

- **CE-A.2.** Reduce the City's carbon footprint. Develop and adopt new or amended regulations, projects, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
 - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
 - Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;
 - Reduce waste by improving management and recycling projects;
- **CE-A.8.** Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-1.2, or by renovating or adding on to existing buildings, rather than constructing new buildings.
- **CE-A.9.** Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:
 - Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;
 - Using life cycle costing in decision-making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system.
- **CE-I.4.** Maintain and promote water conservation and waste diversion projects to conserve energy.
- **CE-I.5.** Support the installation of photovoltaic panels, and other forms of renewable energy production.
- **CE-I.10.** Use renewable energy sources to generate energy to the extent feasible.

City of San Diego Climate Action Plan

On January 29, 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program. Actions identified in the program include the following:

1. Participation in the Cities for Climate Protection program coordinated through the International Council of Local Environmental Initiatives;
2. Establishment of a 15% GHG reduction goal set for 2010, using 1990 as a baseline; and
3. Direction to use the recommendations of a scientific Ad Hoc Advisory Committee as a means to improve the GHG Emission Reduction Action Plan within the City organization and to identify additional community actions.

In 2005, the City released a Climate Protection Action Plan. This report includes many of the recommendations provided by the Ad Hoc Advisory Committee and City staff. By implementing these recommendations, the City could directly address the challenges relating to mitigation for state and federal ozone standards nonattainment (with associated health benefits) and enhanced economic prosperity, specifically related to the tourism and agricultural sectors.

The Climate Protection Action Plan evaluated City-wide GHG emissions, particularly three elements: (1) the GHG projection in 2010 resulting from no action taken to curb emissions, (2) the GHG emission reductions due to City of San Diego actions implemented between 1990 and 2003, and (3) the GHG reductions needed by 2010 to achieve 15% reduction. The Climate Protection Action Plan does not recommend or require specific strategies or measures for projects within the City to reduce emissions.

In December 2015, the City adopted its final Climate Action Plan (CAP) (City of San Diego 2015). With implementation of the CAP, the City aims to reduce emissions 15% below the baseline to approximately 11.1 MMT CO₂e by 2020, 40% below the baseline to approximately 7.8 MMT CO₂e by 2030, and 50% below the baseline of 2010 to approximately 6.5 MMT CO₂e by 2035. It is anticipated that the City would exceed its reduction target by 1.3 MMT CO₂e in 2020, 176,528 MT CO₂e in 2030, and 127,135 MT CO₂e in 2035 with implementation of the CAP. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The City has identified the following five strategies to reduce GHG emissions to achieve the 2020 and 2035 targets:

1. Energy- and water-efficient buildings
2. Clean and renewable energy
3. Bicycling, walking, transit, and land use
4. Zero waste (gas and waste management)
5. Climate resiliency

CAP Consistency Checklist

To provide a mechanism for CEQA Tiering, the City amended the CAP to include a CAP Consistency Checklist intended to provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Consistency Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets

identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG emissions reduction targets. Projects that are consistent with the CAP as determined through the use of this checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

5.7.3 Impacts Analysis

Issue 1: *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Issue 2: *Would the project conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

Impact Threshold(s)

Pursuant to CEQA Guidelines Sections 15183.5(b), 15064(h)(3), and 15130(d), the City may determine that a project's incremental contribution to a cumulative GHG effect is not cumulatively considerable if the project complies with the requirements of a previously adopted GHG emissions reduction plan.

Under the City's CEQA Significance Determination Thresholds, the method for determining significance for project-level environmental documents is through the CAP Consistency Checklist. The CAP Consistency Checklist is used by the City to verify project-by-project consistency with the underlying assumptions in the CAP and ensure that the City would achieve its emissions reduction targets. The CAP Consistency Checklist includes a three-step process to determine project consistency.

Step 1 consists of an assessment to determine a project's consistency with the growth projections of the CAP.

Step 2 includes a list of measures a project is required to implement. Regardless of whether the project answers "yes" or "no" to Step 1, implementation of the measures listed in Step 2 are required for all projects, as applicable.

Step 3 focuses on assessing if a project would implement the General Plan's City of Villages strategy, the General Plan's Mobility Element, pedestrian improvements, the Bicycle Master Plan, and support transit-oriented development within a Transit Priority Area (TPA). Step 3 applies to projects proposing a land use and/or zoning designation amendment and increase density within a TPA.

Impact Analysis

Step 1

The project site is designated Park, Open Space, and Recreation in the General Plan. The project site is currently designated as Private Recreation–Golf Course, as identified within the Community Plan Land Use Map. The project proposes a General Plan amendment and Carmel Mountain Ranch Community Plan amendment, as well as a Rezone, which would increase the intensity of use and allow for the proposed

residential development on site. The General Plan Amendment would redesignate the project site for Low-Medium Residential, Medium Residential, Open Space, and Commercial. The Community Plan amendment would redesignate 10 of the 18 former golf course holes and the clubhouse site for residential use, and 8 of the 18 former golf course holes for open space. The project site currently includes the following zoning:

- AR-1-1 (agricultural residential)
- RS-1-14 (residential single unit)
- RM-2-5 (residential multiple unit)
- RM-3-7 (residential multiple unit)

The proposed project would include the following changes to the existing zoning:

- 12.01 acres from AR-1-1 (agricultural-residential) to RM-1-1 (residential-multiple unit)
- 4.16 acres from AR-1-1 (agricultural-residential) to RM-1-3 (residential-multiple unit)
- 10.07 acres from AR-1-1 (agricultural-residential) to RM-2-4 (residential-multiple unit)
- 11.4 acres from AR-1-1 (agricultural-residential) to RM-2-5 (residential-multiple unit)
- 5.58 acres from AR-1-1 (agricultural-residential) to RM-2-6 (residential-multiple unit)
- 3.42 acres from AR-1-1 (agricultural-residential) to RM-3-7 (residential-multiple unit)
- 4.45 acres from RS-1-14 (residential-single unit) to RM-2-5 (residential-multiple unit)
- 1.88 acres from RS-1-14 (residential-single unit) to AR-1-1 (agricultural-residential)
- 0.41 acres from RM-2-5 (residential-multiple unit) to AR-1-1 (agricultural-residential)
- 0.13 acres from RM-3-7 (residential-multiple unit) to AR-1-1 (agricultural-residential)
- 5.55 acres from RM-1-1 (residential-multiple unit) to AR-1-1 (agricultural-residential)

The project would not be consistent with the existing land use plan and zoning designations. However, the project would increase density within a TPA and, as shown below, it would implement CAP Strategy 3 actions, consistent with Step 3 of the CAP Consistency Checklist. Therefore, the proposed project can respond “yes” to Step 1 of the CAP Consistency Checklist under Option B.

Step 2

The second step of the CAP consistency review is to review and evaluate a project’s consistency with the applicable strategies and actions of the CAP. Table 5.7-1 shows the proposed project’s consistency with each item within the CAP Consistency Checklist.

Table 5.7-1. Climate Action Plan Consistency Checklist

CAP Consistency Checklist Item	Compliance
1. Cool/Green Roofs: <ul style="list-style-type: none"> • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; OR 	Consistent. The proposed project would include roofing materials with a minimum 3-year aged solar reflection and thermal

Table 5.7-1. Climate Action Plan Consistency Checklist

CAP Consistency Checklist Item	Compliance
<ul style="list-style-type: none"> • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; OR • Would the project include a combination of the above two options? <p>Check "N/A" only if the project does not include a roof component.</p>	<p>emittance or solar reflection index equal to or greater than that provided in Table 1 of Attachment A of the CAP Consistency Checklist.</p>
<p>2. Plumbing Fixtures and Fittings:</p> <p>With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following:</p> <p>Residential buildings:</p> <ul style="list-style-type: none"> • Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi; • Standard dishwashers: 4.25 gallons per cycle; • Compact dishwashers: 3.5 gallons per cycle; and • Clothes washers: water factor of 6 gallons per cubic feet of drum capacity? <p>Nonresidential buildings:</p> <ul style="list-style-type: none"> • Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and • Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)? <p>Check "N/A" only if the project does not include any plumbing fixtures or fittings.</p>	<p>Consistent.</p> <p>The proposed project would include low-flow fixtures and appliances consistent with the requirements of this Checklist item.</p>

Table 5.7-1. Climate Action Plan Consistency Checklist

CAP Consistency Checklist Item	Compliance
<p>3. Electric Vehicle Charging:</p> <ul style="list-style-type: none"> Multiple-family projects of 17 dwelling units or less: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents? Multiple-family projects of more than 17 dwelling units: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents? Non-residential projects: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use? <p>Check “N/A” only if the project is a single-family project or would not require the provision of listed cabinets, boxes, or enclosures connected to a conduit linking the parking spaces with electrical service, e.g., projects requiring fewer than 10 parking spaces.</p>	<p>Consistent.</p> <p>The proposed project would provide listed cabinets, boxes or enclosures connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of EV supply equipment to provide EV charging stations, and at a minimum 3% of the spaces would have the necessary EV supply equipment installed to provide active EV charging stations ready for use by residents.</p>
<p>4. Bicycle Parking Spaces:</p> <p>Would the project provide more short- and long-term bicycle parking spaces than required in the City’s Municipal Code (Chapter 14, Article 2, Division 5)?</p> <p>Check “N/A” only if the project is a residential project.</p>	<p>Not Applicable.</p> <p>The proposed project is residential.</p>
<p>5. Shower Facilities:</p> <p>If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the California Green Building Standards Code as shown in the table below?</p> <p>Check “N/A” only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).</p>	<p>Not Applicable.</p> <p>The proposed project is residential.</p>
<p>6. Designated Parking Spaces:</p> <p>If the project includes a nonresidential use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?</p> <p>This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.</p>	<p>Not Applicable.</p> <p>The proposed project is residential.</p>

Table 5.7-1. Climate Action Plan Consistency Checklist

CAP Consistency Checklist Item	Compliance
<p>Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.</p> <p>Check “N/A” only if the project is a residential project, or if it does not include nonresidential use in a TPA.</p>	
<p>7. Transportation Demand Management Program:</p> <p>If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes:</p> <p>At least one of the following components:</p> <ul style="list-style-type: none"> • Parking cash out program • Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools • Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development <p>And at least three of the following components:</p> <ul style="list-style-type: none"> • Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees • On-site carsharing vehicle(s) or bikesharing • Flexible or alternative work hours • Telework program • Transit, carpool, and vanpool subsidies • Pre-tax deduction for transit or vanpool fares and bicycle commute costs • Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either on site or within 1,320 feet (1/4 mile) of the structure/use? <p>Check “N/A” only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees).</p>	<p>Not Applicable.</p> <p>The proposed project is residential.</p>

Source: Appendix K.

Notes: N/A = not applicable; psi = pounds per square inch; EV = electric vehicle; TPA = Transit Priority Area; HOV = high-occupancy vehicle; SANDAG = San Diego Association of Governments.

As shown in Table 5.7-1, the project would be consistent with all applicable GHG reduction strategies found within Step 2 of the CAP Consistency Checklist.

Step 3

Lastly, as identified under Step 1 the project is proposing a land use and zoning designation amendment that would result in increased density within a TPA; therefore the project would be required to implement the action strategies of Step 3 as outlined in the following discussion.

CAP-1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Units 5 and 6 of the project are located within a TPA; therefore, the entire project is within a TPA.

Yes. The proposed project would result in an increase in density above what is currently zoned for the site. Because the proposed project would locate new residential units close to the San Diego Metropolitan Transit System (MTS) Sabre Springs/Peñasquitos Transit Station (within 1,000 feet) and an access point for the Interstate (I) 15 high-occupancy vehicle (HOV) lanes (within 2,000 feet), the proposed project supports the General Plan's City of Villages strategy, including Policies LU-A.6 and LU-A.10, as it is an infill residential project. Further, the proposed project would include approximately 6.74 miles of pedestrian and bicycle pathways (including 4.89 miles of existing and 1.85 miles of new trails) that would allow residents to access the mass transit options close to the proposed project without using single-occupancy vehicles. The trails, which would be completed in Phases I and II, would allow residents to take advantage of the proximity to public transportation as a project design feature. Thus, the project would implement the General Plan's City of Villages strategy in an identified TPA and the development result in an increase in the capacity for transit-supportive residential and/or employment densities.

CAP-2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Yes. The proposed project would add medium-density residential units to an infill site located close to established mass transit (the MTS Sabre Springs/Peñasquitos Transit Station and an access point for the I-15 HOV lanes). The proposed project would include approximately 6.74 miles of pedestrian and bicycle pathways (including 4.89 miles of existing and 1.85 miles of new trails) that would allow residents to access the mass transit options close to the proposed project without using single-occupancy vehicles. The trails would be completed in Phases I and II to allow residents to take advantage of the proximity to public transportation as a project design feature. Thus, the proposed project would implement the General Plan's Mobility Element in a TPA to increase the use of transit.

CAP-3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Yes. The proposed project would include approximately 6.74 miles of pedestrian and bicycle pathways (including 4.89 miles of existing and 1.85 miles of new trails). The multimodal trail system would provide internal connections throughout the project site and, more importantly, connect residents to the neighborhoods, commercial developments, and mass transit stops surrounding the project site. The trails, which are designed for pedestrians and bicyclists, would be completed in Phases I and II to allow residents to take advantage of the proximity to public transportation as a project design feature. Thus, proposed project would implement pedestrian improvements in TPAs to increase walking opportunities.

CAP-4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Yes. The proposed project would include approximately 6.74 miles of pedestrian and bicycle pathways (including 4.89 miles of existing and 1.85 miles of new trails). The multimodal trail system would provide internal connections throughout the project site and, more importantly, connect residents to the neighborhoods and commercial developments surrounding the project. The multimodal trail is designed for pedestrians and bicyclists and it would allow residents to access the mass transit options close to the proposed project without using single-occupancy vehicles. The trail network, which would be completed in Phases I and II, would allow residents to take advantage of the proximity to public transportation as a project design feature, and would include enhancements to the existing Class II bicycle lanes around the project site. The site is unique in that it consists of 18 separate development areas (11 of which are proposed for residential development), creating linkages through the site to key destination areas. In total, the proposed project would have 11 access points throughout the 164.5-acre site connecting to various roadways in the community. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity. Traffic calming measures and low speed designs would be used in the design of on-site roadways, with "shared roadway" markings identifying that bicycle use is permitted. Trail staging areas would be constructed on site to provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Thus, the proposed project would implement the City's Bicycle Master Plan to increase bicycling opportunities.

CAP-5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Yes. The proposed project would add medium-density residential units to an infill site located close to established mass transit (the MTS Sabre Springs/Peñasquitos Transit Station and access to the I-15 HOV lanes). The residents of the proposed project would be able to take advantage of established mass transit opportunities without having to use a single-occupancy vehicle. The proposed project is residential, so it would not directly create jobs, but there would be jobs needed to fulfill the maintenance, landscaping, and repair of the development, including the new open space and park areas. The proposed project would create jobs during the construction phase and residents would be close to employment opportunities nearby, including the Rancho Bernardo and Rancho Peñasquitos employment centers. The Rancho Bernardo and Rancho Peñasquitos employment centers are located directly to the north and southwest of the project area and are estimated to contain 16,542 and 8,861 employees, respectively (SANDAG 2019a, 2019b). The proposed project would create a multimodal trail system that would provide internal connections throughout the project site and, more importantly, connect residents to the neighborhoods and commercial developments surrounding the project. The multimodal trail is designed for pedestrians and bicyclists. The trail network would include enhancements to the existing Class II bicycle lanes around the project site. The site is unique in that it consists of 18 separate development areas (11 of which are proposed for residential development), creating linkages through the site to key destination areas. In total, the proposed project has 11 access points throughout the 164.5-acre site connecting to various roadways in the community. Trails would connect to sidewalks along the proposed on-site roadways and along existing adjacent residential streets to maximize access and connectivity. Traffic calming measures and low speed designs would be used in the design of on-site roadways, with "shared roadway" markings identifying that bicycle use is permitted. Thus, the proposed project would incorporate implementation mechanisms that support Transit Oriented Development.

CAP-6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Yes. The project would include large shade/specimen, shade, riparian, screening, and accent trees. There would be a minimum of five tree species included as part of the development from each category listed. The project would incorporate tree planting that would result in 29% coverage of the project site, which would contribute toward the City's 20% urban canopy tree coverage goal. In addition, the project also aims to preserve existing trees that are outside the limits of grading, and the applicant has prepared a landscape plan that identifies existing trees to remain. In total, the project would involve planting 363 new trees and keeping 1,521 existing trees. Thus, the project would implement the Urban Forest Management Plan to increase the City's urban tree canopy coverage.

Plan, Policy or Regulation Consistency

As detailed in Section 5.7.2, Regulatory Framework, numerous plans, policies, and regulations have been adopted for the purpose of reducing GHG emissions. The principal overall state plan and policy are AB 32 and the follow-up legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. The City's CAP outlines the measures for the City to achieve its share of state GHG reductions. As discussed under Impact 1 above, the project would be consistent with the CAP and, therefore, would be consistent with state GHG reduction goals.

Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the LCFS, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide, rather than project-specific, level. The project does not conflict with or inhibit implementation of those plans and regulations.

The City General Plan includes policies to reduce GHG emissions. The project would not conflict with the applicable GHG reducing goals or policies within the City's General Plan as identified in Section 5.7.2. Therefore, the project would be consistent with the City's General Plan policies for reducing GHG emissions.

Significance of Impact

The project would be consistent with City's CAP. Therefore, the project would not conflict with the City's CAP or any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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5.8 Health and Safety

This section describes the existing health and safety conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the Phase I Environmental Site Assessment (ESA), prepared by Stantec (April 2018) and included as Appendix L.

5.8.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

The site is primarily characterized by disturbed, fallow land left over from the previous golf course use. Previous golf course maintenance could have resulted in ground contamination from uses of petroleum products (e.g., for vehicle and equipment maintenance and use), pesticides, herbicides, and fertilizers. Other hazardous materials may have also been used for maintenance activities, such as solvents and cleaning products.

Highland Ranch Elementary School, located at 14840 Waverly Downs Way, is located adjacent to the project site to the north. Highland Ranch Elementary School is the only school within 0.25 miles of the proposed project.

Site History

Based on a review of publicly available aerial photographs performed as part of the Phase I ESA, the golf course was constructed between 1975 and 1996. Prior to construction of the golf course, it appears that the project site was undeveloped. Residential development surrounding the project site occurred between 1975 and 1996.

Hazardous Materials

Government Code Section 65962.5 requires the California Department of Toxic Substances Control (DTSC), the State Department of Health Services, the State Water Resources Control Board (SWRCB), and the California Department of Resources Recycling and Recovery to compile and annually update lists of hazardous waste sites and lands designated as hazardous waste sites throughout the state. The provisions in Government Code Section 65962.5 are commonly referred to as the “Cortese List.” The Cortese List was reviewed for hazardous waste sites along the project alignment. Resources included on the Cortese List include the following:

- List of hazardous waste and substances sites from the DTSC EnviroStor database
- List of open, active leaking underground storage tank (LUST) sites from the SWRCB GeoTracker database

- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of active cease-and-desist orders and cleanup and abatement orders from SWRCB
- List of hazardous waste facilities subject to corrective action identified by DTSC

The above-listed databases and lists for information regarding hazardous materials or hazardous wastes were reviewed to determine what if any potential contamination exists within the boundaries of the project site. Although no Cortese List sites were identified on the project site, the site has been listed on various hazardous materials databases, including the County of San Diego (County) HMD, Statewide Environmental Evaluation and Planning System Underground Storage Tanks (SWEEPS UST) database, the DTSC HAZNET database, and the U.S. Environmental Protection Agency (EPA) Facility Index System (FINDS) for previous uses of the site as both an AT&T and Verizon Wireless facility. More specifically, the project site was listed as AT&T Mobility in the San Diego HMD and SWEEPS UST databases, as Carmel Mountain Ranch Country Club in the HAZANET database, and as Verizon Wireless: Carmel Mountain Country Club in the FINDS database.

The AT&T listing of the project site describes the historic presence of a single 500-gallon underground storage tank (UST) containing gasoline, which was installed in 1989 and removed in 1993, as well as the handling and storage of lead-acid batteries at the project site in 2017. Further, a cellular server structure is also located on the project site, in the existing parking area for the clubhouse. No other information is listed in the environmental database report prepared by the County of San Diego Department of Environmental Health (DEH) regarding the UST and lead-acid batteries. The Carmel Mountain Ranch Country Club listing refers to the handling and disposal of 1.0425 tons of “unspecified oil-containing waste” in 1998. The environmental site assessment concluded that this listing is likely in reference to the grease trap and two-stage clarifier observed during their site visit. The Verizon Wireless listing is in reference to the communications building observed at the project site in the clubhouse parking area.

The environmental site assessment was conducted in April 2018; therefore, the reliance period of 180 days has expired; therefore, a search for Cortese List sites on or within 1 mile (0.50 miles for LUST sites) of the project site was conducted on April 8, 2020, and did not identify new listings that were not previously identified.

Based on records obtained from the DEH, the 500-gallon double-walled gasoline UST was located adjacent to the eastern corner of the clubhouse and was removed under the oversight of the City of San Diego Fire-Rescue Department (SDFRD) on March 18, 1999. No staining or odors were observed in the native soil during the removal, no reinspection was required, and no detections were reported in soil samples collected beneath the UST and analyzed for total petroleum hydrocarbons (TPH). One additional soil sample was also analyzed for TPH; volatile organic compounds (VOCs); benzene, toluene, ethylbenzene, and xylenes (BTEX); and total recoverable petroleum hydrocarbons (TRPH). Minor detections of 1,1-dichloroethene (DCE) at 1.2 milligrams per kilogram (mg/kg) and toluene at 4.1 mg/kg were reported. The DEH Site Assessment and Mitigation (SAM) Program reviewed the soil analytical results and determined that no further action was required.

Further, the Phase I ESA noted the presence of a two-stage clarifier on the project site, located to the east of the clubhouse, related to the former electric golf cart wash area. Although there are no reported issues or violations associated with the clarifier, the existing clarifier could result in soil contamination at the project site.

The presence of two 500-gallon aboveground storage tanks (ASTs) containing gasoline and diesel fuel, located southeast of the existing maintenance building on site were also identified during the Phase I ESA.. The concrete secondary containment structure appeared to be intact and in good condition, with no visible cracks or staining. Dark staining was observed adjacent to the ASTs outside the secondary containment structure in the soil, likely related to fueling operations. However, due to the limited area of dark staining observed, the ASTs did not appear to present a threat to human health or the environment.

Additional hazardous materials identified at the project site that could result in a recognized environmental condition (REC) include one hydraulic lift located in the maintenance building in the southeastern portion of the site, as well as a floor drain with visible staining on the surrounding concrete located southeast of the maintenance building on site. A chemical storage shed located east of the maintenance building on site was also found to contain pesticide products. The ongoing pesticide application on the site leading to accumulated residual pesticides in soils would be considered a REC.

Additional Environmental Databases

Local and regional sources were also used in the Phase I ESA to obtain information pertaining to the project site and/or indications of RECs in connection with the project site. These additional environmental databases and sources include DEH, the Regional Water Quality Control Board (RWQCB) – San Diego Region, direct contact with DTSC, and a review of available records of the site held by the City's Development Services Department. Aside from the former UST found on site and described previously, no additional RECs were identified through a review of these sources.

Emergency Response/Evacuation

The City is a participating jurisdiction in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan (MHMP), a County-wide plan to identify risks and minimize damage from natural and man-made disasters (County of San Diego 2017). The primary goals of the MHMP include efforts to promote and provide compliance with applicable regulatory requirements (including through the promulgation/enhancement of local requirements), increase public awareness and understanding of hazard-related issues, and foster inter-jurisdictional coordination.

The San Diego Office of Homeland Security oversees the City's homeland security, disaster preparedness, emergency management, and recovery/mitigation programs. The primary focus of this effort is to ensure comprehensive emergency preparedness, training, response, recovery, and mitigation services for disaster-related effects. The Office of Homeland Security also maintains the City's Emergency Operations Center (EOC) and an alternate EOC in a ready-to-activate status, ensures that assigned staff are fully trained and capable of carrying out their responsibilities during activations, and manages the EOC during responses to multi-department and City-wide emergencies to support incident response activities and maintain City-wide response capabilities (City of San Diego 2017).

Additionally, the City is a participating agency in the County's Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan (EOP; County of San Diego 2018a), which addresses emergency issues including evacuation. Annex Q (Evacuation) of the EOP notes that "Primary evacuation routes consist of major interstates, highways and prime arterials within San Diego County" (County of San Diego 2018b). The closest primary evacuation route within the vicinity of the project site is Interstate (I) 15, located immediately to the west of the site. State Route (SR) 56 is located directly to the southwest of the project site and transitions into Ted Williams Parkway to the east and throughout the south of the project site (County of San Diego 2018b).

Airport Hazards

The ALUCP for MCAS Miramar maps the project site within AIA Review Area 2. Within Review Area 2, only land use actions for which the height of objects is an issue are subject to ALUC review (SDCRAA 2008).

The project site is also within FAA Part 77 Notification Area, which includes building height and obstruction restrictions to ensure that no object would interfere with the safe operation of aircraft or impact the air installation operations. The ALUCP contains criteria for determining airspace obstruction compatibility. Any proposed development that includes an object over 200 feet above the ground level or that penetrates the 100:1 slope extending 20,000 feet away from the nearest runway must be submitted to FAA for obstruction evaluation, and the SDCRAA and MCAS Miramar must be notified of the proposal (SDCRAA 2008).

5.8.2 Regulatory Framework

Federal

Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and 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. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to \$8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act, also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. SARA Title III Sections 301 through 312 are administered by EPA's Office of Emergency Management. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP) program.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency

Act (Stafford Act), as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations. The California Highway Patrol and the California Department of Transportation are the state agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. 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.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect fire and life safety. These measures may include construction standards, separation from project site lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

National Emissions Standards for Hazardous Air Pollutants Program

Under federal law, 188 substances are listed as hazardous air pollutants. Major sources of specific hazardous air pollutants are subject to the requirements of the EPA's National Emissions Standards for Hazardous Air Pollutants program. The EPA establishes regulatory schemes for specific source categories, and requires implementation of maximum achievable control technologies for major sources of hazardous air pollutants in each source category. State law has established the framework for California's Toxic Air Contaminant Identification and Control Program, which is generally more stringent than the federal program, and is aimed at hazardous air pollutants that are a problem in California. The state has formally identified more than 200 substances as toxic air contaminants, and is adopting appropriate control measures for each. Once adopted at the state level, each local air district will be required to adopt a measure that is equally or more stringent.

Occupational Safety and Health Act

Congress passed the Occupational Safety and 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 Safety and 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 Safety and Health Act

and enforces standards in all 50 states. Because California has an approved state plan, only California Occupational Safety and Health Administration (Cal/OSHA) standards apply to the project site.

Renovating, Repair, and Painting Rule

In 2008, EPA issued the Renovation, Repair, and Painting Rule. This rule requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in pre-1978 homes, childcare facilities, and schools be certified by EPA, and that they use certified renovators who are trained by EPA-approved training providers to follow lead-safe work practices. Individuals can become certified renovators by taking an 8-hour training course from an EPA-approved training provider. Contractors must use lead-safe work practices and follow these three procedures: (1) contain the work area, (2) minimize dust, and (3) clean up thoroughly.

Resource Conservation and Recovery Act

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. These laws provide for the “cradle to grave” regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of. The DTSC is responsible for implementing the RCRA program as well as California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency program, the California Environmental Protection Agency (CalEPA) has in turn delegated enforcement authority to DEH for regulating hazardous waste producers or generators.

Robert T. Stafford Disaster Relief and Emergency Assistance Act

Code of Federal Regulations Sections 206.31–206.48 provide the statutory framework for a presidential declaration of an emergency or a declaration of a major disaster. Such declarations open the way for a wide range of federal resources to be made available to assist in dealing with an emergency or major disaster. The Stafford Act structure for the declaration process reflects the fact that federal resources under this act supplement state and local resources for disaster relief and recovery. Except in the case of an emergency involving a subject area that is exclusively or preeminently in the federal purview, the governor of an affected state, or acting governor if the governor is not available, must request such a declaration by the president.

Risk Assessment and Regional Screening Levels

EPA and DTSC use risk assessments to characterize the nature and magnitude of health risks to humans and ecological receptors from chemical contaminants and other stressors that may be present in the environment. In general terms, risk depends on the following three factors: how much of a chemical is present in an environmental medium (air, soil, or water); how much contact (exposure) a person or ecological receptor has with the contaminated environmental medium; and the inherent toxicity of the chemical. EPA developed regional screening levels (RSLs) that provide a unified set of screening level/preliminary remediation goals for all EPA regions for screening chemical contaminants at Superfund sites. The RSLs replaced the preliminary remediation goals (PRGs) in 2008. The RSLs are calculated using the latest toxicity values, default exposure assumptions, and physical and chemical properties. The EPA considers RSLs to be protective for humans (including sensitive groups) over a lifetime. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at

concentrations below the corresponding RSLs can be assumed to not pose a significant health risk to people who may live (residential RSLs) or work (commercial/industrial RSLs) at the site. The EPA RSL tables were most recently updated in November 2018.

The DTSC Human and Ecological Risk Office (HERO) incorporated the EPA RSLs into the HERO human health risk assessment. The HERO review of the EPA RSLs determined that the revised RSLs included some levels that were substantially higher, and therefore less protective, than the previous PRGs. HERO therefore created Human Health Risk Assessment Note 3, which incorporates HERO recommendations and DTSC-modified screening levels based on review of the EPA RSLs. The DTSC-modified screening levels should be used in conjunction with the EPA RSLs to evaluate chemical concentrations in environmental media at California sites and facilities. The HERO Human Health Risk Assessment Note 3 was most recently updated in April 2019.

State

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's role and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. The California Emergency Services Act is intended to protect health and safety by preserving the lives and property of the people of the state. The Office of Emergency Services coordinates the responses of other agencies, including EPA, California Highway Patrol, the RWQCBs, air quality management districts, and county disaster response offices.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The emergency response plan is administered by the California Emergency Management Agency and includes response to hazardous materials incidents. The California Emergency Management Agency coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, the RWQCBs, San Diego Air Pollution Control District, SDFRD, and the DEH Hazardous Incident Response Team.

Hazardous Waste and Substances Sites List

The Hazardous Waste and Substances Sites List (Cortese List) is a planning document used by the state, local agencies, and developers to comply with CEQA requirements by providing information about the location of hazardous materials release sites. Government Code Section 65962.5(a) requires CalEPA to develop an updated Cortese List annually, at minimum. DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List.

Hazardous Materials Release Response Plans and Inventory

Two programs found in California Health and Safety Code Chapter 6.95 are directly applicable to the CEQA issue of risk due to hazardous substances release: the Hazardous Materials Business Plan program and the CalARP Program. In the San Diego region, DEH is responsible for implementing the Hazardous Materials Business Plan program and the CalARP Program, which provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a hazardous materials business plan or

risk management plan is required pursuant to the regulation. Congress requires EPA Region 9 to make risk management plan information available to the public through the EPA's Envirofacts data warehouse. Envirofacts is considered the single point of access to select EPA environmental data.

Senate Bill 1889 – Accidental Release Prevention Law/CalARP Program

Senate Bill 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1, 1997, the Accidental Release Prevention Law/CalARP Program replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. The CalARP Program addresses facilities that contain specified hazardous materials (known as regulated substances) that, if involved in an accidental release, could result in adverse off-site consequences. The CalARP Program defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

Title 14, Division 1.5 of the California Code of Regulations

Title 14, Division 1.5 of the California Code of Regulations establishes the regulations for CAL FIRE and is applicable in all State Responsibility Areas where CAL FIRE is responsible for wildfire protection. Development within State Responsibility Areas must comply with these regulations. Among other things, Title 14 establishes minimum standards for emergency access, fuel modification, project site line setbacks, signage, and water supply.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

DTSC regulates the generation, transportation, treatment, storage and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose “cradle to grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies, including DEH.

Underground Storage Tank Act

The Underground Storage Tank Act monitoring and response program is required under Chapter 6.7 of the California Health and Safety Code and Title 23 of the California Code of Regulations. The program was developed to ensure that facilities meet regulatory requirements for design, monitoring, maintenance, and emergency response in operating or owning USTs. DEH is the administering agency for this program in the project area.

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 required to be “as effective as” 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. The employer is also required, among other things, to have an illness and injury prevention program.

Cal/OSHA Asbestos and Carcinogen Unit

The Cal/OSHA Asbestos and Carcinogen Unit enforces asbestos standards in construction, shipyards, and general industry. This includes identification and removal requirements of asbestos in buildings, as well as

health and safety requirements of employees performing work under the Asbestos-In-Construction regulations (8 CCR 1529). Only a Cal/OSHA-certified asbestos consultant can provide asbestos consulting (as defined in Business and Professions Code Sections 7180–7189.7, and triggered by the same size and concentration triggers as for registered contractors). These services include building inspection, abatement project design, contract administration, supervision of site surveillance technicians, sample collection, preparation of asbestos management plans, and clearance air monitoring.

California Department of Public Health

The California Department of Public Health enforces lead laws and regulations related to the prevention of lead poisoning in children, prevention of lead poisoning in occupational workers, accreditation and training for construction-related activities, lead exposure screening and reporting, disclosures, and limitations on the amount of lead found in products. Accredited lead specialists are required to find and abate lead hazards in a construction project and to perform lead-related construction work in an effective and safe manner.

Local

County of San Diego Department of Environmental Health

DEH protects public health and safeguards environmental quality, educates the public to increase environmental awareness, and implements and enforces local, state, and federal environmental laws. DEH regulates the following: retail food safety, public housing, public swimming pools, small drinking-water systems, mobile-home parks, on-site wastewater systems, recreational water, oversight and cleanup of ASTs and USTs, and medical and hazardous materials and waste.

County of San Diego Office of Emergency Services

The Unified San Diego County Emergency Services Organization has primary responsibility for preparedness and response activities, and addresses disasters and emergency situations within the unincorporated area of the County. The County of San Diego Office of Emergency Services serves as staff to the Unified Disaster Council, the governing body of the Unified San Diego County Emergency Services Organization. Emergency response and preparedness plans include the operational area emergency response plan and the County MHMP.

San Diego Air Pollution Control District

Under Regulation XI, Subpart M – National Emission Standards for Asbestos, Rule 361.145 – Standard for Demolition and Renovation, the San Diego Air Pollution Control District requires that the proponent of a proposed demolition or renovation project submit an asbestos demolition or renovation operational plan notice of intention at least 10 days prior to the onset of any asbestos stripping or removal work. It should be noted that the notice of intention is required for all demolition projects, regardless of the presence of asbestos.

Multi-Jurisdictional Hazard Mitigation Plan

The City is a participating jurisdiction in the County MHMP, a County-wide plan that identifies risks and minimizes damage from natural and human-caused disasters. The MHMP includes an overview of the risk assessment process, vulnerability assessments, and identifies hazards present in each jurisdiction of the County. Hazards

profiled in the plan include wildfire, structure fire, flood, coastal storms, erosion, tsunamis, earthquakes, liquefaction, rain-induced landslide, dam failure, hazardous materials incidents, nuclear materials release, and terrorism. The MHMP sets forth a variety of objectives and actions based on a set of broad goals, including the following: (1) promoting disaster-resistant future development; (2) increasing public understanding and support for effective hazard mitigation; (3) building support of local capacity and commitment to become less vulnerable to hazards; (4) enhancing hazard mitigation coordination and communication with federal, state, local and tribal governments; and (5) reducing the possibility of damage and losses to existing assets, particularly people, critical facilities or infrastructure, and County-owned facilities, due to dam failure, earthquake, coastal storm, erosion, tsunami, landslides, floods, structural fire/wildfire, and human-caused hazards.

San Diego County Site Assessment and Mitigation Program

DEH maintains the SAM Program list of contaminated sites that have previously or are currently undergoing environmental investigations and/or remedial actions. The County SAM Program has a primary purpose to protect human health, water resources, and the environment within the County by providing oversight of assessments and cleanups in accordance with the California Health and Safety Code and the California Code of Regulations. The SAM Program's voluntary assistance program also provides staff consultation, project oversight, and technical or environmental report evaluation and concurrence (when appropriate) on projects pertaining to properties contaminated with hazardous substances.

San Diego County Emergency Operations Plan

The San Diego County EOP's operational area consists of 19 jurisdictions that range in population from several thousand to more than 1 million, with a total estimated population of more than 3.3 million. To foster a regional approach, the cities and the County joined together in 1961 to form an operational area and entered into a joint powers authority. The joint powers authority establishes procedures and protocols for participants to assist one another in the event of a disaster or major emergency exceeding the capabilities of any single jurisdiction.

City of San Diego Municipal Code

Hazardous Materials

The Hazardous Waste Establishment division of the San Diego Municipal Code (Chapter 4, Article 2, Division 8) enables the City's health officer to establish a program to monitor establishments where hazardous wastes are produced, stored, handled, disposed of, treated, or recycled, and to provide health care information and other appropriate technical assistance on a 24-hour basis to emergency responders in the event of a hazardous waste incident involving community exposure. The Disclosure of Hazardous Materials division (San Diego Municipal Code Chapter 4, Article 2, Division 9) establishes a system for the provision of information on potential hazards or hazardous materials in the community, including appropriate education and training for use of information. Elements of the system include the health officer's ability to seek advice from the Hazardous Materials Advisory Committee, the filing of a hazardous substance disclosure form, the content of the disclosure form, emergency response information, and penalties for violations.

Airport Land Use Compatibility Zone

The San Diego Municipal Code addresses issues related to safety compatibility in the airport land use compatibility overlay zone. Chapter 13 Article 2, Division 15 establishes the Airport Land Use Compatibility

Overlay Zone, which ensures that new development located within an airport influence area for MCAS Miramar, Montgomery-Gibbs Executive Airport, Brown Field, and Gillespie Airport is compatible with respect to airport-related noise, public safety, airspace protection, and aircraft overflight areas. Regulations include safety compatibility and aircraft overflight notification.

City of San Diego General Plan

The City's General Plan Public Facilities, Services, and Safety Element presents goals and policies relating to hazardous materials and disaster preparedness. Further, the City's General Plan Land Use Element includes goals and policies related to airport hazards, including Policy LU-G.6, which requires all development projects to notify the Federal Aviation Administration (FAA) in areas where the proposed development meets the notification criteria as defined by Code of Federal Regulations Title 14, Part 77.

5.8.3 Impacts Analysis

Issue 1: Would the proposal be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result create a significant hazard to the public or environment?

Issue 2: Would the proposal expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during past agricultural uses?

Issue 3: Would the proposal result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Impact Threshold(s)

Per the City's Significance Determination Thresholds, impacts related to health and safety could be significant if the project would:

- Be located on a site on or near known contamination sources. Project sites that meet one or more of the following criteria may result in a significant impact:
 - Located within 1,000 feet of a known contamination site;
 - Located within 2,000 feet of a known border zone property (also known as a Superfund site) or a hazardous waste property subject to corrective action pursuant to the Health and Safety Code;
 - If a DEH site file is closed. These cases are especially important where excavation is involved. DEH often closes a listing when there is no longer danger to the existing use on the property. Where a change in use is proposed DEH should be consulted. Excavation, which would disturb contaminated soils, potentially resulting in the migration of hazardous substances would require consultation by the applicant and analyst with DEH. The applicant may be required to obtain a concurrence letter from DEH subsequent to participation in the Voluntary Assistance Program (VAP);
 - Properties historically developed with industrial or commercial uses which involved dewatering (the removal of groundwater during excavation), in conjunction with major excavation in an area with high groundwater.

Where dewatering is involved, prior to issuance of any permit that would allow excavation which requires dewatering, a plan for disposal of the dewatering effluent and a permit, if needed, from the Regional Water Quality Control Board or the Industrial Waste Division of MWWd, shall be provided to LDR by the applicant. A Dewatering Discharge Permit (NPDES No. CA 1018804) shall be obtained for the removal and disposal of groundwater (if necessary) encountered during construction. Discharge under this permit will require compliance with a number of physical, chemical, and thermal parameters (as applicable), along with pertinent site-specific conditions, pursuant to direction from the RWQCB. Wells, including test well, and soil percolation tests are not considered dewatering activities;

- Located on a site presently or previously used for agricultural purposes (pesticides can be routinely used and do not degrade easily).

Impact Analysis

Construction

Construction of the proposed project would involve the transport of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, and solvents. These materials would be used and stored in designated construction staging areas within the boundaries of the project site, and once the proposed project has been constructed, any remaining materials would be transported off site. These materials would be transported, handled, and disposed of in accordance with all applicable federal, state, and local laws and regulations pertaining to the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or the environment.

Other hazardous materials identified on the project site, such as drums of petroleum products, fertilizers, pesticides and cleaning products, would be handled, stored, transported, and disposed of in accordance with federal, state, and local regulations prior to construction activities. Consequently, the presence of these hazardous materials would not pose a significant risk to the public or the environment.

Hazardous Structures

The existing structures at the project site were constructed around 1985. Therefore, per the Phase I ESA, lead-based paint and asbestos-containing materials (ACMs) are unlikely to be present within the existing structures located on the project site, due to the age of the structures. Nonetheless, the Phase I ESA makes no warranty as to the possible existence or absence of inaccessible materials or to their evaluation with respect to asbestos content. If ACMs are detected during demolition or construction activities, standard regulatory practices would be applied to ensure proper handling or disposal of these materials. More specifically, ACM disposal must be in compliance with California Code of Regulations, Article 4, Section 1529, pertaining to Asbestos Construction Safety Orders; South Coast Air Quality Management District (SCAQMD) Rule 1403; CCR Title 8, Industrial Relations; Cal/OSHA Asbestos and Carcinogen Unit; California Department of Public Health; California Department of Resources, Recycling, and Recovery; and EPA National Emission Standards for Hazardous Air Pollutants. Nonetheless, because the existence of materials containing ACMS or other wastes, such as PCBs and universal wastes, is not known at this time, demolition or alteration without proper identification and abatement of these hazardous building materials could pose a potential hazard to the public or environment.

However, as a condition of project approval, prior to demolition of structures present on site, a hazardous building materials survey would be conducted by a California Department of Public Health (DPH)-certified

asbestos consultant and/or certified site surveillance technician and a California DPH-certified lead inspector/risk assessor or sampling technician. A report documenting material types, conditions, and general quantities shall be provided, along with photos of positive materials and diagrams. Demolition or renovation plans and contract specifications would incorporate any abatement procedures for the removal of material containing asbestos, lead-based paint, universal wastes, and/or PCB-containing equipment. All abatement work would be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), San Diego Air Pollution Control District, Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, and California Occupational Safety and Health Administration (which regulates employee exposure).

Furthermore, a Hazardous Materials Contingency Plan (HMCP) would be required to be prepared and submitted to the County DEH as part of the VAP prior to commencement of any building renovation, demolition, or other construction activity.

Soil Contamination

As discussed in Section 5.8.1, the Stantec Phase I ESA identified multiple RECs on the site:

- Potential soil vapor contamination related to a former 500-gallon gasoline UST, which was removed in 1998
- A two-stage clarifier that must be removed and potentially contaminated soil surrounding the clarifier
- Potential soil contamination related to an in-ground hydraulic lift
- Potential accumulation of organochlorine pesticides in shallow soils due to ongoing pesticide application
- Potential soil contamination at an outdoor drain where fertilizers are disposed of

Underground Storage Tank

On-site contaminated soil vapor was evaluated based on the DEH documents provided in the Phase I ESA. According to these documents, no odors or staining were observed in the native soils following UST removal. Two soil samples were collected, neither of which contained detectable TPH (method detection limit [MDL] of 10 mg/kg), BTEX (MDL of 0.05 mg/kg), or methyl tert-butyl ether (MTBE) (MDL of 0.05 mg/kg). One of the two soil samples was analyzed for VOCs; minor detections of 1,1-DCE (1.2 mg/kg) and toluene (4.1 mg/kg) were detected. Reportedly, water was observed seeping into the UST and secondary containment structure; however, this was attributed to heavy irrigation of the golf course. Groundwater was not noted during the UST decommissioning activities. This information was compared to current closure requirements for LUST sites (DTSC 2012). According to this guidance, the LUST site as described above meets the current requirements for low-threat closure with DTSC, and the site does not pose a significant risk of adversely affecting human health (DTSC 2012, Table 1). The guidance also states that vapor intrusion from soil contamination is not a significant risk if low-threat closure criteria are met, and if TPH concentrations are less than 100 mg/kg. The detected concentrations of 1,1-DCE and toluene are well below residential-risk-based concentrations for direct contact to soil. Based on current regulatory screening levels and guidance, low detections of contaminants of concern, lack of apparent impacted groundwater, and the fact that the LUST was removed more than 20 years ago, it is not anticipated that vapor intrusion poses a potential impact to the project.

Furthermore, as a condition of project approval, the project would be required to comply with the County of San Diego DEH Voluntary Assistance Program (VAP). The VAP provides for consultation, project oversight,

and technical/environmental report evaluation. This would include the preparation and review of a Soil Sampling Plan and Hazardous Materials Contingency Plan. If the technical information, findings, and recommendations in the reports submitted through the VAP demonstrate that human health and the environment are adequately protected, a letter of “No Further Action” or “Concurrence” would be issued. If the technical reports show potential harm to human health or the environment a mitigation and/or remediation plan will be prepared and submitted to the County for review and approval.

Other Potential Soil Contaminants

As discussed in Section 5.8.1, the closest school to the project site, Highland Ranch Elementary School, is located adjacent to the project site to the north.

Construction of the project, specifically soil excavation near the potentially contaminated areas, could release hazardous materials into the environment, resulting in emissions near a school. More specifically, the two-stage clarifier that must be removed and the potentially contaminated soil surrounding the clarifier could pose a threat. According to the Phase I ESA, the two-stage clarifier must be removed in accordance with current regulatory requirements. The applicant and the contractor would comply with all federal, state, and local regulations and requirements and therefore would decommission the clarifier as required. Decommissioning and removal of the clarifier as required by federal, state, and local regulation would not create an impact to the project. In addition, potential soil contamination related to an in-ground hydraulic lift and accumulation of organochlorine pesticides in shallow soils due to ongoing pesticide application, have the potential to result in hazardous conditions.

However, as stated above, as a condition of project approval, the project would be required to comply with the County of San Diego DEH VAP, which would include the preparation and review of a Soil Sampling Plan and Hazardous Materials Contingency Plan. If the technical information, findings, and recommendations in the reports submitted through the VAP demonstrate that human health and the environment are adequately protected, a letter of “No Further Action” or “Concurrence” would be issued.

Operation

The project involves residential dwellings and a mix of open space and recreational uses, including publicly accessible trails and publicly accessible parkland. Hazardous materials associated with the residential dwellings, associated landscape, and recreational uses would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. Although the project would introduce dwelling units to the site resulting in an increased use of commercially available potentially hazardous materials, the use of these substances would be subject to all applicable safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials.

Project conformance with standard local, state, and federal regulations pertaining to the routine transport, use, storage, or disposal of hazardous materials or hazardous wastes would ensure that potential adverse effects are minimized and that such substances are handled appropriately in the event of accidental release and would not result in hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school.

Significance of Impact

The proposed project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and a significant hazard to the public or environment would

not result. Regulatory compliance and review of structures to be demolished by a qualified/certified technician would ensure exposure to toxic building materials would not occur. Compliance with the County's DEH VAP program would ensure that no people would be exposed to toxic substances, such as soil contamination from previous uses on the site, including pesticides and herbicides. Lastly, the project would not result in hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within 0.25 mile of an existing or proposed school. Impacts would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation measures would be required.

Issue 4: *Would the Project result in a safety hazard for people residing or working in a designated airport influence area?*

Issue 5: *Would the Project result in a safety hazard for people residing or working in a designated airport influence area or within 2.0 miles of a private airstrip or heliport facility that is not covered by an adopted ALUCP?*

Impact Threshold(s)

Per the City's Significance Determination Thresholds, health and safety impacts may be significant if the project would:

- Be located in a designated airport influence area and where the FAA has reached a determination of "hazard" through FAA Form 7460-1, "Notice of Proposed Construction or Alteration" as required by FAA regulations in CFR Title 14 Section 77.13;
- Be inconsistent with an ALCUP; or
- Result in a safety hazard for people residing or working within 2.0 miles of a private airstrip or heliport facility that is not covered by an adopted ALCUP.

Impact Analysis

The project is located within Marine Corps Air Station (MCAS) Miramar Airport Influence Area – Review Area 2 (Review Area 2). Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight areas. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. The additional function of Review Area 2 is to define where various mechanisms to alert prospective property owners about the nearby airport are appropriate. In addition, the project site is subject to FAA Part 77, Objects Affecting Navigable Airspace. These regulations require that a project proposing to construct an object that could affect the navigable airspace around an airport submit information about the proposed construction to FAA. According to the Federal Aviation Regulations Part 77, this includes any construction exceeding 200 feet above ground level, or any construction within 20,000 feet of an airport that exceeds a 100:1 surface from any point on the runway (ALUC 2011).

The proposed project would introduce structures at the project site that would not exceed 48 feet in height (inclusive of all building appurtenances such as solar panels, chimneys, and mechanical equipment). The maximum elevation of the site is approximately 810 feet above mean sea level (amsl). Therefore, the proposed project's maximum elevation would be 858 feet amsl (48 feet + 810 feet = 858 feet). The closest buildings to MCAS Miramar would be located approximately 6.8 miles from the nearest edge of the MCAS Miramar runway and thus would be outside the 20,000-foot reporting distance.

Consistent with the City's General Plan Land Use Element Policy LU-G.6, the project applicant notified FAA because the proposed development meets the notification criteria as defined by Code of Federal Regulations Title 14, Part 77. It was determined that the proposed project does not exceed the applicable height requirements, and thus would comply with the FAA (Part 77) Determination of No Hazard to Air Navigation. The project was also submitted to the San Diego Regional Airport Authority for an ALUC consistency determination with the MCAS Miramar ALUCP; however, ALUC staff concluded that no consistency determination was needed because the project site is entirely within Review Area 2, and it was not determined to be hazardous by the FAA. Therefore, the proposed project will be in compliance with the MCAS Miramar ALUCP.

Significance of Impacts

The project site is not located within the MCAS Miramar Safety Zone (County of San Diego 2008); therefore, no conflicts within the MCAS Miramar Safety Zone would occur. In sum, the project would not result in airport safety hazards for people residing or working in the project area. The project would be consistent with the applicable ALUCP and would comply with FAA regulations; the project would not result in a safety hazard for people residing or working within an airport influence area. Also, the project is not located within 2.0 miles of a private airstrip or helipad facility (TollFreeAirline.com 2020). Consequently, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 6: Would the proposal expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

As discussed in Section 5.8.1 and in the Phase I ESA (Appendix L), a chemical storage shed is present on the project site, located east of the maintenance building on site. The chemical storage shed contains pesticide products used throughout the project site, as well as a flood drain with visible staining on the surrounding concrete located southeast of the maintenance building. Organochlorine pesticides and their drying agents are known to accumulate in shallow soils where the products are applied. Therefore, the presence of the pesticides could expose people to toxic substances.

However, as stated above, as a condition of project approval, the project would be required to comply with the County of San Diego DEH VAP, which would include the preparation and review of a Soil Sampling Plan and Hazardous Materials Contingency Plan. If the technical information, findings, and recommendations in the reports submitted through the VAP demonstrate that human health and the environment are adequately protected, a letter of "No Further Action" or "Concurrence" would be issued.

Significance of Impact

The presence of the pesticides could expose people to toxic substances, regulatory compliance required as part of the project's condition of approval would ensure potential impacts would remain **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

5.9 Historical Resources

This section describes the existing historical resources conditions of the Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the Cultural Resources Inventory report prepared by Dudek (June 2020), and included as Appendix M.

5.9.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

The area of potential effect (APE) consists of the geographic area within which the project may directly or indirectly cause alterations to historical or cultural resources. The APE includes the footprint of the entire 164.5-acre project site. The project APE is largely developed and covered by landscaping and concrete paths.

Cultural Setting

Evidence for continuous human occupation in the San Diego region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. The cultural report employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1769), and Ethnohistoric (post-AD 1769). It is important to note that Kumeyaay Native American aboriginal lifeways did not cease at European contact. Protohistoric refers to the chronological trend of continued Native American aboriginal lifeways at the cusp of the recorded historic period in the Americas.

As recognized in 2001 by State Assembly Joint Resolution No. 60, the Kumeyaay Nation has occupied the Southern California and Baja California region, including the City of San Diego (City) and the project's APE. The Kumeyaay are the identified most likely descendants (MLDs) for all Native American human remains found in the City.

For additional details on the on the cultural and historical setting of the project, refer to the cultural report included as Appendix M to this EIR.

Records Search Results

An examination of existing maps, records, and reports was conducted to determine if the project could potentially impact previously recorded cultural resources. A records search was completed in August 26,

2019, through the South Coastal Information Center (SCIC) at San Diego State University. The search encompassed the APE and a 1-mile buffer around the APE. The purpose of the records search is to identify any previously recorded resources that may be located in or adjacent to the project APE and to identify previous studies in the project vicinity. In addition to a review of previously prepared site records and reports, the records search also reviewed historical maps of the project area, ethnographies, the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility. Note that in contrast to the rest of the EIR, this section uses metric units when describing the test units and depths for these resources, in keeping with the sources reviewed and standard cultural resources methodology.

Previously Identified Cultural Resources

The records search identified 52 cultural resources within 1 mile of the APE (Appendix M). Of the 52 resources identified within 1 mile of the APE, 9 resources intersect the APE: P-37-006068, P-37-006069, P-37-006070, P-37-006076, P-37-006081, P-37-006082, P-37-006084, P-37-006085, and P-37-006086 (Table 5.9-1). The nine prehistoric sites include three lithic scatters and six milling stations.

Table 5.9-1 Previously Identified Cultural Resources within the Area of Potential Effect

Primary Number	Trinomial	Era	Description	CRHR/NRHP Eligibility
P-37-006068	SDI-006068	Prehistoric	Lithic scatter	Recommended not eligible
P-37-006069	SDI-006069	Prehistoric	Milling station and lithic scatter	Recommended not eligible
P-37-006070	SDI-006070	Prehistoric	Milling stations	Recommended not eligible
P-37-006076	SDI-006076	Prehistoric	Milling station and artifact scatter	Recommended not eligible
P-37-006081	SDI-006081	Prehistoric	Lithic scatter	Recommended not eligible
P-37-006082	SDI-006082	Prehistoric	Lithic scatter	Recommended eligible
P-37-006084	SDI-006084	Prehistoric	Milling station and lithic scatter	Recommended eligible
P-37-006085	SDI-006085	Prehistoric	Milling station and lithic scatter	Recommended not eligible
P-37-006086	SDI-006086	Prehistoric	Milling station and lithic scatter	Recommended not eligible

Source: Appendix M.

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

P-37-006068; CA-SDI-6068

This resource was recorded in 1978 as a small lithic scatter located in dense grass adjacent to Chicarita Creek. The site record states that one black metavolcanic core and two flakes were identified on the surface. Westec Services Inc. (Westec) revisited the site and, though they could not relocate the surface artifacts, they identified two shallow bedrock mortars (Westec 1984). Westec (1984) excavated a single 1-meter by 1-meter test unit to a depth of 20 centimeters but recovered no subsurface artifacts. Westec therefore recommended the site not significant and exempt from further review.

P-37-006069; CA-SDI-6069

This resource was originally recorded as a prehistoric milling feature and associated lithic scatter identified on an undisturbed knoll in 1978. The original site record states that the milling feature contained two milling slicks on an isolated bedrock feature and that the associated lithic scatter consisted of six black metavolcanic flakes. The site was archaeologically tested in 1984, and its surface artifacts were collected (Westec 1984). Excavation of a single 1-meter by 1-meter test unit to a depth of 20 centimeters recovered no subsurface artifacts. Westec therefore recommended the site not significant and exempt from further review.

P-37-006070; CA-SDI-6070

This resource was initially recorded as a bedrock milling outcrop with five milling slicks and one basin. This resource is located on a knoll overlooking Chicarita Creek. In 1984, Westec (1984) excavated a single 1-meter by 1-meter test unit and recovered no subsurface artifacts, though a single basalt flake was recovered from the surface. Westec therefore recommended the site not significant and exempt from further review.

P-37-006076; CA-SDI-6076

The resource was initially recorded as a bedrock milling outcrop with associated artifacts. Six milling slicks and two basins were identified on “several adjacent outcrops” and the artifact assemblage consisted of two bifacial manos, one ceramic fragment, and two basalt flakes. The site was archaeologically tested in 1984 (Westec 1984). Relocation of the site was successful though severe impacts were noted, including pot hunting, vandals, firearms practice, etc. No surface artifacts remained, with only the milling features as evidence. Excavation of a single 1-meter by 1-meter test unit recovered no subsurface artifacts, though a single basalt flake was recovered from the surface. Westec therefore recommended the site not significant and exempt from further review.

P-37-006081; CA-SDI-6081

This resource is a San Dieguito period lithic workshop divided into Locus A (recorded as CA-SDI-6081) and Locus B (recorded as CA-SDI-6082). Locus A is located approximately 150 meters south of Locus B atop a small knoll adjacent to Interstate 15 and was obliterated by the previous highway construction. Westec (1984) tested Locus A and recovered one basalt flake from the first level (0–10) with no other artifacts recovered from this unit. Westec recommended the site not significant and exempt from further review.

P-37-006082; CA-SDI-6082

This resource is a San Dieguito period lithic workshop divided into Locus B (recorded as CA-SDI-6082) and Locus A (recorded as CA-SDI-6081). Locus B is located approximately 150 meters north of Locus A atop a small knoll. Locus B (CA-SDI-6082) was tested by Von Werlhof (1979), who recovered artifacts as deep as 90 centimeters (Westec 1984). The recovered artifact assemblage included groundstone tools, flaked stone tools, debitage, percussing tools, and bifaces. The assemblage totaled 77 artifacts.

Locus B was noted as exhibiting impacts from the installation of a water tank atop the knoll. The site was noted as still containing significant subsurface deposits. Westec (1984) maintained the previous recommendation that P-37-006082 was eligible for the CRHR.

P-37-006084; CA-SDI-6084

This resource was originally recorded in 1972 as a lithic workshop situated on an eastern slope. The site contained at least 20 artifacts of mixed materials (felsite, basalt, and quartz). Westec (1984) performed an excavation of a single 1-meter by 1-meter test unit, and recovered a total of 76 debitage to a depth of 40 centimeters. Westec noted that earlier records indicated finished tools present on the surface; however, they were not able to locate any during their testing program. The site was noted as being disturbed extensively by off-road vehicle activity. Westec determined that the site itself appears to be intact and is therefore considered to be eligible for the CRHR.

Rincon (Hector and Wade 1986) revisited P-37-006084 and conducted excavation to mitigate impacts to the site prior to the development of the property. Rincon excavated 28 square meters of midden from P-37-006084. Rincon determined that the site was a lithic tool production site and limited habitation area. The site contained no diagnostic artifacts and could not be associated with a chronological period. The site was greatly impacted by the development of the Carmel Mountain Ranch community and intact deposits are unlikely to exist.

P-37-006085; CA-SDI-6085

This resource was originally recorded as a prehistoric milling feature and associated lithic scatter. The site was initially recorded by Rydzynski and Parkinson (1972) and later updated by Thesken (1978) as containing six milling slicks and one imminent basin located on four bedrock features. The associated scatter consisted of 15 lithic flakes and one unifacial mano. The site was tested by Westec (1984) with a single control unit. The unit and surface reconnaissance recovered no artifacts or features. Westec recommended the site not significant and exempt from further review.

P-37-006086; CA-SDI-6086

This resource was originally recorded in 1972 as a San Dieguito II-III lithic workshop containing more than 30 flakes and two scrapers. One small bedrock milling slick was also identified. The site was tested by Westec (1984) with a single 1-meter by 1-meter control unit, from which only two flakes were found on the surface. No subsurface deposits were observed. Westec observed that the site was likely completely destroyed by recent access road construction, installation of a sewer main, and surface grading. Westec recommended the site not significant and exempt from further review.

Previous Studies

The records search revealed that 100 archaeological studies have been previously conducted within 1 mile of the APE (Appendix M). Of the 100 studies, 24 studies cover portions of the project APE. Two studies contain information pertinent to the cultural sensitivity of the proposed project.

SD-01715

In 1984, Westec conducted archaeological testing of 18 cultural resource sites previously identified within the proposed community development of Carmel Mountain Ranch (Westec 1984). Westec recommended seven sites located within the project APE as not significant and exempt from further review: P-37-006068, P-37-006069, P-37-006070, P-37-006076, P-37-006081, P-37-006085, and P-37-006086. Westec also recommended two resources within the project APE as significant archaeological sites deserving of further review: P-37-006082 and P-37-006084.

SD-7840

In 1986, Rincon conducted excavations at three cultural resource sites to mitigate impacts to the sites prior to the development of the Carmel Mountain Ranch community (Hector and Wade 1986). One of these sites, P-37-006084, is located in the project APE. Rincon excavated 28 square meters of midden from P-37-006084. Rincon determined that the site was a lithic tool production site and limited habitation area. The site contained no diagnostic artifacts and could not be associated with a chronological period.

Native American Heritage Commission Sacred Lands File Search

The Native American Heritage Commission (NAHC) was contacted for a Sacred Lands File search on August 13, 2019 (Appendix M). NAHC indicated in a response, dated September 13, 2019, that no previously recorded sites within are within one mile of the APE. The NAHC indicated that the absence of specific site information in the Sacred Lands File does not indicate the absence of cultural resources within the APE and included a list of Native American contacts that have knowledge of the cultural resources within the region. Outreach letters were sent via Certified Mail to all representatives listed on the NAHC list on October 3, 2019 (Appendix M).

To date, only one response from the NAHC outreach letters has been received. Ray Teran, resource manager of the Viejas Band of Kumeyaay Indians, wrote a response letter to Dudek indicating that the “project site has cultural significance or ties to Viejas.” Mr. Teran requested that a Kumeyaay cultural monitor be on site during ground-disturbing activities and that the monitor inform Viejas of any inadvertent cultural discoveries. Mr. Teran did not indicate the presence of any known tribal cultural resources. Refer to Section 5.16, Tribal Cultural Resources, for a discussion related to potential impacts on tribal cultural resources.

Survey

As described under “Records Search Results” in this section, a review of all known resources and identification of all potential new resources were completed as part of the cultural report preparation. Much of the APE has been previously inventoried and most resources have been previously identified. An additional survey was conducted to assure no previously unidentified resources are present within the proposed project APE.

The survey of the project APE was conducted on September 3, 2019. The APE is located in a highly developed area with large portions of the APE surface covered by the previous golf course consisting of engineered slopes, hills, sand pits, water conveyance, landscaped rock, sod, and some pavement, obscuring any remnants of archaeological sites. The survey team conducted a reconnaissance survey of the APE in motorized carts. The vehicle survey allowed the survey team to assess the APE and identify less developed portions of the APE where ground surface was visible and cultural resources could be identified.

Many of the level areas were completely obscured, such as the fairways of the golf course, and were not subject to pedestrian survey. Less developed portions of the APE, such as exposed soils along paved paths or natural slopes, were surveyed using transects at 15-meter intervals.

An iPad Air with georeferenced project maps and GPS capabilities was used to aid surveying and site recordation. Records of sites previously identified within the APE were loaded onto the iPad for field reference. Field work was conducted by Jessica Colston, Dudek archaeologist, and Shuluuk Linton, Red Tail Environmental Native American monitor.

Visibility throughout the project APE varied greatly. Areas of high disturbance such as sand traps, engineered water features, and fairways offered no visibility to the ground surface, while some of the slopes of the south and northern portions were completely barren of vegetation and offered 100 percent visibility. Drainages, road cuts, and burrower tailings were examined at all opportunities.

The survey team was able to relocate previously recorded site, P-37-006082/CA-SDI-6082, which is located on a hillside on the periphery of the golf course development. The recorded site was impacted by a buried pipe below a dirt path along the western side of its boundary. The vegetation within the boundaries of the recorded site consisted of tall dried plants with thistle and grasses. The majority of the recorded site occupied a southeast trending slope at approximately 25° to the golfing path and water feature below. Two rock outcrops were observed and inspected for modification; however, no modifications were observed. One cryptocrystalline silicate flake and one granitic flake were observed within the recorded site boundary. Portions of the interior of the recorded site were not surveyed due to safety concerns raised by dense vegetation.

No new archaeological resources were identified during the survey of the proposed project APE.

Built Environment

The Golf Course, club house, and bathroom on site were not determined to be eligible for the National, State, or local registers and therefore not considered historical resources for the purposes of CEQA compliance.

5.9.2 Regulatory Framework

Federal

National Historic Preservation Act

The NHPA authorizes the National Register of Historic Places (NRHP), which is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service (NPS), under the U.S. Department of the Interior, NRHP listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, *How to Apply the National Register Criteria*, as “the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity” (NPS 1990). NRHP guidance further asserts that certain property types are not considered eligible for listing in the NRHP, except under certain circumstances (NPS 1990).

A historic property is defined as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the NRHP criteria” (36 CFR Sections 800.16(i)(1)).

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Sections 800.5(a)(1):

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or

association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

To comply with Section 106, the criteria of adverse effect are applied to historic properties, if any exist in the APE, pursuant to 36 CFR Sections 800.5(a)(1). If no historic properties are identified in the APE, a finding of "no historic properties affected" will be made for the proposed Project. If there are historic properties in the APE, application of the criteria of adverse effect will result in Project-related findings of either "no adverse effect" or of "adverse effect," as described above. A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds in criteria of adverse effect 36 CFR Sections 800.5(a)(1), in certain cases when the undertaking is modified to avoid or lessen effects, or if conditions were imposed to ensure review of rehabilitation plans for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (codified in 36 CFR Part 68).

If adverse effects findings were expected to result from the proposed Project, mitigation would be required, as feasible, and resolution of those adverse effects by consultation may occur to avoid, minimize, or mitigate adverse effects on historic properties pursuant to 36 CFR Part 800.6(a).

State

California Register of Historical Resources

In California, the term "historical resource" includes, but is not limited to, "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 Public Resources Code 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" (California Public Resources Code Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Historical Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (California Public Resources Code Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
2. 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

Resources less than 50 years old generally are not considered for listing in the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, Section 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 on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local cultural resource surveys. The State Historic Preservation Office maintains the CRHR.

Native American Historic Resource Protection Act

The Native American Historic Resource Protection Act (California Public Resources Code Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy a Native American historical or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (CAL-NAGPRA), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. CAL-NAGPRA also provides a process for the identification and repatriation of these items to the culturally affiliated tribes.

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 shall occur until the county coroner has examined the remains (California Health and Safety Code Section 7050.5b). 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 (California Health and Safety Code Section 7050.5c). The NAHC will notify the MLD. With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

California Environmental Quality Act

As described further below, the following California Environmental Quality Act (CEQA) statutes and CEQA Guidelines are relevant to the analysis of historic, archaeological, and tribal cultural resources:

1. California Public Resources Code Section 21083.2(g): Defines “unique archaeological resource.”
2. California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a): Define historical resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change” in the significance of a historical resource. It also defines the circumstances when a project would materially impair the significance of a historical resource.
3. California Public Resources Code Section 21074(a): Defines “tribal cultural resources” and Section 21074(b): Defines a “cultural landscape.”

4. California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e): These provisions set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
5. California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4: These measures provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation; and identify preservation-in-place as the preferred manner of mitigating impacts to significant archaeological sites.

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” (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[b]). A “historical resource” is any site listed or eligible for listing in the CRHR. The CRHR listing criteria (14 CCR 15064.5[a][3]) are intended to examine whether the resource in question:

- A. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- B. Is associated with the lives of persons important in our past;
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. Has yielded, or may be likely to yield, information important in pre-history or history.

The term “historical resource” also includes any site described in a local register of historical resources, or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1[g]).

CEQA was amended in 2014 through Assembly Bill 52, which created a new category of tribal culture resources that must be considered under CEQA (Section 5.16, Tribal Cultural Resources) and applies to all projects that file a Notice of Preparation or notice of negative declaration or mitigated negative declaration on or after July 1, 2015. Assembly Bill 52 requires lead agencies to provide notice to and begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project if that tribe has requested, in writing, to be kept informed of projects by the lead agency prior to the determination whether a negative declaration, mitigated negative declaration, or EIR will be prepared.

All historical resources and unique archaeological resources – as defined by statute – are presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; 14 CCR Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; 14 CCR Section 15064.5[a]). A site or resource that does not meet the definition of “historical resource” or “unique archaeological resource” is not considered significant under CEQA and need not be analyzed further (California Public Resources Code Section 21083.2[a]; 14 CCR Section 15064.5[c][4]).

Pursuant to these sections, the CEQA first evaluates whether a project site contains any historical resources, then assesses whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements.

Finally, 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 set forth in California Public Resources Code Section 5097.98.

Local

City of San Diego Historical Resource Regulations

The City's Historical Resources Regulations (San Diego Municipal Code Chapter 14, Article 3, Division 2) were adopted in January 2000, providing a balance between sound historic preservation principles and the rights of private property owners. The purpose and intent of the Regulations are outlined as follows:

To protect, preserve and, where, damaged, restore the cultural resources of San Diego. The regulations apply to all development within the City of San Diego when cultural resources are present within the premises regardless of the requirement to obtain Neighborhood Development Permit or Site Development Permit.

The regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these are the General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Historical resources, in the context of the City's regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the city. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These resources are usually over 45 years old and they may have been altered or still be in use.

Compliance with the regulations begin with the determination of the need for a site-specific survey for a project. Pursuant to San Diego Municipal Code Section 143.0212(a), a historic property (built-environment) survey can be required for any parcel containing a structure that is over 45 years old and appears to have integrity of setting, design, materials, workmanship, feeling, and association. San Diego Municipal Code Section 143.0212(b) requires that historical resource sensitivity maps be used to identify properties in the City that have a probability of containing historic or pre-historic archaeological sites. These maps are based on records of the California Historical Resources Information System maintained by the SCIC at San Diego State University, archival research from the San Diego Museum of Man, and site-specific information in the City's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City would require a survey. In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a 1-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. In both cases, the determination for the need to conduct a site-specific survey must be made within 10 days of submittal for a construction permit (ministerial) or 30 days for a development permit (discretionary) pursuant to San Diego Municipal Code Section 143.0212(c).

San Diego Municipal Code Section 143.0212(d) states that if a property-specific survey is required, it shall be conducted according to the criteria included in the City's Historical Resources Guidelines. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located.

The City of San Diego Historical Resources Guidelines

Historical Resources Guidelines (City of San Diego 2001) are incorporated in the San Diego Land Development Manual by reference. The guidelines establish a development review process to review for projects in the City. This process is composed of two aspects: (1) the implementation of the Historical Resources Regulations and (2) the determination of impacts and mitigation under CEQA. The guidelines provide property owners, the development community, consultants, and the public with explicit guidelines for the management of historical resources located within City jurisdiction. These guidelines are designed to implement the City's Historical Resources Regulations contained in the Land Development Code (Chapter 14, Division 3, Article 2) in compliance with applicable local, state, and federal policies and mandates, including, but not limited to, the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. The intent of the guidelines is to ensure consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation, and development.

The City's Historical Resources Guidelines (City of San Diego 2001) observe the following:

Historical resources include all properties (historic, archaeological, landscapes, traditional, etc.) eligible or potentially eligible for the National Register of Historic Places, as well as those that may be significant pursuant to state and local laws and registration programs such as the California Register of Historical Resources or the City of San Diego Historical Resources Register. "Historical resource" means site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the City. They include buildings, structures, objects, archaeological sites, districts or landscapes possessing physical evidence of human activities that are typically over 45 years old, regardless of whether they have been altered or continue to be used. Historical resources also include traditional cultural properties. The following definitions are based, for the most part, on California's Office of Historic Preservation's (OHP) Instructions for Recording Historical Resources and are used to categorize different types of historical resources when they are recorded.

These guidelines are intended to protect, preserve, and, where damaged, restore the cultural resources of San Diego. The regulations apply to all development within the City of San Diego when cultural resources are present within the premises regardless of the requirement to obtain Neighborhood Development Permit or Site Development Permit. The Historical Resources Regulations require that designated cultural resources and traditional cultural properties be preserved unless deviation findings can be made by the decision maker as part of a discretionary permit. Minor alterations consistent with the U.S. Secretary of the Interior's Standards are exempt from the requirement to obtain a separate permit but must comply with the regulations and associated cultural resources guidelines. Limited development may encroach into important archaeological sites if adequate mitigation measures are provided as a condition of approval. Historical Resources Guidelines, located in the Land Development Manual, provide property owners, the development community, consultants, and the general public explicit guidance for the management of cultural resources located within the City's jurisdiction. These guidelines are designed to implement the cultural resources regulations and guide the development review process from the need for a survey and how impacts are assessed to available mitigation strategies and report requirements and include appropriate methodologies for treating cultural resources located in the City. In general, the City's cultural resources provisions build on

federal and state cultural resources laws and guidelines in an attempt to streamline the process of considering impacts to cultural resources within the City's jurisdiction, while maintaining that some resources not significant under federal or state law may be considered historical under the City's Guidelines. In order to apply the criteria and determine the significance of potential project impacts to a cultural resource, the APE of the project must be defined for both direct impacts and indirect impacts. Indirect impacts can include increased public access to an archaeological site, or visual impairment of a historically significant view shed related to a historic building or structure.

City of San Diego General Plan

The City's General Plan contains a Historic Preservation Element, that seeks "[t]o guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. To improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation" (City of San Diego 2008). The Historic Preservation Element pertains to both historical and cultural resources that include elements from the built environment such as buildings, structures, objects, and districts; landscape features, including significant trees and plantings, hardscape, fountains, lighting, sculptures, signs and other natural or designed features; interior elements and fixtures designated in conjunction with a property; significant archaeological sites; and traditional cultural properties (City of San Diego 2008). The Historic Preservation Element contains the following goals:

- A. Identification and Preservation of Historical Resources:
 - Identification of the historical resources of the City
 - Preservation of the City's important historical resources
 - Integration of historic preservation planning in the larger planning process
- B. Historic Preservation, Education, Benefits, and Incentives:
 - Public education about the importance of historical resources
 - Provision of incentives supporting historic preservation
 - Cultural heritage tourism promoted to the tourist industry

Carmel Mountain Ranch Community Plan

The Carmel Mountain Ranch Community Plan, most recently amended in November 2005, provides the framework for development of the Carmel Mountain Ranch community in conformance with the General Plan. The Community Plan contains a Cultural Resources Element that notes that there are 23 known archaeological sites within the Carmel Mountain Community. Specifically, it notes a known site (P-37-006082) retained in open space as part of the golf course (City of San Diego 2005).

5.9.3 Impacts Analysis

Issue 1: Would the project result in the alteration, including the adverse physical or aesthetic effects and/or destruction of a prehistoric or historic archaeological site (including an architecturally significant building), structure, object, or site?

Impact Threshold(s):

In accordance with the City's Significance Determination Thresholds, prehistoric and historic resource impacts may be significant if the project would result in:

- A resource listed in, eligible or potentially eligible for listing in the NRHP.
- A resource listed in, or determined to be eligible by, the State Historical Resources commission, for listing in the CRHR (PRC Section 5024.1).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC, or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).
- An archaeological site consisting of at least three associated artifacts/ecofacts (within a 40-square-meter area) or a single feature.
- A "traditional cultural property." A site would be considered to possess ethnic significance if it is associated with a burial or cemetery; religious, social or transitional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

The determination of significance of impacts on historical and unique archaeological resources is based on the criteria found in Section 15064.5 of the State CEQA Guidelines. Section 15064.5 clarifies the definition of a substantial adverse change in the significance of a historical resource as "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."

Impact Analysis

Archaeology

Currently, the project APE consists of a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse. As previously described, the project APE is primarily characterized by disturbed, fallow land left over from the previous golf course use. The project would result in the redevelopment of the majority of the project site into residential, open space, and recreational uses.

As described above, a records search and survey were conducted within the project APE. The project APE is highly developed, and has been previously surveyed prior). A search of records housed at the SCIC identified nine archaeological resources located within the project APE: P-37-006068, P-37-006069, P-37-006070, P-37-006076, P-37-006081, P-37-006082, P-37-006084, P-37-006085, and P-37-006086. These resources were archaeologically evaluated and seven were recommended not significant and exempt from further review (Westec 1984): P-37-006068, P-37-006069, P-37-006070, P-37-006076, P-37-006081, P-37-006085, and P-37-006086. The remaining two sites, P-37-006082 and P-37-006084, were recommended to be classified as significant at that time. No historic structures or properties exist within the project APE and the property itself is not eligible to be classified as a historical resource.

Excavations were conducted at P-37-006084 to mitigate impacts to the site prior to the previous development of the project site (Hector and Wade 1986). The site contained no diagnostic artifacts and could not be associated with a chronological period. P-37-006084 was greatly impacted by the development of the Carmel Mountain Ranch community and intact deposits are unlikely to exist. Therefore, P-37-006084 is not considered a significant historical resource.

The survey conducted by Dudek as part of the cultural report confirmed that P-37-006082 is the only previously identified resource within the project APE that has not been completely obscured or destroyed by development of Carmel Mountain Ranch.

Also, the presence of nine previously identified prehistoric cultural resources within the project APE suggests that there is a heightened potential that buried historical resources would be encountered during ground disturbance.

Built Environment

The Golf Course, club house, and bathroom on site were not determined to be eligible for the National, State, or local registers and therefore not considered historical resources for the purposes of CEQA compliance.

Significance of Impact

Archaeology

The survey conducted by Dudek as part of the cultural report confirmed that P-37-006082 is the only previously identified resource within the project APE that has not been completely obscured or destroyed by development of Carmel Mountain Ranch. As such, impacts to this resource resulting from the proposed project construction would be **potentially significant (Impact HR-1)**.

Built Environment

The Golf Course, club house, and bathroom on site were not determined to be eligible for the National, State, or local registers and therefore not considered historical resources for the purposes of CEQA compliance. Consequently, no potentially significant structures are present on the property. **No impact** would result to the built environment.

Mitigation Monitoring and Reporting Program***Archeology***

MM-HR-1 Avoidance of Known Cultural Resources: In order to avoid impacts to known cultural resources P-37-006082/CA-SDI-6082, adherence to the following requirements shall be observed during project construction activities:

Prior to issuance If project construction activities are proposed within 100 feet of the recorded boundary of P-37-006082/CA-SDI-6082, avoidance measures such as avoidance signs or exclusionary fencing shall be utilized. Work within 100 feet of the recorded boundary of P-37-006082/CA-SDI-6082 shall be closely monitored to assure work does not extend into the resource boundary.

MM-HR-2 Construction Monitoring:

The following monitoring program shall be implemented to protect unknown archaeological or tribal cultural resources that may be encountered during construction and/or maintenance-related activities.

I. Prior to Permit Issuance

A Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site-specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.

2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼ mile radius.
- B. PI Shall Attend Preconstruction (Precon) Meetings
1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
 2. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
 - b. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).
 3. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

- A. Monitor(s) Shall be Present During Grading/Excavation/Trenching
1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.
 2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
 4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
 4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the

- Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.
- B. Isolate discovery site
1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains ARE determined to be Native American
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call.
 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN
 - c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.

V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries:

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day:
 - b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries:

If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.
 - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.
 - b. Recording Sites with State of California Department of Parks and Recreation

The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.
 3. The PI shall submit revised Draft Monitoring Report to MMC for approval.
 4. MMC shall provide written verification to the PI of the approved report.
 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
 3. The cost for curation is the responsibility of the property owner.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
 3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

Significance After Mitigation

With implementation of **MM-HR-1** (avoidance of known cultural resources) and **MM-HR-2** (monitoring), impacts to known cultural resource P-37-006082 and unknown resources (Impact HR-1) would be reduced to below a level of significance. This is because these measures ensure that construction will not touch or disturb the known significant archeological resources located onsite, and ensure a robust discovery, protection and recovery program for unanticipated and unknown cultural resources that may be located on the site. Impacts would be reduced to **less than significant** with mitigation.

Issue 2: Would the project result in any impact to existing religious or sacred uses within the potential impact area?

Impact Threshold(s):

In accordance with the City's Significance Determination Thresholds, prehistoric and historic resource impacts may be significant if the project would result in:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance.
- A site associated with a burial or cemetery; religious, social, or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

Impact Analysis

Based on the records search results and survey, no religious or sacred uses are known to exist within the project APE. The SCIC records search did not identify any existing religious or sacred uses within the project site. Additionally, the NAHC Sacred Lands File did not identify sacred lands within project site. Because of the lack of existing religions or sacred uses, the project would not result in impacts under this category.

Significance of Impact

No existing religious or sacred uses are located on the project site. However, prior to mitigation (MM-HR-2(IV)), impacts would be **potentially significant (Impact HR-2)**.

Mitigation Monitoring and Reporting

With implementation of MM-HR-2, as described above, impacts would be reduced to **less than significant**.

Issue 3: Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

Impact Threshold(s)

In accordance with the City's Significance Determination Thresholds, prehistoric and historic resource impacts may be significant if the project would result in impacts to:

- Discovery of human remains shall always be treated as a significant discovery.

Impact Analysis

There are no formal cemeteries or known burials in the immediate vicinity of the project site. In the unlikely event of a discovery of human remains, the project would be handled in accordance with procedures of the California Public Resources Code (§5097.98), State Health and Safety Code (§7050.5), and California Government Code Section 27491. These regulations detail specific procedures to follow in the event of a discovery of human remains, i.e. work would be required to halt and no soil would be exported off-site until a determination could be made via the County Coroner and other authorities as required. In addition, the

Mitigation, Monitoring, and Reporting Program requires the presence of archaeological and Native American monitors during grading that would ensure that any buried human remains inadvertently uncovered during grading operations are identified and handled in compliance with these regulations.

Significance of Impacts

However, prior to mitigation (MM-HR-2(IV)), impacts would be **potentially significant (Impact HR-3)**.

Mitigation Monitoring and Reporting

With implementation of MM-HR-2, as described above, impacts would be reduced to **less than significant**.

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5.10 Hydrology

This section describes the existing hydrology conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements and evaluates potential impacts related to implementation of the project. The following discussion is based on the Drainage Study, prepared by Project Design Consultants (April 2020) and included as Appendix E.

5.10.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Existing Drainage Patterns

The project site drains in two different directions, before commingling in Los Peñasquitos Creek; the western half of the site drains west and is conveyed to outfalls in Chicarita Creek, and the eastern half of the site drains east and is conveyed to an outfall near Ted Williams Parkway on Unit 14. This water is then conveyed through natural canyons near Poway Fire Station 3, until it drains into Los Peñasquitos Creek. Los Peñasquitos Creek runs from east to west, and the runoff from Chicarita Creek eventually commingles with Los Peñasquitos Creek at Cypress Canyon.

Because the majority of the area surrounding the project site is already developed, there is minimal run-on into the project site.

There are several existing private storm drain systems within the project site and two major public systems in the adjacent streets: a 72-inch-diameter cast-in-place concrete storm drain on Shoal Creek Drive, and a 72-inch-diameter reinforced concrete pipe storm drain on Carmel Ridge Road. There are two additional storm drain system outlets near the project site: a 48-inch-diameter reinforced concrete pipe outlets into Chicarita Creek near Rancho Carmel Drive, and a 54-inch-diameter reinforced concrete pipe outlets into Unit 12 near Ted Williams Parkway.

Groundwater

Groundwater/seepage was encountered within several of the exploratory trenches and borings performed during the field investigation. Groundwater/seepage was found as shallow as 7 feet and as deep as 32 feet. However, due to the geologic conditions and the natural and artificial water sources inherent to the property, groundwater conditions are expected to fluctuate seasonally.

Floodplains

There is one FEMA special flood hazard area located on the eastern side of the site, and it is associated with Chicarita Creek (FEMA Firm Map No. 06073C1352G and 06073C1354G). Total length of the creek is approximately 13,095 feet (San Diego Integrated Regional Water Management 2013) and runs along the east side of Interstate-15. The entire length of the creek is comprised of a natural bottom and has a 100-year design flow of approximately 2,500 cubic feet per second.

Other Linear Features

There is a narrow, meandering channel that originates from a small, 6-inch to 8-inch pipe and winds through former playing holes until it reaches a remnant golf cart path. Once the channel reaches the golf cart path, any flows that remain likely dissipate through evaporation. There are also areas mapped as coastal and valley freshwater marsh on the project site along Chicarita Creek, and also in the east and southeast portions of the project site associated with unnamed stream channels.

5.10.2 Regulatory Framework

Federal

National Pollutant Discharge Elimination System Permit Program Phase I

In November 1990, under Phase I of the urban runoff management strategy, the U.S. Environmental Protection Agency published National Pollutant Discharge Elimination System (NPDES) permit application requirements for municipal, industrial, and construction discharges. The application requirements for municipalities were directed at those municipalities that own and operate separate storm drain systems service populations of 100,000 or more, or that contribute significant pollutants to waters of the United States, and require such agencies to obtain coverage under municipal stormwater NPDES permits.

Municipalities were required to develop and implement urban runoff management programs to reduce pollutants in urban runoff and stormwater discharges that were contributing a substantial pollutant load to their systems. Rather than establishing numeric effluent limits, the U.S. Environmental Protection Agency established narrative effluent limits for urban runoff, including the requirement to implement appropriate best management practices (BMPs).

National Pollutant Discharge Elimination System Permit Program Phase II

The Phase II Final Rule, published in the Federal Register on December 8, 1999, required NPDES permit coverage for stormwater discharges from the following:

- Certain regulated small municipal separate storm sewer systems (MS4s)
- Construction activity disturbing between 1 and 6 acres of land (i.e., small construction activities)

In addition to expanding the NPDES program, the Phase II Final Rule included minor revisions for certain industrial facilities. As with Phase I, the Phase II program requires the development and implementation of stormwater management plans to reduce pollutant discharges.

State***National Pollutant Discharge Elimination System Permits***

In California, the State Water Resources Control Board and its Regional Water Quality Control Boards administer the NPDES permit program. The NPDES permits cover all construction and subsequent drainage improvements that disturb 1 acre or more, industrial activities, and municipal separate storm drain systems. Construction and industrial activities are typically regulated under statewide general permits that are issued by the State Water Resources Control Board, which also issued a statewide general small MS4 stormwater NPDES permit for public agencies that fall under the Phase II NPDES regulations.

The NPDES permit system was established in the Clean Water Act to regulate both point-source discharges (i.e., a municipal or industrial discharge at a specific location or pipe) and nonpoint-source discharges (i.e., diffused runoff of water from adjacent land uses) to surface waters of the United States. For point-source discharges, each NPDES permit contains limits on allowable concentrations and mass emission of pollutants contained in the discharge. For nonpoint-source discharges, the NPDES program establishes a comprehensive water quality program to manage urban stormwater and minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive stormwater management program.

The reduction of pollutants in urban stormwater discharge to the maximum extent practicable through the use of structural and nonstructural BMPs is one of the primary objectives of the water quality regulations for MS4s. BMPs typically used to manage runoff water quality include controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs.

Local***Municipal Stormwater Permit***

The City of San Diego (City) currently operates under the NPDES Municipal Stormwater Permit issued on January 24, 2007 (Permit Order No. R9-2007-0001), which requires that stormwater BMPs be incorporated into the permanent design of public and private development projects. On May 8, 2013, the San Diego Regional Water Quality Control Board approved a regional MS4 permit for San Diego, southern Orange, and southwestern Riverside Counties, which became effective on June 27, 2013. The region-wide NPDES permit (commonly referred to as the Regional MS4 Permit) sets the framework for responsible agencies to implement a collaborative watershed-based approach to restore and maintain the health of surface waters. The Regional MS4 Permit required development of Water Quality Improvement Plans that will allow watershed stakeholders to prioritize and address pollutants through an appropriate suite of BMPs in each watershed.

City Stormwater Runoff and Drainage Regulations

Drainage regulations are enforced under San Diego Municipal Code Sections 142.0201 through 142.0230 (Article 2: General Development Regulations, Division 2: Storm Water Runoff and Drainage Regulations) and Sections 143.0145 and 143.0146 (Article 3: Supplemental Development Regulations, Division 1: Environmentally Sensitive Lands Regulations). The primary purposes of drainage regulations are to regulate

the development of, and impacts to, drainage facilities; to limit water quality impacts from development; to minimize hazards due to flooding while minimizing the need for construction of flood control facilities; to minimize impacts to environmentally sensitive lands; to implement the provisions of federal and state regulations; and to protect the public health, safety, and welfare. The drainage regulations apply to all development in the City, regardless of whether a permit or other approval is required.

City of San Diego Drainage Design Manual

The primary purpose of the City's Drainage Design Manual, dated January 2017, is to provide policies and procedures to secure standardization of drainage design throughout the City. The manual establishes design standards and design procedures for stormwater conveyance and hydrology analysis for flood management and water quality facilities in the City (City of San Diego 2017).

City of San Diego Grading Ordinance

The City of San Diego Municipal Code, Chapter 14, Article 2, Division 1 (Section 142.0101), addresses the City's Grading Regulations. The purpose of the regulations is to address slope stability, protection of property, erosion control, water quality, landform preservation, and paleontological resources preservation, and to protect the public health, safety, and welfare of persons, property, and the environment. The Grading Regulations require permittees provide adequate erosion control or drainage devices, debris basins, or other safety devices, and take all safety precautions reasonably necessary to protect persons and property.

City of San Diego General Plan

The City General Plan (2008a) provides a number of goals and policies related to hydrology and water quality concerns in the Public Facilities, Services, and Safety Element; and the Conservation Element, as summarized below.

- Public Facilities, Services, and Safety Element. This element includes a number of goals and policies related to the provision of adequate public facilities and services for existing and proposed development. For storm water, these involve efforts to provide appropriately designed and sized infrastructure and ensure adequate conveyance capacity, protect water quality, and provide conformance with applicable regulatory standards (such as the NPDES).
- Conservation Element. The Conservation Element provides a number of goals and policies related to preserving and protecting watersheds and natural drainage features, minimizing runoff and related pollutant generation during and after construction activities, and protecting drinking water resources.

5.10.3 Impacts Analysis

Impact 1: *Would the proposal result in impervious surfaces and associated increased runoff?*

Impact 2: *Would the proposal result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?*

Impact Threshold(s)

The City's Significance Determination Thresholds (2016a) identify potentially significant impacts related to runoff if a project would:

- Result in decreased aquifer recharge or result in extraction from an aquifer resulting in a net deficit in the aquifer volume or reduction in the local groundwater table;
- Grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25 percent grade and drain into a sensitive water body or stream, causing uncontrolled runoff that results in erosion and subsequent sedimentation of downstream water bodies; or
- Modify existing drainage patterns such that environmental resources, including biological communities or archaeological sites, would be adversely affected.

Impact Analysis

The project site is approximately 164.5 acres in size and approximately 101.4 acres would be open space (including natural open space, landscaped slopes, and parkland). The remaining 63.1 acres would be impervious surfaces associated with building footprints, roadways, and parking areas. Development of the project site would disturb approximately 74 acres. Proposed development would not significantly alter ultimate discharge points of on-site and off-site runoff. Due to the surrounding development, there is minimal off-site run-on onto the project site, and proposed on-site drainage patterns would mimic existing drainage patterns. Some local redirection of runoff occurs on site; however, most flows converge in the storm drain systems that head to Chicarita Creek or Los Peñasquitos Creek.

The west side of the project site (Units 1, 2, 5, 6, 8, and 9) would continue to discharge to Chicarita Creek, and the east side of the project site (Units 10, 11, 16, 17, and 18) would drain into natural canyons before converging with Los Peñasquitos Creek. The proposed drainage improvements include private storm drains collecting rooftop and surface drainage and public storm drains in public roads that connect private pipes with the public storm drain system. Treatment of on-site stormwater prior to discharging into the downstream systems would be facilitated by several biofiltration basins (see Figure 5.10-1, Proposed Offsite Drainage Points of Connection).

The Drainage Report prepared for the project concludes that redevelopment would result in an overall increase in the 100-year runoff from the site, but peak flows after detention would be less than either backbone storm drain system capacity or existing condition peak flow at the project outfall, whichever condition governs. The project includes detention sizing based on impervious surfaces percentages. For all outfalls, the proposed project includes detention basins to address peak flows that are greater than existing condition peak flows. The existing condition 100-year peak flow of Outfall A (near the southwest corner of the site) is 15.7 cubic feet per second (cfs), whereas the proposed condition 100-year peak flow is 23.6 cfs. For Outfall B, the unmitigated 100-year post-project flow rates would increase from 57.7 cfs to 101.9 cfs. For Outfalls C and D, the unmitigated 100-year post-project flow rates would increase from 8.3 cfs to 18.0 cfs.

and from 19.8 cfs to 31.0 cfs, respectively. For Outfall E, the unmitigated 100-year post-project flow rates would increase from 21.7 cfs to 39.6 cfs.

Preliminary detention modeling was performed for several basins (Basin 9 and Basin 11) (Appendix E), and peak flows after detention would be significantly less than the existing flows and backbone flows. During final engineering, calculations would be prepared for all basins to show the final detained flow rates out of the detention basins. The combination of basins would be sufficient to ensure the graded total peak 100-year flow rates for the proposed condition would be less than the maximum allowable peak flow rate.

Therefore, although the project would increase the quantity of runoff on site, proposed storm drains would be sized to accommodate the post-project peak-flow conditions during final engineering. Further, small on-site redirection of flows would not alter general drainage patterns as on-site storm drain systems ultimately discharge to the same location downstream of the project. As such, the project would not result in increased runoff or have an adverse effect on drainage patterns.

Significance of Impacts

The project would not result in increased runoff or have an adverse effect on drainage patterns and impacts would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

Issue 3: *Would the Project develop wholly or partially within the 100-year floodplain identified in the FEMA maps or impose flood hazards on other properties?*

Impact Threshold(s)

The City's Significance Determination Thresholds (2016a) identify potentially significant impacts related to flood hazards if a project would:

- Impose flood hazards on other properties or development, or result in substantial changes to stream flow velocities or quantities; or
- Impose flood hazards on other properties or development, or be proposed to develop wholly or partially within the 100-year floodplain identified on the FEMA maps.

Impact Analysis

As stated above, small on-site redirection of flows would not alter general drainage patterns as on-site storm drain systems ultimately discharge to the same location downstream of the project. Further, although the project would increase the quantity of runoff on site, proposed storm drains would be sized to accommodate the post-project peak-flow conditions during final engineering. The combination of basins would be sufficient to ensure the graded total peak 100-year flow rates for the proposed condition would be less than the maximum allowable peak flow rate. Thus, the project would not impose flood hazards due to changes in flow or velocity.

In addition, there is one FEMA special flood hazard area located on the eastern side of the site, and it is associated with Chicarita Creek (FEMA Firm Map No. 06073C1352G and 06073C1354G). No development is proposed as part of the project that would occur within the floodplain or result in any impacts Chicarita Creek. Thus, the project would not impose flood hazards due to development within a 100-year floodplain.

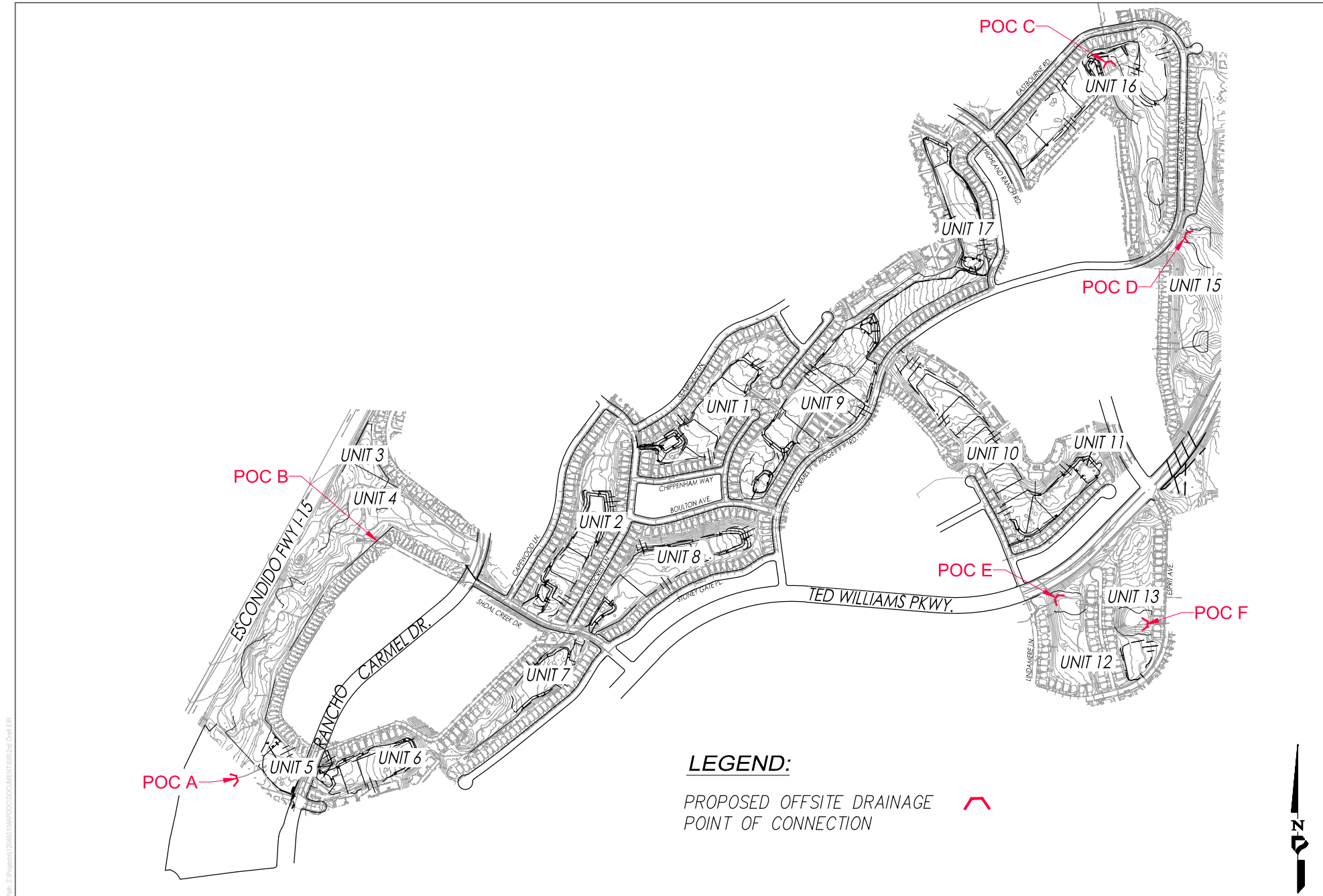
Significance of Impacts

The project would not impose flood hazards to other properties or development, and impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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SOURCE: Project Design Consultants 2020

FIGURE 5.10-1
 Proposed Offsite Drainage Points of Connection
 Trails at Carmel Mountain Ranch

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5.11 Noise

This section describes the existing noise conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based upon the noise analysis technical report prepared by Dudek (August 2020) and included as Appendix F. For analysis related to land use based noise impacts, refer to Section 5.1, Land Use.

5.11.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Ambient Noise Conditions

The existing ambient noise environment in the project vicinity was surveyed on September 3, 2019. The sound level measurements were performed with a Rion NL 52 integrating sound level meter, equipped with a 0.5-inch pre-polarized condenser microphone and pre-amplifier. The sound level meter utilized to take noise measurements meets the current American National Standards Institute standard for Type 1 sound level meters, and all components used in conducting the sound level measurements, including microphones, pre-amplifiers, and field calibrators, have laboratory certified calibrations traceable to the National Institute of Standards and Technology.

The sound level meter was calibrated before and after the measurements, and the measurements were conducted with the microphone positioned 5 feet above the ground. Noise measurements were taken at five locations, with specific consideration to document noise levels in the vicinity of nearby noise-sensitive receptors, and additionally to document existing transportation noise source levels associated with roadways projected to potentially carry significant project-related traffic volumes. Measurements were taken between 10:12 a.m. and 11:35 a.m. on September 3, 2019. The locations of the sound level measurements are depicted in Figure 5.11-1, Noise Measurement Locations. The results of the noise measurements are presented in Table 5.11-1. The measured average noise levels ranged from approximately 47.0 A-weighted decibels (dBA) equivalent sound level (L_{eq}) at site ST2 to 60.1 dBA L_{eq} at site ST1.

Table 5.11-1. Existing Ambient Noise Monitoring Results

Site	Location/Description	Time (Duration)	dBA L_{eq}	dBA L_{max}
ST1	APN 313-031-28-00, Rancho Carmel Dr.	10:12 a.m. (10 min.)	60.1	68.7
ST2	APN 313-040-62-00, NSLU north of Stoney Gate Pl.	10:30 a.m. (15 min)	47.0	54.8
ST3	APN 313-043-02-00, NSLU north of former Club House	10:50 a.m. (15 min)	45.0	52.6

Table 5.11-1. Existing Ambient Noise Monitoring Results

Site	Location/Description	Time (Duration)	dBA L _{eq}	dBA L _{max}
ST4	APN 313-541-10-00, Highland Ranch Dr.	11:10 a.m. (10 min)	57.2	68.0
ST5	APN 313-704-01-00, Ted Williams Pkwy	11:35 a.m. (10 min)	52.5	63.3

Notes: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; ST = short-term noise measurement locations; APN = Assessor's Parcel Number; NSLU = noise-sensitive land use.

As shown in Table 5.11-1, monitoring locations near project area roadways (ST1, ST4, and ST5) were documented to experience average sound levels ranging from approximately 53 dBA to 60 dBA L_{eq}, with maximum sound levels reaching 69 dBA maximum sound level (L_{max}). Monitoring locations representing noise-sensitive land uses (NSLUs) that are central to the proposed project's development area and away from the local roadway network (ST2 and ST3) were documented to have average noise levels ranging from approximately 45 dBA to 47 dBA, with maximum noise levels reaching approximately 55 dBA L_{max}.

Traffic Noise Conditions

Existing traffic noise levels were modeled for roadway segments in the project vicinity based on the Federal Highway Administration Highway Traffic Noise Model prediction methodologies (FHWA 1998) and traffic data developed as part of the traffic impact study prepared for the proposed project (Appendix C). To determine existing day-evening-night traffic noise levels in the project vicinity, the average daily traffic volumes for roadways in the immediate vicinity of the project site were used as inputs to the traffic noise model. Noise prediction receiver locations were plotted for the outdoor activity areas nearest the adjacent roadway segments. Modeled existing traffic noise levels are summarized in Table 5.11-2, along with distances from roadway centerlines to the 60 dBA, 65 dBA, and 70 dBA community noise equivalent level (CNEL) traffic noise contours. As shown in Table 5.11-2, the location of the 65-dBA CNEL traffic noise contour along the local roadway network ranges from within the right-of-way to approximately 1,700 feet from the centerline of the modeled roadways. The CNEL at 100 feet from the center line ranges from approximately 55 dBA to 79 dBA.

Table 5.11-2. Summary of Modeled Existing Traffic Noise Levels

Roadway	Segment	ADT ¹	CNEL at 100 feet from CL	Distance to CNEL Contour (feet) ²		
	From/To			70 dBA	65 dBA	60 dBA
Ted Williams Pkwy	I-15 to Rancho Carmel Dr.	43,971	58.7	168	363	781
	Rancho Carmel Dr. to Shoal Creek Dr.	32,195	72.9	150	323	697
	Shoal Creek Dr. to Carmel Ridge Rd.	31,130	73.7	152	328	706
	Carmel Ridge Rd. to Highland Ranch Rd.	29,305	69.2	134	288	620
	Highland Ranch Rd. to Pomerado Rd.	28,510	73.9	133	287	619
Rancho Carmel Dr	Provencal Place to Shoal Creek Dr.	11,194	66.5	41	88	189
	Shoal Creek Dr. to Windcrest Lane	11,969	68.7	44	96	206
	Windcrest Lane to Carmel Mountain Rd.	13,664	59.5	43	92	198

Table 5.11-2. Summary of Modeled Existing Traffic Noise Levels

Roadway	Segment	ADT ¹	CNEL at 100 feet from CL	Distance to CNEL Contour (feet) ²		
	From/To			70 dBA	65 dBA	60 dBA
Carmel Mountain Rd	Rancho Carmel Dr. to Stoney Peak Dr.	34,979	60.0	51	109	235
Highland Ranch Rd	World Trade Dr. to Eastbourne Rd.	14,946	66.4	39	85	182
	Eastbourne Rd. to Carmel Ridge Rd.	11,770	67.1	35	76	163
	Carmel Ridge Rd. to Ted Williams Pkwy.	11,281	65.5	33	71	152
World Trade Dr	Stoney Peak Dr. to Highland Ranch Rd.	4,714	55.8	13	29	62
Interstate 15	South of Ted Williams Pkwy	222,000	73.7	681	1466	3159
	Ted Williams Pkwy to Carmel Mountain Ranch Rd.	238,000	80.2	825	1778	3831
Interstate 15	North of Carmel Mountain Ranch Rd.	227,000	78.7	767	1653	3561

Notes: ADT = Average Daily Traffic Volumes; CNEL = Community Noise Equivalent Level; CL = centerline; dBA = A-weighted decibels.

¹ ADT volumes calculated based on traffic impact report prepared for the project (Appendix C).

² Not accounting for shielding provided by natural or human-made intervening objects. Actual distance to real-world noise level contours will be dependent upon shielding effects in the environment under consideration.

Noise Sensitive Land Uses

NSLUs generally include uses where exposure to noise would result in adverse effects, as well as uses where a quiet environment is an essential element of the intended purpose of the use. Residential uses are considered an NSLU of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Existing land uses surrounding the project site consist of residential, commercial, mixed-use, and public education facilities. Single-family residential land uses are located throughout the project area. Multi-family residential land uses are located north of the project site, between Stoney Peak Drive and Highland Ranch Road, and at the southernmost boundary of the project site. Multi-family homes to the north of the project site include the Carmel Terrace apartment complex, the Carmel Summit apartment complex, and the Jefferson at Carmel Mountain Ranch complex. Multi-family homes are also located to the east off Tivoli Park Row, Highland Ranch Road, and Provencal Place. Existing NSLUs in the project area include single-family residential, multi-family residential, the Highland Ranch Elementary School, and the Shoal Creek Elementary School.

Vibration

Vibration from roadways is considered to be the primary source of groundborne vibration within the project area. Heavy truck traffic can generate groundborne vibration, which varies considerably depending on vehicle type, weight, and pavement conditions. However, groundborne vibration levels generated from vehicular traffic are not typically perceptible outside of the roadway right-of-way. There are no other significant sources of groundborne vibration within the project area.

5.11.2 Regulatory Framework

Federal

Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, the EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, responsibilities for regulating noise control policies were transferred to state and local governments in 1982. However, noise control guidelines and regulations contained in the EPA rulings in prior years are still adhered to by designated federal agencies where relevant. There are no federal noise regulations that are directly applicable to the construction or operation of the project.

State

California Department of Transportation - Vibration

There are no state standards for vibration. However, California Department of Transportation (Caltrans) provides a review and synthesis of published research results in the Transportation and Construction Vibration Guidance Manual. Based on the synthesis of research, Caltrans provides guidance thresholds for the protection of a number of structures and conditions. Caltrans recommends a threshold of 0.5 inches per second (in/sec) peak particle velocity (PPV) for “new residential structures,” 0.3 in/sec PPV for “older residential structures” and 0.25 in/sec PPV for historic buildings and some old structures (Caltrans 2013).

The Caltrans Transportation Construction Vibration Guidance Manual does not contain specific definitions for the categories used within their guidance threshold criteria. However, based on the terminology and definitions contained within the research papers that they summarize, the term new residential structures is likely referring to modern construction techniques (e.g., timber frame, reinforce choice, gypsum wallboard, wood or stucco siding), while older residential structures is interpreted to refer structures constructed with obsolete building methods and materials (e.g., plaster and lath, its best dose). Historic and some old buildings is interpreted to refer to historically significant buildings or older buildings in significant disrepair. The Carmel Mountain Ranch development was constructed in the late 1980s and early 1990s, using modern construction techniques. While this would likely place the surrounding structures within the new residential structure category, this analysis will rely on the more conservative older residential structure category threshold criteria of 0.3 in/sec PPV.

Local

City of San Diego Municipal Code

The San Diego Municipal Code serves to further protect the welfare and the peace and quiet of the community through the establishment of both objective and subjective methods for determining non-compliance with the City noise regulations. The City has enumerated these standards and methods of

enforcement in Chapter 5, Article 9.5 of the San Diego Municipal Code. Relevant standards and thresholds are presented below (City of San Diego 2010).

- (a) It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table **[Error! Reference source not found.5.11-3]**, at any location in the City of San Diego on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.

Table 5.11-3. Applicable Noise Limits

Land Use	Time of Day	One-Hour Average Sound Level (dB)
Single-family residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multifamily residential (up to a maximum density of 1/2,000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or agricultural	Any time	75

Note: dB = decibels.

Source: SDMC 2019.

- (a) The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Permissible construction noise level limits shall be governed by Sections 59.5.0404 of this article.
- (b) Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the noise level limits of Part A. of this section, measured at or beyond six feet from the boundary of the easement upon which the equipment is located.

Section 59.5.0404 Construction Noise

- (a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less

objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

- (b) Except as provided in subsection C. hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m.
- (c) The provisions of subsection B. of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

5.11.3 Impact Analysis

Issue 1: Would the project Create a significant increase in the existing ambient noise levels which exceed the City's adopted noise ordinance?

Impact Threshold(s)

The City's California Environmental Quality Act (CEQA) Significance Determination Thresholds references the San Diego Municipal Code to establish definitions for acoustical terminology and provide additional significance thresholds for impact determination based on the source type. Based on the Scoping Letter provided for the proposed project, the following environmental threshold and threshold discussion related to noise impacts is applicable. Based on the City's CEQA Significance Determination Thresholds (City of San Diego 2016), noise impacts may be significant if the project would:

- Construction Noise: Exposure of people to construction noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0404 (i.e., 75 dBA LEQ [12-hour]);
- Stationary Noise Sources: Exposure of people to noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0401, as identified in Table 5.11-X; or
- Traffic Generated Noise: Exposure of people to transportation noise levels that exceed the sound level limits as presented in Table K-2 of the City's Significance Determination Thresholds and as identified below in Table 5.11-X, *City of San Diego Traffic Noise Significance Thresholds*.

**Table 5.11-4. City of San Diego Traffic Noise Significance Thresholds (dBA CNEL)
(Table K-2 of the Guidelines)**

Structure of Proposed Use That Would Be Impacted by Traffic Noise	Interior Space	Exterior Useable Space ¹	General Indication of Potential Significance
Single-family detached	45 dB	65 dB	Structure or outdoor useable area is <50 feet from the center of the closest (outside) lane on a street with existing or future ADTs >7,500
Multi-family, school, library, hospital, day care center, hotel, motel, park, convalescent home	45 Db ²	65 dB	
Office, church, business, professional uses	n/a	70 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >20,000
Commercial, retail, industrial, outdoor sports uses	n/a	75 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >40,000

Source: City of San Diego 2016.

Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; ADT = average daily traffic; n/a = not applicable.

¹ If a project is currently at or exceeds the significance thresholds for traffic noise described above, and noise levels would result in less than a 3-dB increase, then the impact is not considered significant.

² The City Development Services Department ensures 45 dB pursuant to Title 24.

Impact Analysis

Short-Term Construction

Development of the proposed project would generate noise levels associated with the operation of heavy construction equipment and construction related activities in the project area. Construction noise levels in the project area would fluctuate depending on the particular type, number, and duration of usage for the various pieces of equipment. Other factors that influence noise levels include the relative exposure and distance between the source and receptors. The proposed project would be developed in phases. Developments implemented during earlier phases would have the potential to expose the on-site noise-sensitive receptors of the earlier phases to construction noise levels associated with the later phases of project development (e.g., Phase 1 NSLU would be affected by the construction of Phase 2 and beyond). Construction noise associated with the proposed project is assessed with respect to the nearest existing residential receptors, at which the 75 dBA 12-hour L_{eq} threshold would apply, per San Diego Municipal Code Section 59.5.0404(c).

The effects of construction noise depend largely on the types of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the vicinity of the receiver. Construction generally occurs in several discrete stages, with each phase varying the equipment mix and the resulting overall noise emission. These phases alter the characteristics of the noise environment generated on the project site and in the surrounding community for the duration of the construction phase. Construction phases for the proposed project are anticipated to include demolition, grading, utility infrastructure, building construction, paving, and architectural coating. To

assess noise levels associated with the various equipment types and operations, construction equipment can be considered to operate in two modes, mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner. Stationary equipment operates in a given location for an extended period of time to perform continuous or periodic operations.

Operational characteristics of heavy construction equipment are additionally typified by short periods of full-power operation followed by periods of operation at lower power, idling, or powered-off conditions. These characteristics are accounted for through the application of typical usage factors (operational percentage) to the reference maximum noise levels. The Federal Transit Administration and Federal Highway Administration have measured and documented maximum noise levels and operational characteristics for a wide range of construction machinery, which are summarized in Table 5.11-5.

Table 5.11-5. Construction Equipment Noise Emission Levels

Equipment Description	Acoustical Use Factor (%)	L _{max} at 50 feet (dBA, slow) ¹
Auger Drill Rig	20	85
Backhoe	40	80
Blasting ²	N/A	94
Compactor (ground)	20	93
Compressor (air)	40	80
Concrete Mixer Truck	40	85
Concrete Pump Truck	20	82
Concrete Saw	20	90
Crane	16	85
Dozer	40	85
Dump Truck	40	80
Excavator	40	85
Flat Bed Truck	40	84
Front End Loader	40	80
Generator	50	82
Grader	40	85
Jackhammer ²	20	85
Mounted Impact Hammer (hoe ram) ²	20	90
Pavement Scarifier	20	85
Paver	50	85
Pneumatic Tools	50	85
Pumps	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Vacuum Excavator (Vac-truck)	40	85

Source: DOT 2006; FTA 2006.

Notes: L_{max} = maximum noise level; dBA = A-weighted decibels; N/A = not applicable.

¹ All equipment fitted with a properly maintained and operational noise control device, per manufacturer specifications.

² Impulsive/impact device.

Although specific designs and construction requirements for build out of the proposed project are currently unknown, it is anticipated that development of various project development and phases would incorporate the use of typical construction fleet mixes. Based on the reference noise levels, usage rates, and operational characteristics discussed above, overall hourly average noise levels attributable to project construction activities were calculated by phase for the proposed project. Construction noise levels were predicted using reference noise emission data and operational parameters contained in the FHWA RCNM, the FTA guidance manual and the default construction fleet assumptions used in the air quality analysis. These construction phases are assumed to be similar for all development phases of the proposed project. The estimated construction noise levels and the distance from construction activity to the San Diego Municipal Code 75 dBA L_{eq} 12-hour noise level threshold are presented by phase in Table 5.11-6.

Table 5.11-6. Construction Noise Model Results Summary

Construction Phase Noise Levels (dBA L_{eq}) at 50 feet					
<i>Demolition</i>	<i>Grading</i>	<i>Dry and Wet Utilities</i>	<i>Paving</i>	<i>Building Construction</i>	<i>Architectural Coating</i>
87.2 dBA	86.2 dBA	85.9 dBA	85.5 dBA	86.8 dBA	76 dBA
<i>Distance to City of San Diego 75 dBA L_{eq} 12-hour Noise Level Threshold</i>					
162 feet	136 feet	132 feet	128 feet	143 feet	55 feet

Source: Appendix F.

Notes: dBA = A-weighted decibels; L_{eq} = equivalent sound level

As shown in Table 5.11-6, noise levels for typical construction activities would generate maximum noise levels ranging from approximately 76 to 87.2 dBA at a distance of 50 feet from the acoustical center of construction operations, depending on construction phase. Noise from localized point sources (e.g., heavy construction equipment, mobile-source construction noise, stationary-source construction noise) typically decrease at a rate of 6 dB to 7.5 dB with each doubling of distance between the noise source and the receptor. Assuming an attenuation rate of 6 dB per doubling of distance, construction operations and related activities would have the potential to generate exterior noise levels exceeding the San Diego Municipal Code construction noise threshold at distances ranging from 55 feet to 162 feet from the acoustical center of construction operations. Given the nature of the project site, being interspersed within existing residential land uses, the distance from the acoustical center of localized construction operations to the nearest existing noise-sensitive land uses would range from approximately 105 feet to 185 feet. With the proximate location of noise-sensitive land uses, the majority of construction operations associated with the proposed project would exceed the City's 75 dBA 12-hour average property line noise level threshold and, therefore, mitigation would be necessary.

As mentioned, future on-site noise-sensitive land uses developed during the earlier phases of the proposed project would also have the potential to be exposed construction noise levels generated by the later phases of development. However, the distance from the acoustical center of construction operations for subsequent development phases would range from approximately 250 feet to 1,000 feet to the nearest on-site future noise-sensitive receptors. Therefore, the predicted construction noise levels at future on-site receptors would comply with the City of San Diego 75 dBA 12-hour average property line noise level threshold.

Groundborne Vibration

Construction activities occurring within the project site may result in varying degrees of temporary groundborne vibration or noise, depending on the specific construction equipment used and the operations involved. Representative groundborne vibration levels for various types of construction equipment, developed by the Federal Transit Administration, are summarized below in Table 5.11-7. As shown in Table 5.11-7, heavier pieces of construction equipment, such as a bulldozer, have been documented to generate peak particle velocities of approximately 0.089 in/sec PPV or less at a reference distance of 25 feet (DOT 2006). Pile driving and blasting are not currently expected to be utilized in the construction of the proposed project.

Groundborne vibration attenuates rapidly, even over short distances. Using standard Federal Transit Administration vibration attenuation formulas, non-pile driving construction activities would exceed the Federal Transit Administration/Caltrans recommended threshold of significance of 0.2 in/sec PPV at a distance of 15 feet or less. During construction of the proposed project, heavy construction equipment would not operate within 15 feet of any sensitive receptor, as buildings associated with the existing sensitive receptors are located approximately 20 feet or more from their respective property lines, proposed project boundaries, and construction areas. Thus, construction of the proposed project would not result in significant groundborne vibration impacts, due to the distance at which heavy construction activities would occur from sensitive receptors.

Table 5.11-7. Representative Vibration Levels for Construction Equipment

Equipment		PPV at 25 feet (in/sec) ¹	Approximate Lv (VdB) at 25 feet ²
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (vibratory/sonic)	Upper range	0.734	105
	Typical	0.170	93
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Heavy-duty Trucks (Loaded)		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: DOT 2006.

Notes: PPV = peak particle velocity; in/sec = inches per second.

- ¹ Vibration levels can be approximated at other locations and distances using the above reference levels and the following equation: $PPV_{equip} = PPV_{ref} (25/D)^{1.5}$ (in/sec); where “PPV ref” is the given value in the above table, “D” is the distance for the equipment to the new receiver in feet.
- ² Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor of 4.
- ³ Vibration levels can be approximated at other locations and distances using the above reference levels and the following equation: $PPV_{equip} = PPV_{ref} (25/D)^{1.5}$ (in/sec); where “PPV ref” is the given value in the above table, “D” is the distance for the equipment to the new receiver in feet.

Long-Term Operational

Off-Site Roadway Traffic Noise

The proposed project would result in the creation of additional vehicle trips on regional and local roadways, which could result in increased traffic noise levels at NSLUs adjacent to area roadways. Potential off-site noise impacts resulting from the increase in vehicular traffic on the local roadway network associated with long-term operations of the proposed project were evaluated under existing (2019), near-term (2025), and project horizon (2050) conditions with and without implementation of the proposed project.

Traffic volumes and the distribution of those volumes were obtained from the Local Mobility Analysis prepared for the proposed project (Appendix C). Average vehicle speeds on local area roadways were assumed to be consistent with posted speed limits and remain as such with or without implementation of the proposed project.

Table 5.11-8 through Table 5.11-10 summarize modeled traffic noise levels at a noise prediction receiver locations, and also present the relative traffic noise level increase resulting from implementation of the proposed project. Actual traffic noise exposure levels at NSLUs in the project vicinity would vary depending on a combination of factors such as daily traffic volumes, relative distances between sources and receiver locations, shielding provided by existing and proposed structures, and meteorological conditions.

As shown below in Table 5.11-8, modeled traffic noise levels along roadway segments in the vicinity of the proposed project approach or exceed the “normally acceptable” noise level threshold under the existing conditions at a number of locations within the study area. To evaluate the effects of the proposed project, the potential for the project to increase the ambient noise level in the project’s vicinity is also analyzed and shown in Table 5.11-8. A significant impact would occur if implementation of the proposed project would cause an increase of 3 dB from existing noise levels.

Table 5.11-8. Predicted Existing No Project and Existing Plus Project Traffic Noise Levels

Roadway	Segment From/To	Predicted Level, dBA CNEL			
		Existing	Existing Plus Project	Net Change	Impact?
Ted Williams Pkwy	I-15 to Rancho Carmel Dr.	58.7	59.0	<1	No
Ted Williams Pkwy	Rancho Carmel Dr. to Shoal Creek Dr.	72.9	73.2	<1	No
Ted Williams Pkwy	Shoal Creek Dr. to Carmel Ridge Rd.	73.7	73.9	<1	No
Ted Williams Pkwy	Carmel Ridge Rd. to Highland Ranch Rd.	69.2	69.4	<1	No
Ted Williams Pkwy	Highland Ranch Rd. to Pomerado Rd.	73.9	74.2	<1	No
Rancho Carmel Dr.	Provencal Place to Shoal Creek Dr.	66.5	66.9	<1	No
Rancho Carmel Dr.	Shoal Creek Dr. to Windcrest Lane	68.7	69.0	<1	No
Rancho Carmel Dr.	Windcrest Lane to Carmel Mountain Rd.	59.5	60.0	<1	No
Carmel Mountain Rd.	Rancho Carmel Dr. to Stoney Peak Dr.	60.0	60.1	<1	No
Highland Ranch Rd.	World Trade Dr. to Eastbourne Rd.	66.4	66.7	<1	No

Table 5.11-8. Predicted Existing No Project and Existing Plus Project Traffic Noise Levels

Roadway	Segment From/To	Predicted Level, dBA CNEL			
		Existing	Existing Plus Project	Net Change	Impact?
Highland Ranch Rd.	Eastbourne Rd. to Carmel Ridge Rd.	67.1	67.6	<1	No
Highland Ranch Rd.	Carmel Ridge Rd. to Ted Williams Pkwy	65.5	65.8	<1	No
World Trade Dr.	Stoney Peak Dr. to Highland Ranch Rd.	55.8	55.9	<1	No
I-15	South of Ted Williams Pkwy	73.7	73.7	<1	No
I-15	Ted Williams Pkwy to Carmel Mountain Ranch Rd.	80.2	80.2	<1	No
I-15	North of Carmel Mountain Ranch Rd.	78.7	78.7	<1	No

Source: Appendix F.

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level; I = Interstate.

- * Traffic noise levels are predicted at a standard distance of 100 feet from the roadway centerline and do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

Existing traffic noise levels presented in Table 5.11-8 indicate that traffic noise levels in the project area currently range from approximately 56 to 80 dBA CNEL. Existing plus project traffic noise levels are predicted to remain within the same range. Development of the proposed project is calculated to result in a net change in traffic noise levels of less than 1 dB, and would therefore not result in an increase in traffic noise levels of 3 dB CNEL or more at noise-sensitive receptors in the project area or contribute significantly to further degradation of the ambient noise environment.

The near-term (2025) traffic noise levels presented in Table 5.11-9 indicate that traffic noise levels in the project area without the proposed project would range from approximately 56 to 80 dBA CNEL. The near-term (2025) plus project traffic noise levels are predicted to remain within the same range. Development of the proposed project is anticipated to result in a net change in traffic noise levels of less than 1 dB. Therefore, the proposed project would not result in an increase in traffic noise levels of 3 dB CNEL or more at noise-sensitive receptors in the project area or contribute significantly to further degradation of the ambient noise environment.

Table 5.11-9. Predicted Near-Term (2025) No Project and Near-Term (2025) Plus Project Traffic Noise Levels

Roadway	Segment From/To	Predicted Level, dBA CNEL			
		Near-Term	Near-Term Plus Project	Net Change	Impact?
Ted Williams Pkwy	I-15 to Rancho Carmel Dr.	58.8	59.0	<1	No
Ted Williams Pkwy	Rancho Carmel Dr. to Shoal Creek Dr.	72.9	73.2	<1	No

Table 5.11-9. Predicted Near-Term (2025) No Project and Near-Term (2025) Plus Project Traffic Noise Levels

Roadway	Segment From/To	Predicted Level, dBA CNEL			
		Near-Term	Near-Term Plus Project	Net Change	Impact?
Ted Williams Pkwy	Shoal Creek Dr. to Carmel Ridge Rd.	73.7	73.9	<1	No
Ted Williams Pkwy	Carmel Ridge Rd. to Highland Ranch Rd.	69.2	69.4	<1	No
Ted Williams Pkwy	Highland Ranch Rd. to Pomerado Rd.	74.0	74.2	<1	No
Rancho Carmel Dr.	Provencal Place to Shoal Creek Dr.	66.6	67.0	<1	No
Rancho Carmel Dr.	Shoal Creek Dr. to Windcrest Lane	68.7	69.0	<1	No
Rancho Carmel Dr.	Windcrest Lane to Carmel Mountain Rd.	59.6	60.0	<1	No
Carmel Mountain Rd.	Rancho Carmel Dr. to Stoney Peak Dr.	60.0	60.2	<1	No
Highland Ranch Rd.	World Trade Dr. to Eastbourne Rd.	66.4	66.7	<1	No
Highland Ranch Rd.	Eastbourne Rd. to Carmel Ridge Rd.	67.1	67.6	<1	No
Highland Ranch Rd.	Carmel Ridge Rd. to Ted Williams Pkwy	65.5	65.8	<1	No
World Trade Dr.	Stoney Peak Dr. to Highland Ranch Rd.	55.8	55.9	<1	No
I-15	South of Ted Williams Pkwy	74.0	74.0	<1	No
I-15	Ted Williams Pkwy to Carmel Mountain Ranch Rd.	80.4	80.4	<1	No
I-15	North of Carmel Mountain Ranch Rd.	78.9	78.9	<1	No

Source: Appendix F.

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level; I = Interstate.

* Traffic noise levels are predicted at a standard distance of 100 feet from the roadway centerline and do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

The predicted cumulative (2050) traffic noise levels presented in Table 5.11-10 indicate that traffic noise levels in the project area without the proposed project would range from approximately 57 to 81 dBA CNEL. The cumulative (2050) plus project traffic noise levels are predicted to remain within the same range. Development of the proposed project is calculated to result in a net change in traffic noise levels of less than 1 dB. Therefore, the proposed project would not result in an increase in traffic noise levels of 3 dB CNEL or more at noise-sensitive receptors within the project area or contribute significantly to further degradation of the ambient noise environment.

Table 5.11-10. Predicted Cumulative (2050) No Project and Cumulative (2050) Plus Project Traffic Noise Levels

Roadway	Segment From/To	Predicted Level, dBA CNEL			
		Horizon (2050)	Horizon Plus Project	Net Change	Impact?
Ted Williams Pkwy	I-15 to Rancho Carmel Dr.	59.8	60.0	<1	No
Ted Williams Pkwy	Rancho Carmel Dr. to Shoal Creek Dr.	73.7	74.0	<1	No
Ted Williams Pkwy	Shoal Creek Dr. to Carmel Ridge Rd.	74.1	74.3	<1	No
Ted Williams Pkwy	Carmel Ridge Rd. to Highland Ranch Rd.	69.6	69.8	<1	No
Ted Williams Pkwy	Highland Ranch Rd. to Pomerado Rd.	74.7	74.8	<1	No
Rancho Carmel Dr.	Provençal Place to Shoal Creek Dr.	68.0	68.3	<1	No
Rancho Carmel Dr.	Shoal Creek Dr. to Windcrest Lane	70.7	70.9	<1	No
Rancho Carmel Dr.	Windcrest Lane to Carmel Mountain Rd.	61.0	61.3	<1	No
Carmel Mountain Rd.	Rancho Carmel Dr. to Stoney Peak Dr.	60.9	61.0	<1	No
Highland Ranch Rd.	World Trade Dr. to Eastbourne Rd.	67.0	67.3	<1	No
Highland Ranch Rd.	Eastbourne Rd. to Carmel Ridge Rd.	67.8	68.2	<1	No
Highland Ranch Rd.	Carmel Ridge Rd. to Ted Williams Pkwy	66.2	66.5	<1	No
World Trade Dr.	Stoney Peak Dr. to Highland Ranch Rd.	56.5	56.7	<1	No
I-15	South of Ted Williams Pkwy	64.9	74.9	<1	No
I-15	Ted Williams Pkwy to Carmel Mountain Ranch Rd.	81.2	81.2	<1	No
I-15	North of Carmel Mountain Ranch Rd.	79.7	79.7	<1	No

Source: Appendix F.

Notes: dBA = A-weighted decibels; CNEL = community noise equivalent level; I = Interstate.

- * Traffic noise levels are predicted at a standard distance of 100 feet from the roadway centerline and do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

As presented in Tables 5.11-8 through 5.11-10, the additional vehicular traffic associated with the proposed project would result in a CNEL increase of less than 1 dB, which is below the 3 dB discernible level of change for the average healthy human ear, and below the City's threshold for significant change in the ambient noise environment.

On-Site Traffic Noise Compatibility

The ambient noise environment in the project area is largely influenced by vehicular traffic on the local and regional roadway network. To determine compatibility of the proposed project with the existing and future ambient noise environments, the traffic noise model was further employed to evaluate noise levels at the outdoor activity areas (labeled as "recreation") identified in the proposed project's tentative map. Modeled existing plus project and future plus project noise levels at the receiver locations are present below in Table 5.11-15.11-11.

The traffic noise model does not account for shielding or level reductions provided by natural or man-made intervening structures, such as topography, earthen berms, buildings, barriers, etc. As such, in-situ noise levels on the proposed project site would likely be lower in comparison to the modeled noise levels within this analysis. Additionally, multi-family developments, such as those proposed with this project, generally include a common outdoor activity area that is typically located more central to the use and shielded from traffic noise by the associated intervening multi-family buildings. Locating the common use outdoor activity area more central to the use allows for placement of multi-family uses in closer proximity to traffic noise sources, while remaining in compliance with local land use compatibility standards.

Table 5.11-11. Predicted Existing and Cumulative (2050) Plus Project Traffic Noise Levels at Future On-Site NSLUs

Development Area	Noise Source	Distance from OAA to CL (feet)	Predicted Level, dBA CNEL		Level of Compatibility ¹
			Existing Plus Project	Future Plus Project	
Unit 1	I-15	2,328	63.0	64.0	Compatible
	Rancho Carmel Dr.	1,110			
	Ted Williams Parkway	1,265			
Unit 2	I-15	1,930	63.9	64.9	Conditionally Compatible
	Rancho Carmel Dr.	810			
	Ted Williams Parkway	1,420			
Unit 5	I-15	850	69.2	70.2	Incompatible
	Rancho Carmel Dr.	230			
	Ted Williams Parkway	1,030			
Unit 6	I-15	1,350	66.7	67.8	Conditionally Compatible
	Rancho Carmel Dr.	310			
	Ted Williams Parkway	805			
Unit 8	I-15	2,625	64.3	65.0	Conditionally Compatible
	Rancho Carmel Dr.	1,300			
	Ted Williams Parkway	525			
Unit 10-11	I-15	4,360	55.6	56.1	Compatible
	Rancho Carmel Dr.	3,060			
	Carmel Mountain Rd	2,660			
	Highland Ranch Rd	1,050			
	Ted Williams Parkway	1,375			
Unit 16	I-15	4,000	55.2	55.9	Compatible
	Carmel Mountain Rd	1,775			
	World Trade Dr	1,075			
	Highland Ranch Rd	455			
	Ted Williams Parkway	2,200			

Table 5.11-11. Predicted Existing and Cumulative (2050) Plus Project Traffic Noise Levels at Future On-Site NSLUs

Development Area	Noise Source	Distance from OAA to CL (feet)	Predicted Level, dBA CNEL		Level of Compatibility ¹
			Existing Plus Project	Future Plus Project	
Unit 17	I-15	3,550	60.8	61.4	Conditionally Compatible
	Carmel Mountain Rd	1,445			
	World Trade Rd	720			
	Highland Ranch Rd	445			
	Ted Williams Parkway	2,400			
Unit 9-18	I-15	3,350	54.1	54.8	Compatible
	Rancho Carmel Dr.	2,050			
	Carmel Mountain Rd	1,770			
	Ted Williams Parkway	1,630			
	Highland Ranch Rd	1,705			

Notes: dBA = A-weighted decibels; CNEL = Community Noise Equivalent Level

¹ Level of compatibility within the City of San Diego Noise Compatibility Guidelines (Table 4), without accounting for intervening structure, topography or mitigation.

Source: Dudek 2020

As shown in 5.11-11, the outdoor activity areas identified on the tentative map meet the “compatible” or “conditionally compatible” use thresholds for existing and future traffic noise levels, without accounting for noise level reductions provided by intervening elements in the vicinity, with the exception of Unit 5.

Based on the modeled traffic noise level from I-15, Unit 5 would be incompatible with the multi-family land use thresholds, not accounting for shielding provided by the existing earthen berm to the north of the site or the developments buildings. The earthen berm to the north would limit the exposure of the outdoor activity area to traffic noise being generated north of the proposed project and would likely provide a reduction of 2 to 3 dB from the calculated levels. Intervening buildings associated with the development would largely break line of site to the outdoor activity area, resulting in a noise level reduction of 3 to 5 dB. Therefore, traffic noise levels at the common use outdoor activity area associated with Unit 5 are calculated to range from approximately 62 to 65 dB. Therefore, a multi-family use designed in accordance with the tentative map would be consistent with the conditionally acceptable threshold of the City of San Diego Land Use Compatibility Guidelines.

Additionally, the project would be required to comply with the California Building Code and the City of San Diego Code, which require that interior noise levels be maintained at 45 dBA Ldn/CNEL or less.

Non-Transportation Noise Sources

The incorporation of new single-family and multi-family residences and open space/recreational uses included in the proposed project would add a variety of non-transportation noise sources to the existing

community. New residential mechanical equipment installed within the proposed dwelling units would be a new source of generated noise within the project area. In addition, the open space and recreational uses would attract residents and their guests, which could generate new potential community noise associated with the use of these areas.

Residential Mechanical Equipment

Mechanical equipment associated with residential land uses generally includes heating, ventilation, and air-conditioning (HVAC) equipment that can be a significant noise source. Noise levels generated by the HVAC and mechanical equipment vary significantly depending on unit size, efficiency, location, type of fan, and orientation of openings. The specific equipment types and location for outdoor HVAC equipment associated with the various elements of the proposed project are unknown at this time; as such, outdoor HVAC equipment representative of what is typical for similar residential housing developments was assumed for the analysis. Each outdoor HVAC condenser unit has a sound emission source level of 74 dBA at 3 feet (Johnson Controls 2010). The design guidelines prepared for the proposed project specify a 50-foot setback/buffer between existing residential property boundaries and new buildings. Assuming an attenuation rate of 6 dB per doubling of distance and shielding that would break the line of sight to the outdoor HVAC equipment, the noise level at the nearest receiving property line would be approximately 44.5 dBA during continuous operation, exceeding the San Diego Municipal Code residential noise level standard of 40 dBA between 10:00 p.m. and 7:00 a.m.

Outdoor Recreation and Gathering Spaces

Proposed outdoor spaces include trails, nature viewing areas, children's play areas, picnic areas, a space for outdoor performances and entertainment, farmers markets, and an open park area to support sporting activities and movies in the park.

While design details, such as location, capacity, specific activity elements, site configuration, and design are unknown at this time, farmers markets, food truck events, performances and entertainment events typically incorporate or necessitate the use of amplified sound systems. Amplified sound systems often employed at events with more limited attendance, such as those identified above, are capable of producing sound levels in excess of 90 dB at a distance of 100 feet. Therefore, sound levels associated with the outdoor recreation activities and events would have the potential to exceed San Diego Municipal Code non-transportation noise standards.

Groundborne Vibration

The proposed project does not include elements that would generate groundborne vibration during operation.

Significance of Impact

Construction

Short-Term Construction

Given the nature of the project site being interspersed with and in proximity to existing residential land uses, construction operations associated with the proposed project have the potential to exceed the City's 75 dBA 12-hour average property line noise level threshold, resulting in a potentially significant impact (**Impact NOI-1**).

Groundborne Vibration

Regarding groundborne vibration impacts, implementation of the proposed project would result in a **less-than-significant impact**.

OperationalOff-Site Roadway Traffic Noise

As presented in Tables 5.11-9 through 5.11-11, the additional vehicular traffic associated with the proposed project would result in a CNEL increase of less than 1 dB, which is below the 3 dB discernible level of change for the average healthy human ear, and below the City's threshold for significant change in the ambient noise environment. Therefore, implementation of the proposed project would result in a **less-than-significant impact**.

On-Site Roadway Traffic Noise

A multi-family use designed in accordance with the tentative map would be consistent with the conditionally acceptable threshold of the City of San Diego Land Use Compatibility Guidelines, and impacts would be **less than significant**.

Residential Mechanical Noise

As stated above, assuming an attenuation rate of 6 dB per doubling of distance and shielding that would break the line of site to the outdoor HVAC equipment, the noise level at the nearest receiving property line would be approximately 44.5 dBA during continuous operation, exceeding the San Diego Municipal Code residential noise level standard of 40 dBA between 10:00 p.m. and 7:00 a.m., resulting in a **potentially significant impact (Impact NOI-2)**.

Outdoor Recreation and Gathering Spaces

Sound levels associated with the outdoor recreation activities and events would have the potential to exceed San Diego Municipal Code non-transportation noise standards, resulting in a **potentially significant impact (Impact NOI-3)**.

Groundborne Vibration

The proposed project does not include elements that would generate groundborne vibration during operation. Impacts would be **less than significant**.

Mitigation Monitoring and Reporting

The following mitigation measures would reduce potentially significant noise impacts:

- MM-NOI-1 Construction Noise Reduction Techniques.** Prior to issuance of demolition, grading, or building permits, Mitigation Monitoring Coordination shall verify that construction activity occurring as a result of proposed project implementation within 175 feet of noise-sensitive receivers includes noise-reduction measures to ensure construction activities do not exceed the 75 dBA CNEL and comply with City of San Diego Noise Standards (San Diego

Municipal Code Section 59.5.0401, Sound Level Limits, and Section 59.5.0404, Construction Noise), as follows:

- A. Construction operations and related activities associated with the proposed project shall be performed during daytime hours, as outlined within the San Diego Municipal Code, between 7:00 a.m. and 7:00 p.m., with the exception of the days and holidays identified in the Municipal Code.
- B. Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. Internal combustion powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed manufacturer specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function and minimization of noise.
- C. Portable and stationary site support equipment (such as generators, compressors, rock crushers, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.
- D. Impact tools shall have the working area/impact area shrouded or shielded, with intake and exhaust ports on power equipment muffled or suppressed. This may necessitate the use of temporary or portable, application specific noise shields or barriers if construction noise levels exceed the San Diego Municipal Code property line sound level threshold.
- E. Construction equipment shall not be idled for extended periods (e.g., 15 minutes or longer) of time in the immediate vicinity (i.e., within 25 feet) of noise-sensitive receptors.
- F. A disturbance coordinator shall be designated by the general contractor, which will post contact information in a conspicuous location near the entrance of the project construction site, prior to start of any construction activities so that it is clearly visible to nearby receivers most likely to be disturbed. The coordinator shall manage complaints resulting from the construction noise, by instituting modifications to the construction operations, construction equipment or work plan to ensure compliance with the San Diego Municipal Code standards, where complaints are valid and substantive. Recurring disturbances shall be evaluated by a qualified acoustical consultant retained by the project proponent to ensure compliance with applicable standards.

MM-NOI-2 Mechanical Equipment Noise Reduction Measures. Prior to issuance of building permit, Mitigation Monitoring Coordination shall verify that mechanical noise levels are minimized to meet applicable City of San Diego (City) noise thresholds through equipment selection, project-site design, and construction of localized barriers or parapets. Selection of mechanical equipment shall consider radiated outdoor sound pressure levels and efficiency as the primary criteria. Outdoor residential mechanical equipment shall be located so that line-of-site from the equipment to the adjacent noise-sensitive receiving property line is blocked by intervening building elements or structures. Should the selection and placement of mechanical equipment that inherently complies with the City's criteria not be possible, localized noise barriers for equipment located at grade, or rooftop parapets, shall be constructed around the heating, ventilation, and air-conditioning equipment so that line-of-site from the noise source to the property line of the adjacent noise-sensitive receptors is blocked. To ensure compliance with the San Diego Municipal Code, efficacy of the mechanical equipment location or intervening barrier shall be demonstrated through a

noise analysis performed by a qualified acoustical consultant that shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.

MM-NOI-3 Outdoor/Recreational and Gathering Space Noise Reduction Measures. Prior to issuance of a building permit, Mitigation Monitoring Coordination shall verify that sound levels associated with outdoor recreation activities and community events through application of project-site design and limitations on event capacity, allowable equipment, and operational hours (i.e., 7:00 a.m. to 7:00 p.m.) are minimized to meet applicable City of San Diego (City) noise thresholds. Proposed recreational activity areas shall be located in a manner to minimize noise exposure at surrounding noise-sensitive receptors. Use of recreational areas adjacent to noise-sensitive receptors shall be limited to daytime hours (7:00 a.m. to 7:00 p.m.), with the exception of temporary use permits granted by the City Manager. Community events using areas of the property immediately adjacent to noise-sensitive receptors shall be limited to daytime and evening hours (7:00 a.m. to 10:00 p.m.). The use of outdoor amplified sound systems shall be prohibited unless a detailed noise evaluation demonstrates such systems would be in compliance with San Diego Municipal Code. To ensure compliance with the San Diego Municipal Code, further noise analysis shall be performed for proposed recreational outdoor activity areas and community event venues by a qualified acoustical consultant with appropriate specifications provided for sound controls to meet applicable code requirements; the detailed noise analysis and controls shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.

Level of Significance After Mitigation

Short-term construction noise impacts would be **less than significant** with implementation of Mitigation Measure MM-NOI-1. The application of the noise control techniques affecting and controlling construction noise at the source can obtain reductions of 3 to 6 dBA, while noise control techniques implemented along the path of the noise (such as temporary noise barriers, enclosures, relocation of equipment) can reduce construction noise levels between 2 to 7 dBA (Appendix F). Therefore, the overall noise level reduction achieved through implementation of the noise control techniques can be expected to range from 5 to 13 dBA. In addition, further reductions in construction noise levels generated by the proposed project could be achieved through refinement and modification to the construction schedule, how the equipment is operated, and selection of quieter equipment.

Long-term operational noise impacts would be **less than significant** with implementation of MM-NOI-2 and MM-NOI-3. MM-NOI-2 would reduce operational noise from mechanical equipment and HVAC systems, and MM-NOI-3 would reduce noise from outdoor recreational and gathering spaces.



Project Boundary

Noise Measurement Location

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5.12 Paleontological Resources

This section describes the existing paleontological resources conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project. The following discussion is based upon paleontological resources review memorandum prepared by Dudek (January 21, 2020) and included as Appendix N.

5.12.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Geologic Units Underlying the Project Area

The project site is underlain by late Quaternary-age young alluvial flood plain deposits, several middle Eocene-age sedimentary units (the Mission Valley Formation, Stadium Conglomerate, and Friars Formation, from youngest to oldest), late Cretaceous-age intrusive igneous rocks, and early Cretaceous-age undivided metasedimentary and metavolcanic rocks (Attachment A to Appendix N). The listed geologic units and their paleontological sensitivity are summarized below.

Young Alluvial Flood Plain Deposits (Qya)

Holocene- and late-Pleistocene-age alluvial flood plain deposits (mapped unit Qya) occur in modern floodplains and primarily occur in the western portion of the project site near Interstate 15 and Rancho Carmel Drive. The SDNHM does not have any fossil localities from these deposits within a 1-mile radius of the project site. These deposits are generally less than 11,700 years old and range in composition from unconsolidated to moderately consolidated silt, sand, pebbly and cobbly sand, and boulders. Young alluvial flood plain deposits are assigned a low paleontological sensitivity based on their relatively young geologic age and lack of recorded fossil collection localities. However, these deposits commonly overlie geologic units of high or moderate paleontological sensitivity that could be impacted by construction where the contact is relatively shallow.

Friars Formation (Tf)

The fluvial deposits of the middle Eocene-age (approximately 47 to 46 million years old) Friars Formation underlie the majority of the project site. The SDNHM has 20 fossil collection localities from the Friars Formation within a 1-mile radius of the project site. The Friars Formation is assigned a high paleontological sensitivity on the basis of the recovery of diverse and well-preserved assemblages of both marine invertebrates and terrestrial vertebrates from these deposits.

Cretaceous Intrusive Igneous Rocks (Kg, Kgu, Kt)

The Cretaceous intrusive igneous rocks of San Diego County compose part of the northern end of the Peninsular Ranges Batholith, and include the unit mapped as granodiorite by Kennedy and Tan (2008). The southern and southwestern portions of the project site are underlain by these rocks. The SDNHM does not have any fossil localities from intrusive igneous rocks within a 1-mile radius of the project site. Plutonic igneous rocks do not preserve fossils because they crystallize at extremely high temperatures and pressures several miles below the earth's surface, so these rocks are assigned no paleontological sensitivity.

Cretaceous Metasedimentary and Metavolcanic Rocks (Mzu, Jsp)

Crystalline basement rocks of early Cretaceous age (approximately 145 to 125 million years old), mapped as Mesozoic metasedimentary and metavolcanic rocks by Kennedy and Tan (2008), underlie the southeastern margins of the project site. The SDNHM does not have any fossil localities from this geologic unit within a 1-mile radius of the project site. The metavolcanic portions of this unit rarely preserve fossils due to the high temperatures associated with their formation; some of the volcanic breccias, however, have produced petrified wood, and are assigned a marginal sensitivity. The metasedimentary portions have the potential to yield fossils, including siliceous microfossils (e.g., radiolarians) and marine macroinvertebrates (e.g., clams and belemnites), and are assigned a moderate paleontological sensitivity. The lack of nearby localities from these deposits indicates that fossil recovery is unlikely, so the geologic unit as a whole as exposed within the project site is assigned a low paleontological sensitivity.

San Diego County resides within the Peninsular Ranges Geomorphic Province (Appendix N). This geomorphic province is characterized by mountainous terrain on the east composed mostly of Mesozoic igneous and metamorphic rocks, and relatively low-lying coastal terraces (coastal plain) to the west underlain by late Cretaceous, Tertiary, and Quaternary age sedimentary rocks.

A review of published geological maps and a site-specific geotechnical investigation report (Appendix J) covering the project site and surrounding area was conducted to determine the specific geologic units underlying the project site. In addition, a search of the paleontological collection records housed at the San Diego Natural History Museum (SDNHM) was conducted in order to determine if any documented fossil collection localities occur at the project site or within the immediate surrounding area.

There are a total of 20 fossil localities documented by the SDNHM within a 1-mile radius of the project site. All of these localities were discovered within the Friars Formation, which underlies the project area. Fluvial deposits within the Friars Formation have yielded plant, invertebrate, and vertebrate fossils. Taxa include terrestrial plants, mollusks, aquatic lower vertebrates, and terrestrial vertebrates (Appendix N).

5.12.2 Regulatory Framework

Federal

The Paleontological Resources Preservation Act requires the secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land using scientific principles and expertise. The Omnibus Public Lands Act–Paleontological Resources Preservation (OPLA–PRP) includes specific provisions addressing management of these resources by the Bureau of Land Management, the National Park Service, the Bureau of Reclamation, the U.S. Fish and Wildlife Service, all of the Department of the Interior, and the Forest Service of the Department of Agriculture.

The OPLA–PRP affirms the authority for many of the policies that the federal land-managing agencies already have in place for the management of paleontological resources, such as issuing permits for collecting paleontological resources, curation of paleontological resources, and confidentiality of locality data. The OPLA–PRP only applies to federal lands and does not affect private lands. It provides authority for the protection of paleontological resources on federal lands, including criminal and civil penalties for fossil theft and vandalism. As directed by the OPLA–PRP, the federal agencies are in the process of developing regulations, establishing public awareness and education programs, and inventorying and monitoring federal lands.

State

The California Environmental Quality Act (CEQA) Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources are recognized as part of the environment under the CEQA Guidelines.

Local

City of San Diego Municipal Code – Paleontological Resources Requirements for Grading Activities

Chapter 14, Article 2, Division 1 of the City of San (City) Diego Municipal Code was updated in March 2018 to include the following for paleontological resources:

Section 142.0151: Paleontological Resources Requirements for Grading Activities

- a) Paleontological resources monitoring shall be required in accordance with the General Grading Guidelines for Paleontological Resources in the Land Development Manual for any of the following:
 - (1) Grading that involves 1,000 cubic yards or greater, and 10 feet or greater in depth, in a High Resource Potential Geologic Deposit/Formation/Rock Unit; or
 - (2) Grading that involves 2,000 cubic yards or greater, and 10 feet or greater in depth, in Moderate Resource Potential Geologic Deposit/Formation/Rock Unit; or
 - (3) Grading on a fossil recovery site or within 100 feet of the mapped location of a fossil recovery site.
- b) If paleontological resources, as defined in the General Grading Guidelines for Paleontological Resources, are discovered during grading, notwithstanding [San Diego Municipal Code] Section 142.0151(a), all grading in the area of discovery shall cease until a qualified paleontological monitor has observed the discovery, and the discovery has been recovered in accordance with the General Grading Guidelines for Paleontological Resources.

City of San Diego Paleontology Guidelines

Since it is the underlying formation and geologic rock units that contain the fossil remains, resource sensitivity/potential levels are rated for individual geologic formations. The resource sensitivity levels and potential ratings are adapted from the resource sensitivity levels and potential ratings described by the City (City of San Diego 2016).

5.12.3 Impacts Analysis

Issue 1: Would the proposal require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit?

Issue 2: Would the proposal require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

Impact Threshold (s):

According to the City of San Diego's Significance Determination Thresholds, the assessment of paleontological resource sensitivity for surficial and geologic units is based on the following designations:

- **High Sensitivity:** these formations are known to consist of geological deposits, formations, and rock units such as Delmar Formation (Td), Friars Formation (Tf), Lindavista Formation (QIn, QLB) occurring in Mira Mesa/Tierrasanta, Lusardi Formation (KI) occurring within Black Mountain Ranch/Lusardi Canyon Poway/Rancho Santa Fe, Mission Valley Formation (TMV), Mt. Soledad Formation (Tm, Tmss, Tmsc) occurring in Rose Canyon, Otay Formation (To), Point Loma Formation (Kp), Pomerado Conglomerate (Tp) within Scripps Ranch/Tierrasanta, San Diego Formation (Qsd), Scripps Formation (Tsd), Stadium Conglomerate (Tst), Sweetwater Formation, and Torrey Sandstone (Tf) located within Black Mountain Ranch/Carmel Valley. Monitoring is required for grading that is greater than 1,000 cubic yards and depths that are 10 feet or greater.
- **Moderate Sensitivity:** Moderate sensitivity is assigned to geological deposits, formations, and rock units consisting of Cabrillo Formation (KCS), Lindavista Formation (QIn, QLB), Lusardi Formation (KI), Mt. Soledad Formation (Tm, Tmss, Tmsc), Pomerado Conglomerate (Tp), River/Stream Terrace Deposits (Qt) occurring in South Eastern/Chollas Valley/Fairbanks Ranch/Skyline/Paradise Hills/Otay Mesa, Nestor/San Ysidro, and Santiago Peak Volcanics (Jsp) occurring in Black Mountain Ranch/La Jolla Valley, Fairbanks Ranch/Mira Mesa/Peñasquitos. Monitoring is required for grading that is over 2,000 cubic yards and depths that are 10 feet or greater.
- **Low Sensitivity:** Low sensitivity is assigned to geologic or surficial formation/materials that consist of Alluvium (Qsw, Qal, or QIs), River/Stream Terrace Deposits (Qt), and Torrey Sandstone (Tf). No monitoring is required in areas with low sensitivity.
- **Zero Sensitivity:** These formations consist of volcanic or plutonic igneous rocks with a molten origin (such as Granite/Plutonic [Kg] and Santiago Peak Volcanics [Jsp]). No monitoring is required in areas with low sensitivity.

The City assess potential impacts to moderate and high sensitivity geologic formations as follows:

- Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit.
- Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit.

Impact Analysis

The project site is underlain by one formation with high-resource potential (Friars Formation) for the occurrence of sensitive paleontological resources. The proposed project would require the excavation of approximately 1,017,150 cubic yards of soil to a maximum cut depth of 25 feet, thereby exceeding the excavation parameters of the threshold. No paleontological resources were identified within the project area as a result of the institutional records search and desktop geological review. It is not anticipated that paleontological resources will be impacted given the limited and relatively shallow construction excavation planned. However, intact paleontological resources may be encountered below a surficial layer of alluvium during excavation into previously undisturbed sedimentary deposits of the Friars Formation. It is likely that high-sensitivity formations will be encountered at the surface in some areas of the project site, with the potential for impacting the Friars Formation. Given the proximity of past fossil discoveries in the area and the underlying paleontologically sensitive deposits, the project site has the potential to yield scientifically significant paleontological resources. In the event that intact paleontological resources are located on the project site, ground-disturbing activities associated with construction of the project, such as grading during site preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site.

Significance of Impact

Because the project's grading exceeds the CEQA Significance Determination Thresholds, the project is subject to the grading ordinance (San Diego Municipal Code Section 142.0151) and the requirement for paleontological monitoring, which would be made a condition of approval. In accordance with Appendix P of the City's Land Development Manual, regulatory compliance would preclude impacts to paleontological resources; thus, impacts would be **less than significant**.

Mitigation Monitoring and Reporting

No mitigation would be required.

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5.13 Population and Housing

This section describes the existing population and housing conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the project.

5.13.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Surrounding land uses include single-family and multi-family residential development in all directions. Multi-family homes exist to the north of the project site, including the Carmel Terrace apartment complex, the Carmel Summit apartment complex, and the Jefferson at Carmel Mountain Ranch complex. Multi-family homes are also located to the east off Tivoli Park Row, Highland Ranch Road, and Provencal Place. The project site is located in close proximity to a variety of commercial uses and employment opportunities. The Carmel Mountain Plaza is north of the project site and provides a wide variety of stores, commercial amenities, and office space. Approximately 43 acres of office development are located immediately south of the project site adjacent to the Metropolitan Transit System Sabre Springs Transit Station.

The project site is currently designated Park, Open Space, and Recreation in the City's General Plan (City of San Diego 2008). The project site is currently designated as Private Recreation-Golf Course, as identified within the Community Plan Land Use Map (City of San Diego 1999). Most of the parcels within the project site are zoned as AR-1-1. However, some of the smaller parcels (associated with the cart paths, cart tunnels, maintenance yard and clubhouse) are zoned as RS-1-12, RS-1-14, RM-1-1, RM-2-5, and RM-3-7 (City of San Diego 2005). Permitted uses within the AR-1-1 zone include development of single-dwelling-unit homes at a required minimum of 10-acre lots. Permitted uses within the RS zones include development of single dwelling units that accommodate a variety of lot sizes and residential dwelling types and that promote neighborhood quality, character, and livability. Permitted uses within the RM zones include multiple-dwelling-unit development at varying densities.

Regional and local population, housing, and employment numbers are discussed in conjunction with applicable plans in Section 5.13.2, Relevant Plans, Policies, and Ordinances.

5.13.2 Regulatory Compliance

State

California Planning and Zoning Law

The legal framework within which California counties and cities exercise local planning and land use functions is provided in the California Planning and Zoning Law (Sections 65000 through 66499.58 of the California Government Code). Under that law, each county and city must adopt a comprehensive, long-term general plan. The law gives counties and cities wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. The requirements include seven mandatory elements described in the California Government Code. Each element must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and implementation measures.

Once the general plan of a county or city is adopted, it should be construed as a dynamic document, for which adaptability is a key component. Each jurisdiction frequently reviews its general plan for consistency and to ensure it addresses growth-related issues in a comprehensive manner. State law allows up to four general plan amendments per general plan element per year.

Senate Bill 375

Senate Bill 375 (codified in the California Government Code and California Public Resources Code) took effect in 2008 and provides a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the greenhouse gas reduction goals established in Assembly Bill 32. Senate Bill 375 requires metropolitan planning organizations to incorporate sustainable communities strategies (SCSs) in their regional transportation plans (RTPs) to achieve greenhouse gas emissions reduction targets by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

Regional Housing Needs Assessment

A regional housing needs assessment (RHNA) is mandated by state housing law as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods.

Communities use the RHNA in land use planning, in prioritizing local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion 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.

Local

San Diego Association of Governments

The San Diego Association of Governments (SANDAG) is a public agency, composed of 18 cities and the County of San Diego, which builds strategic plans guiding the San Diego region in land use, growth, economics, and the environment. SANDAG also provides population and housing estimates for the region, which are based, in part, on local jurisdictional planning data, and inform regional planning.

The SANDAG Regional Comprehensive Plan, adopted in 2004, provides a long-term planning framework for the San Diego region. The Regional Comprehensive Plan identified smart growth and sustainable development as important strategies to direct the region's future growth toward compact, mixed-use development in urbanized communities that already have existing and planned infrastructure, and then toward connecting those communities with a variety of transportation choices.

In 2011, SANDAG approved the 2050 RTP/SCS. This approval marked the first time SANDAG's RTP included an SCS, consistent with the Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375. This RTP/SCS provided a blueprint to improve mobility, preserve open space, and create communities, all with transportation choices to reduce greenhouse gas emissions and meet specific targets set by the California Air Resources Board as required by the 2008 Sustainable Communities Act.

SANDAG is required by law to update its regional transportation plan every 4 years. In October 2015, SANDAG adopted the latest update to its RTP/SCS. SANDAG's 2015 RTP/SCS, known as San Diego Forward: The Regional Plan (Regional Plan), integrates the elements of the prior Regional Comprehensive Plan and combines those elements with the Regional Plan.

The Regional Plan updates growth forecasts and is based on the most recent planning assumptions considering currently adopted land use plans, including the City's General Plan and other factors from the cities in the region and the County. SANDAG's Regional Plan will change in response to the ongoing land use planning of the City and other jurisdictions. For example, the City's General Plan, and other local general plans, may change based on general plan amendments initiated by the jurisdiction or landowner applicants. The general plan amendments may result in increases in development densities by amending the regional category designations or zoning classifications. Accordingly, the latest forecasts from the SANDAG RTP/SCS of future development in the San Diego region, including location, must be coordinated closely with each jurisdiction's ongoing land use planning because that planning is not static, as recognized by the need for updates to SANDAG's RTP/SCS every 4 years.

Regional Growth Forecast

SANDAG estimates future population, housing, land use, and economic growth throughout San Diego County and its cities, including the City. On October 13, 2013, SANDAG accepted the Series 13: 2050 Regional Growth Forecast, the most recent growth forecast for the region. This forecast serves as the foundation for the Regional Plan and other planning documents across the region. SANDAG growth projections for the region, the City, and the Carmel Mountain Ranch Community plan area are outlined in Table 5.13-1 below. It should also be noted that the 2050 Regional Growth Forecast is not intended to be an exact formula utilized to determine growth in the region and comprising jurisdictions; rather it should be utilized as a starting point for regional planning.

Table 5.13-1. Forecasted Growth for the San Diego Region, City of San Diego, and Carmel Mountain Community Planning Area

Jurisdiction/Area	Year				Change 2012–2050	
	2012	2020	2035	2050	Numeric	Percent
Population						
San Diego (Region)	3,143,429	3,435,713	3,853,698	4,086,759	925,330	29
City of San Diego	1,321,315	1,453,267	1,665,609	1,777,936	456,621	35
Carmel Mountain Ranch Community Planning Area	13,021	13,287	13,339	13,292	271	2
Housing						
San Diego (Region)	1,165,818	1,249,684	1,394,783	1,491,935	326,117	28
City of San Diego	518,137	559,143	640,668	695,703	177,566	34
Carmel Mountain Ranch Community Planning Area	5,072	5,072	5,072	5,072	0	0
Employment (Jobs)						
San Diego (Region)	1,450,913	1,624,124	1,769,938	1,911,405	460,492	32
City of San Diego	780,252	867,641	933,938	1,008,793	228,541	29
Carmel Mountain Ranch Community Planning Area	9,199	10,638	11,098	11,662	2,463	27

Sources: SANDAG 2013a, 2013b, and 2013c.

As shown in Table 5.13-1, while both the San Diego region and the City are forecasted to grow in population and housing stock between 2012 and 2050, the Carmel Mountain Ranch community is forecasted to experience minimal to no growth in these same areas (SANDAG 2013a, 2013b, and 2013c). However, similar to the region and City, the Carmel Mountain community is forecasted to experience growth in employment (jobs) between 2012 and 2050 (SANDAG 2013c).

Regional Housing Needs Assessment

In October 2011, SANDAG adopted the RHNA Plan for the 2013–2020 Housing Element cycle (also referred to as the fifth Housing Element cycle). Based on a methodology that weighs a number of factors (i.e., projected population growth, employment, commute patterns, and available sites), SANDAG determined quantifiable needs for housing units in the region according to various income categories. The RHNA allocates housing needs in four income categories (very low, low, moderate, and above moderate) for each jurisdiction that will be used in local housing elements; the City further splits the lowest category into extremely low and very low. In its final RHNA figures, SANDAG allocated 88,096 housing units to the City for the 2013–2020 Housing Element cycle, as outlined in Table 5.13-2 (City of San Diego 2013).

Table 5.13-2. City of San Diego Regional Housing Needs Assessment Allocation by Income Level (2011–2020 Housing Element Cycle)

Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
10,988	10,989	16,703	15,462	33,954	88,096

Source: City of San Diego 2013.

On November 22, 2019, the SANDAG Board of Directors formally adopted the final regional housing assessment methodology for the sixth Housing Element cycle (2021–2029) for the San Diego region and released the RHNA allocation for this cycle (SANDAG 2019). The RHNA allocation for the 2021–2029 Housing Element cycle for the City is 107,901 housing units, as outlined in Table 5.13-3 (SANDAG 2019).

Table 5.13-3. City of San Diego Regional Housing Needs Assessment Allocation by Income Level (2021–2029 Housing Element Cycle)

Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
12,380	15,130	17,311	19,297	43,783	107,901

Source: SANDAG 2019; City of San Diego 2020.

City of San Diego General Plan Housing Element

Current Housing Element 2013-2020

The current Housing Element was adopted in March 2013 for the 2013–2020 planning cycle. The current Housing Element is designed to provide development guidance for housing through facilitating the development of a variety of housing types, appropriately removing housing restraints, enhancing existing residential neighborhoods, promoting equal housing opportunities, and encouraging new housing growth patterns within the City until December 31, 2020 (City of San Diego 2013). In association with the SANDAG RHNA, the current Housing Element also includes the housing growth needs for 2010 through 2020 (88,096 housing units), as detailed in Table 5.13-2. The current Housing Element identifies adequate sites that can be developed for housing that are sufficient to provide for the jurisdiction's share of the regional housing need for all income levels.

The State Department of Housing and Community Development generally utilizes a threshold of 30 units per acre as the minimum density needed to potentially provide housing units for low- and very low-income households in urban areas. In 2012, the City conducted a comprehensive adequate sites inventory in accordance with state law. The inventory results indicate that as of July 17, 2012, there was an overall inventory of land planned and zoned for residential use at 30 housing units per acre to accommodate approximately 126,259 additional units in the City (City of San Diego 2013). The current Housing Element does not identify the project site as part of the housing sites inventory (City of San Diego 2013).

Draft Housing Element 2021–2029

As described above, SANDAG released the draft RHNA allocation for the next housing cycle (2021–2029) in November 2019. The City's RHNA allocation for 2021–2029 is 107,901 housing units, as outlined in Table 5.13-3. The City is currently updating the Housing Element for the next 8-year planning period (2021–2029). This is the

sixth update to the Housing Element, and is referred to as the sixth cycle. For the sixth Housing Element cycle, the City must identify enough potentially developable land zoned for residential use to meet the City's new RHNA capacity/production target and must develop policies and programs that create opportunities to increase housing production.

In March 2020, the City released a draft Housing Element for the 2021–2029 housing cycle (Draft Housing Element). The inventory for the Draft Housing Element demonstrates that the City has enough sites zoned to meet the City's RHNA target of 107,901 new units (City of San Diego 2020). There are sufficient properties Citywide that are presumed (according to state requirements) to be suitable for lower-income housing to meet the City's RHNA target of 44,821 housing units for extremely low, very low, and low-income households. The City identified capacity to construct 164,142 housing units through the adequate sites inventory for the Draft Housing Element cycle (City of San Diego 2020). The sites inventory for the Draft Housing Element identifies a total capacity of approximately 1,245 housing units for the Carmel Mountain Ranch community, under the assumption that the project is in process and may be adopted during the sixth Housing Element cycle (City of San Diego 2020). Specifically, the Draft Housing Element identifies the following for the majority of the project site:

- Vacant – Community Plan Amendment (CPA) in Process: Sites with no or minimal existing development for which a community plan amendment has been applied in order to change the land use designation and/or zoning. The housing capacity for these sites is based on the proposed amended land use designation rather than the existing land use or zoning.
- Net Potential Units of 1,200 dwellings: The potential housing units developable on a site under the zoning and/or land use designation minus the existing housing units on the site. The net potential units shown for a site in the inventory is based on 90% of the maximum permitted under the zoning or land use designation as a conservative estimate of the site's development potential. None of the anticipated net potential units on the project site are anticipated to be lower income.

It should be noted that the majority of the project site is identified in the Draft Housing Element as a potential housing site. The eastern and southeastern portions of the project site (Assessor's Parcel Numbers 31304071, 31304085, 31304109, 31351243, 31353213, 31354026, 31362129, 31369025, 31369026, 31370401, and 31370402) are not included in the Draft Housing Element (City of San Diego 2020).

Carmel Mountain Ranch Community Plan

The Carmel Mountain Ranch Community Plan (Community Plan) identifies the project site for golf course uses. The Community Plan does not identify any of the project site as residential land use within its Housing Element. It should be noted that at the time of the most recent amendment to the Community Plan (1999), the golf course was still in operation.

5.13.3 Impacts Analysis

Issue 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 and other infrastructure)?*

Impact Threshold(s)

Consistent with CEQA Guidelines Appendix G, a project would result in a significant impact to housing and population if the project would induce substantial unplanned population growth in an area, either directly or indirectly.

Impact Analysis

Indirect Growth Potential

The project proposes the redevelopment of a golf course which is currently located within an existing community that is served by utilities and infrastructure. Any proposed new infrastructure needed to serve the project would be connected to existing vehicular access and circulation, water, sewer, drainage, and dry utilities such as gas, electricity, and telecommunications systems. The proposed project would not indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the project. Additionally, the majority of the surrounding area is developed. The project would not otherwise result in the extension of infrastructure to an area that is currently undeveloped or underdeveloped, thereby removing barriers to growth. As such, the project would not induce substantial unplanned indirect growth.

Direct Growth Potential

As described previously, the project site is designated in the General Plan and Community Plan for open space and golf course use. The majority of the project site is zoned as AR-1-1, with smaller portions zoned as RS-1-12, RS-1-14, RM-1-1, RM-2-5, and RM-3-7. The project would require General Plan and Community Plan amendments as well as a rezone to allow for the proposed residential development on site.

The proposed project would directly induce growth through the development of approximately 1,200 multi-family residential dwelling units across the 164.5-acre site. Based on the population rate coefficient of 2.65 persons per household¹ for the Carmel Mountain Ranch community, the project would directly introduce an estimated 3,180 people to the area (SANDAG 2013c). The SANDAG population growth forecasts rely, in part, on individual jurisdiction's planning documents, such as the City's General Plan. Because the project proposes a General Plan amendment and rezone, the estimated population of 3,180 people would not have been accounted for in SANDAG's projections. This is clearly shown in Table 5.13-2, as SANDAG forecasted no change in housing stock and minimal change in population for the Carmel Mountain Ranch community. Similarly, the City's current Housing Element does not anticipate any housing development at the project site in order to meet the RHNA allocation. Some amount of residential dwelling units would be permitted

¹ There are multiple sources for estimations of a "person per household" rate. The analysis contained herein conservatively uses the SANDAG 2050 regional growth forecast rate for the Carmel Mountain community for year 2035, which is the highest out of each forecasted year. By comparison, the City as a whole also has a forecasted rate of 2.65 persons per household in 2035 per SANDAG's regional growth forecast.

under existing zoning, but the potential number of units, and thereby induced population, would be minimal in comparison to the proposed project. Overall, under the current plans, the project site was assumed to maintain its use as a golf course. Therefore, the project's induced population would substantially exceed current projections.

It should be noted that the golf course ceased operation in 2018, after the adoption of the current population and housing forecasts, as well as the City's current Housing Element (City of San Diego 2013). However, under the Draft Housing Element released in March 2020, the City identifies the majority of the project site within its housing sites inventories, reflecting the closure of the golf course. Specifically, the Draft Housing Element identifies approximately 1,200–1,245 potential dwelling units at the project site, consistent with the proposed project. Inclusion of a site on this list does not indicate that a site will be developed or redeveloped, or that a site will be required by the City to be developed or redeveloped. Rather, it indicates that the site has unrealized capacity for housing that could reasonably be realized during the 2021–2029 period (City of San Diego 2020).

It should also be noted that the project site is located within a Transit Priority Area due to its location relative to the Sabre Springs Transit Center. The project would place housing in the vicinity of existing commercial and office centers. The Carmel Mountain Plaza is north of the project site and provides a wide variety of stores, commercial amenities, and office space. Approximately 43 acres of office development are located immediately south of the project site adjacent to the Sabre Springs Transit Station. In addition, a large commercial and industrial hub is located approximately 6 miles south of the project site, on Scripps Poway Parkway east of Pomerado Road. Other commercial opportunities are available within the 4S Ranch community located approximately 5 miles north of the project site and west of Interstate 15. Also, within 5 miles northwest of the project site is a large industrial area within the community of Rancho Bernardo.

Despite the project's consistency with the City's General Plan goals and policies and the Draft Housing Element's identification of development potential on site, the project is nonetheless not accounted for in currently adopted plans or forecasts. The project would directly induce substantial unplanned population growth to the area based on the currently adopted Housing Element (City of San Diego 2013).

Significance of Impact

Despite the fact that the project is consistent with local and statewide goals relating to the provision of new housing, and the fact that the proposed project can be adequately served by existing infrastructure, it would help the City meet its RHNA allocation, the state of California is currently experiencing a housing crisis, and the project would provide affordable units; the project would directly induce substantial population growth to the area based on the currently adopted Housing Element (City of San Diego 2013) and impacts would be **potentially significant (Impact PH-1)**.

Mitigation Monitoring and Reporting

No feasible mitigation exists to reduce or avoid these potentially significant impacts absent a feasible alternative to the proposed project.

Level of Significance After Mitigation

Therefore, the potentially significant impact to population and housing would remain **significant and unavoidable**.

Issue 2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix G, a project would result in a significant impact to housing and population if the project would displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Impact Analysis

The project site does not contain any existing housing or people. Therefore, the project would not result in the displacement of any number of existing housing or people.

Significance of Impact

The project would not result in the displacement of any number of existing housing or people. **No impact** would occur.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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5.14 Public Services and Facilities

This section describes the existing public services and facilities conditions of the proposed Trails at Carmel Mountain Ranch Project (project), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

5.14.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Fire Rescue Services

The City of San Diego Fire-Rescue Department (SDFD) provides fire protection services throughout the City of San Diego (City) and project site. Table 5.14-1 identifies the SDFD and City of Poway fire stations that would serve the project site. To treat medical patients and control small fires, the first-due unit should arrive within 7:30 minutes/seconds, 90 percent of the time from the receipt of the 911 call in fire dispatch. This equates to 1-minute dispatch time, 1:30 minutes/seconds company turnout time, and a 5 minute drive time in the most populated areas. To stop wildfires to under 3 acres (when noticed promptly), and to treat up to 5 medical patients, a multi-unit response of at least 17 personnel should arrive within 10:30 minutes/seconds, 90 percent of the time from the receipt of the 911 call in fire dispatch. This equates to 1-minute dispatch time, 1:30 minutes/seconds company turnout time, and a 8 minute drive time in the most populated areas.

Table 5.14-1. City of San Diego Fire-Rescue and City of Poway Department Fire Stations That Would Serve the Project Site

Station	Address	Apparatus	Distance from Project Site	Time to Project Site ¹
<i>City of San Diego Fire Stations</i>				
Station 40	13393 Salmon River Road	Engine 40, Truck 40, Brush 40, Water Tender 40, Light and Air 40, Paramedic 40	2.4 miles	7.1 minutes
Station 42	12119 World Trade Drive	Engine 42	<0.25 miles	3.3 minutes
Station 44	10011 Black Mountain Road	Battalion Chief (B7)	6.8 miles	10.0 minutes

Table 5.14-1. City of San Diego Fire-Rescue and City of Poway Department Fire Stations That Would Serve the Project Site

Station	Address	Apparatus	Distance from Project Site	Time to Project Site ¹
City of Poway Fire Stations				
Station 1	13050 Community Road	Engine 3711; Battalion Chief (PDC)	3.9 miles	8.5 minutes
Station 3	14322 Pomerado Road	Engine 3713, Truck 3773;	1.4 miles	4.4 minutes

Source: City of San Diego 2020a.

Notes: ¹ Response times above include dispatch and turnout time.

The project site would be served by SDFD Station 40, 42, and 44. Station 40 is located approximately 2.4 miles southwest of the project site at 13393 Salmon River Road in San Diego. Station 40 operates and maintains a fire engine, fire truck, and ambulance. In addition, the station also has a brush engine, which is specifically designed to fight fires in rough terrain where access to the site and fire hydrants is difficult. Station 40 also has a water tender, which is a mobile water carrier, and a light and air truck, which provides air for firefighters' air tanks and lighting at the scene of an emergency. Station 40 is responsible for the repair, maintenance, annual inspection, and testing of all ground ladders. Station 40's district service area is approximately 13.9 square miles and covers the southern portion of the project site, from Shoal Creek Drive to points south (City of San Diego 2020b). A total of 10 people are assigned to Station 40 every day, with four people in the engine company, four in the truck company, and two on the ambulance. The fire company includes a captain, an engineer, a firefighter-paramedic, and a firefighter (92129 Magazine 2015). Station 42 is located less than 0.25 miles from the northern boundary of the project site, at 12119 World Trade Drive in San Diego. Station 42 maintains and operates a fire engine, and the district service area for this station is approximately 6.50 square miles, covering the northern half of the project site, from Shoal Creek Drive to points north (City of San Diego 2020c).

Station 44 would be able to serve the project site with a Battalion Chief SUV equipped with lights and sirens. The Battalion Chief is a staff officer who serves as the incident commander on the scene of fire and medical incidents and has authority over the equipment on the scene. Battalion Chief will respond with both lights and siren to the scene of incidents.

In addition to these SDFD stations, the project site would be served by City of Poway Fire Station 1 and Fire Station 3, located at 13050 Community Road and 14322 Pomerado Road, respectively. Fire Station 1 maintains four frontline fire suppression apparatus (Engine 3711, Medic 3791, Brush 3761, Battalion 3703). In addition, this station maintains five reserve fire suppression apparatus, including Engine 3721, Brush 3769, Medic 3798, Battalion 3704, and Water Tender 3751. Fire Station 3 maintains three frontline fire suppression apparatus (Engine 3713, Truck 3773, Medic 3793), as well as three reserve fire suppression apparatus (Engine 3722, Medic 3799, Utility 3783). The City of Poway Fire Department maintains a workforce of 51 responders, including three Duty Battalion Chiefs and 48 firefighter/paramedics. Firefighters and paramedics are divided into 3 shifts working a rotational schedule. Each shift consists of 17 personnel ready to respond and provide emergency and non-emergency services (City of Poway 2020).

According to the City's General Plan where more than 1 square mile is not populated at similar densities and/or a contiguous area with different density types aggregates into a population cluster area, standards for fire response times identified in Table PF-D.2 of the General Plan apply. The proposed project is located within an area that consists of a range of housing density types and is thus considered a population cluster. The urban-suburban aggregate population threshold applies to the proposed project, given the SANDAG population estimate of 13,218 people for the Carmel Mountain Ranch community (SANDAG 2019). These General Plan standards and the estimated response times to the project site are provided within Table 5.14-2.

Table 5.14-2. Aggregate Population and Travel Time Goals

Area	Aggregate Population	First-Due Unit Travel Time Goal
Metropolitan	>200,000 people	4 minutes
Urban-suburban	<200,000 people	5 minutes
Rural	500–1,000 people	12 minutes
Remote	<500 people	>15 minutes

Source: City of San Diego 2008. City of San Diego Fire Rescue 2020.

Notes: NA = not applicable.

Adopted Fire Station Location Measures

To direct fire station location timing and crew size planning as the community grows, the adopted fire unit deployment performance measures based on population density zones are listed in the Table 5.14-3, below:

Table 5.14-3. Deployment Measures for San Diego City Growth

	Structure Fire Urban Area	Structure Fire Rural Area	Structure Fire Remote Area	Wildfires Populated Areas
	>1,000- people/sq. mi. (minutes)	1,000 to 500 people/sq. mi. (minutes)	500 to 50 people/sq. mi. * (minutes)	Permanent open space areas people/sq. mi. (minutes)
1 st Due Travel Time	5	12	20	10
Total Reflex Time	7.5	14.5	22.5	12.5
1 st Alarm Travel Time	8	16	24	15
1 st Alarm Total Reflex	10.5	18.5	26.5	17.5

Source: City of San Diego Fire Rescue 2020.

Police Services

The San Diego Police Department (SDPD) provides police services to the City, including patrol, traffic, investigative, records, laboratory, and support services. The project site is located within the SDPD Northeastern Division, which serves a population of 234,394 people and encompasses 104 square miles within the neighborhoods of Carmel Mountain, Miramar, Miramar Ranch North, Mira Mesa, Rancho Bernardo, Rancho Encantada, Rancho Peñasquitos, Sabre Springs, and Scripps Ranch (City of San Diego 2020d). The Northeastern

Division Substation is located approximately 2.5 miles from the project site, at 13396 Salmon River Road in Rancho Peñasquitos. The project site is located within beat 232 of the Carmel Mountain area of the department's Northeastern Division.

The SPPD currently utilizes a five-level priority calls dispatch system, which includes priorities E (emergency), one, two, three, and four. The priority system serves as a guide, allowing the phone dispatcher and the radio dispatcher discretion to raise or lower the call priority as necessary based on the information received. Priority E and priority one calls involve serious crimes in progress or a potential for injury. Priority two calls include vandalism, disturbances, and property crimes. Priority three calls include calls after a crime has been committed such as cold burglaries and loud music. Priority four calls include parking complaints or lost and found reports. Table 5.14-4 lists the department's response-time guidelines, as well as the current response time for calls within the project area.

Table 5.14-4. San Diego Police Department Beat 232 Call Priority Response Times

Call Priority	General Plan Response Time Goals¹	Police Department Response Time Goals²	Average Response Times
Priority E – Imminent threat to life	Within 7 minutes	Within 7 minutes	6.9 minutes
Priority 1 – Serious crimes in progress	Within 12 minutes	Within 14 minutes	14.4 minutes
Priority 2 – Less serious crimes with no threat to life	Within 30 minutes	Within 27 minutes	27.5 minutes
Priority 3 – Minor crimes/requests that are not urgent	Within 90 minutes	Within 80 minutes	70.9 minutes
Priority 4 – Minor requests for police service	Within 90 minutes	Within 90 minutes	78.2 minutes

Sources:

¹ City of San Diego 2008.

² SDPD 2019.

As indicated in Table 5.14-4, the response times for priority E, priority three, and priority four calls met the General Plan and SDPD response time goals. The response times for priority one calls did not meet SDPD response time goals or the General Plan response time goals. Priority two response times met the General Plan response time goals, but did not meet SDPD response time goals.

Public Parks and Recreation Facilities

The City's General Plan guides development of park and recreation facilities in the project site. The General Plan provides goals and policies for population-based parks and facilities, resource-based parks, and open space lands. The City's park and recreation goals include achieving a sustainable park and recreation system that meets the needs of residents and visitors and an equitable citywide distribution of parks and recreation facilities (City of San Diego 2008).

The General Plan requires a minimum ratio of 2.8 acres per 1,000 residents for neighborhood parks and community parks (City of San Diego 2008). A community park has a 13-acre minimum and serves a population of 25,000, or typically one community plan area, but depending on location, it may serve multiple community plan areas. A neighborhood park ranges from 3 acres to 13 acres and serves a population of 5,000 within approximately 1 mile.

The Carmel Mountain Ranch community contains two parks and recreation facilities, the Highland Ranch Neighborhood Park and Carmel Mountain Ranch/Sabre Springs Community Park and Recreation Center. The Highland Ranch Neighborhood Park is approximately 5.22 acres and is located at the intersection of Highland Ranch Road and Eastbourne Road along the northern border of the project site. The park contains a softball field, playground area, and picnic area. The 11.5-acre Carmel Mountain Ranch/Sabre Springs Community Park and Recreation Center is located at the intersection of Ted Williams Parkway and Rancho Carmel Drive along the southern border of the project site. The community park and recreation center contains an indoor gymnasium with basketball and volleyball course, outdoor basketball course, lighted soft fields, a community room, playground, and outdoor picnic area.

Although there are no designated open space parks within the Carmel Mountain Ranch community, the Black Mountain Open Space Park and Los Peñasquitos Canyon Preserve are located within close proximity to the project site. The 2,352-acre Black Mountain Open Space Park, located approximately 3.5 miles from the project site, has trails for hiking, biking, and equestrian use. The Los Peñasquitos Canyon Preserve, located approximately 3 miles from the project site, encompasses approximately 4,000 acres of both the Peñasquitos and Lopez Canyons and contains approximately 37 miles of multi-use trails.

The current household population of 13,104 people in the Carmel Mountain Ranch CPA (SANDAG 2019) warrants 36.4 acres of population-based parks, based on the General Plan standard of 2.8 acres per 1,000 people. As previously identified, the community has 16.72 developed usable acres of population-based parks, resulting in a total current deficiency of 19.97 useable acres of population-based parks.

Schools

The project site is located within the Poway Unified School District (PUSD) boundary. Thus, the project would be served by PUSD for the provision of school services. The PUSD operates 26 elementary schools, six middle schools, one kindergarten through grade 8 (K-8) school, six high schools, and one continuation high school. These schools have a capacity to accommodate a total enrollment of 37,815 students (PUSD 2018). The PUSD has a total enrollment of 36,564 students within the kindergarten through grade 12 (K-12) school system (PUSD 2019a).

There are two elementary schools, the Shoal Creek Elementary School and Highland Ranch Elementary School. Unit 15, 16, and 17 of the project would fall within the school attendance boundary for the Highland Ranch Elementary School. The remaining units would fall within the school attendance boundary for the Shoal Creek Elementary School. Further, the project would fall within the school attendance boundaries for Meadowbrook Middle School and Rancho Bernardo High School (PUSD 2014).

Table 5.14-5, Poway Unified School District School Enrollment and Capacity, shows the current capacity and enrollment numbers available for the public schools that would serve students within the jurisdiction of PUSD. As shown in this table, available capacity exists at the elementary school (based on district loading rates), middle schools, and high school levels.

Table 5.14-5. Poway Unified School District School Enrollment and Capacity

School Level (Grades)	Existing Facilities Capacity (State Loading/District Loading)	Student Enrollment (2019)	Available or (Deficit) Capacity
Elementary school (K–5)	16,250/17,225	16,363	(113)/862
Middle school (6–8)	9,045/9,280	8,493	552/787
High school (9–12)	13,298/14,529	11,532	1,766/2,997
Total	38,593/41,034	36,388	2,205/4,646

Source: PUSD 2020a.

Table 5.14-6 shows the current capacity and enrollment numbers available for the public schools that serve the student-aged populations within the Carmel Mountain Ranch community. As shown in this table, available capacity exists at all of the schools listed, although, capacity at Highland Ranch Elementary School is minimal.

Table 5.14-6. School Enrollment and Capacity Serving Community Planning Area

School	Address	Estimated Capacity (State Loading/District Loading) ¹	Enrollment (2019) ¹	Enrollment Projected (2020) ¹
Shoal Creek Elementary School	11775 Shoal Creek Drive San Diego, California 92128	575/610	535	472
Highland Ranch Elementary School	1484 Waverly Downs Way San Diego, California 92128	675/716	675	676
Meadowbrook Middle School	12320 Meadowbrook Lane Poway, California 92064	1,458/1,496	1,267	1,183
Rancho Bernardo High School	13010 Paseo Lucido San Diego, California 92128	2,646/2,891	2,340	2,221

Source:

¹ PUSD Long Range Facility Master Plan 2020a.

Libraries

The project is located within the City's public library system. The City's General Plan establishes goals and policies for the library system and facilities. Per the General Plan, a library system should contribute to the quality of life through technologically improved services and welcoming environments. General Plan policy indicates that branch libraries should be 15,000 square feet or larger, and include features and services that address community-specific needs. Library design should incorporate public input to address the needs of the intended service area (City of San Diego 2008). The nearest municipal library to the project is the Carmel Mountain Ranch Library, located adjacent to the project site at 12095 World Trade Drive. The 13,102 square foot Carmel Mountain Ranch Library serves the communities of Carmel Mountain Ranch and Sabre Springs. The Carmel Mountain Ranch Library includes computer labs, meeting/study rooms, outdoor space, a children's computer area, a bookstore, and a 900-square-foot community room (City of San Diego 2020f).

5.14.2 Regulatory Framework

Federal

There are no federal regulations related to public services and facilities relevant to the project.

State

Quimby Act and Assembly Bill 1359

The Quimby Act, which is within the Subdivision Map Act, authorizes the legislative body of a city or county to require the dedication of land or impose fees for park or recreational purposes as a condition to the approval of a tentative or parcel subdivision map, if specified requirements are met. One of these requirements is that the dedicated land or fees, or combination thereof, shall be used only for the purposes of developing or rehabilitating neighborhood or community park or recreational facilities to serve the subdivision for which the land was dedicated or fees were paid. The act provides that the dedication of land or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide 3 acres of park area per 1,000 persons residing within a subdivision subject to the act, except as specified.

Senate Bill 50

Senate Bill 50 was enacted on August 27, 1998. The bill authorized a \$9.2 billion K–12 school and higher education bond to be presented to the voters of California. The state bond measure, known as the Class Size Reduction Kindergarten–University Public Education Facilities Bond Act of 1998, was approved by the voters on November 3, 1998.

Senate Bill 50 significantly revised developer fee and mitigation procedures for school facilities as set forth in Government Code Section 65996. The legislation holds that the statutory fees are the exclusive means of considering and mitigating school impacts. It does not just limit the mitigation that may be required, it limits the scope of the review and the findings to be adopted for school impacts. Once the statutory fee is paid, the impact would be mitigated because of the provision that the statutory fees constitute full and complete mitigation.

California Mutual Aid

The purpose of Emergency Management Mutual Aid (EMMA) is to provide emergency management personnel and technical specialists to support the disaster operations of affected jurisdictions during an emergency. In accordance with the California Master Mutual Aid Agreement, local and state emergency managers have responded in support of each other under a variety of plans and procedures. Immediately following the 1994 Northridge Earthquake, city and county emergency managers along with the Coastal, Inland, and Southern Regions of the California Governor's Office of Emergency Services, developed EMMA to provide a valuable service during the emergency response and recovery efforts at the Southern Region Emergency Operations Center, local emergency operations centers, the Disaster Recovery Center, local assistance centers, and in the field. Since that time, EMMA has often been used to deploy emergency managers and other technical specialists not covered by law enforcement or fire mutual aid plans in support of emergency operations and response throughout California.

Local***City of San Diego General Plan***

The Public Facilities, Services, and Safety Element of the General Plan addresses facilities and services that are publicly managed. Furthermore, this element provides policies for financing, prioritization, developer, and City funding responsibilities for public facilities in San Diego. In addition, Policy PF-C.1. requires development proposals to fully address impacts to public facilities and services (City of San Diego 2008). In addition, the Public Facilities, Services, and Safety Element provides service response time standards for both police and fire services within the City. The applicable response time goals and standards are provided in Table 5.14-2 for fire services and Table 5.14-4 for police services.

The Public Facilities, Services, and Safety Element also establishes guidelines and policies for branch libraries. Ideally, branch libraries should serve a resident population of 30,000 and may be established when a service area, which is expected to grow to 30,000 residents within 20 years of library construction, has a minimum population of 18,000–20,000. Branches should be located in areas of intense human activity, with a 2-mile maximum service area, where trips can be combined with other daily trips. The City is also part of a county-wide cooperative relationship known as the Serra Cooperative Library System. This system allows residents of the City and San Diego County to use the facilities of public libraries.

Regarding schools, the Public Facilities, Services, and Safety Element established goals for the City to provide a multilevel public and private school system that enables all students to realize their highest potential as individuals and as members of society; to provide educational facilities that are equitable, safe, healthy, technologically equipped, aesthetically pleasing, sustainable, and supportive of optimal teaching and learning for all students, and welcoming to parents and community members; and to provide a public school system that provides opportunities for students to attend schools within their residential neighborhoods as well as choices in educational settings outside their neighborhoods.

The Recreation Element of the City's General Plan provides the following guidelines for population-based parks:

- Neighborhood parks and facilities should serve a resident population of 5,000 within a one radius. The facility should be between 3 and 13 acres in size, and be primarily accessible by bicycling or walking.
- Community parks and recreation centers should serve a resident population of 25,000. The facility should be at least 13 acres in size, and can serve multiple communities.

The General Plan guidelines for resource-based park are as follows:

- Resource-based parks include both regional parks and shoreline parks/beaches. Regional and shoreline parks/beaches should serve the regional resident and/or visitor population. Resource-based parks are identified with an area of distinctive scenic, natural, historical, or cultural interest. However, portions of these parks may serve as a community park.

Fire Hazard Severity Zones

Wildland fire protection in California is the responsibility of the state, local, or federal government. The California Department of Forestry and Fire Protection (CAL FIRE) adopted Fire Hazard Severity Zone maps for State Responsibility Areas in 2007 and recommended maps for Very High Fire Hazard Severity Zones in Local Responsibility Areas. Local Responsibility Areas include incorporated cities, cultivated agricultural

lands, and portions of the desert. CAL FIRE recommendations are not the same as actual zones, which do not go into effect unless adopted by local agencies (CAL FIRE 2012). In San Diego County, CAL FIRE made recommendations for 13 cities, including the City. The project site is classified as an extreme high fire severity zone per the state map on grid tiles 35, 36, and 40 (City of San Diego 2009). Fire Hazard Severity Zones are based on increasing fire hazard and are designated as “No Designation,” “Moderate,” “High,” or “Very High.”

Fire Service Deployment

Fire stations are equipped to respond to calls within established standards based on speed and weight of attack (Citygate 2017). Speed calls for first-due, all risk intervention units (engines, trucks, and/or rescue ambulances) are strategically located across a community responding in effective travel time. These units are tasked with controlling moderate emergencies without the incident escalating to a second alarm or greater size, which unnecessarily depletes departmental resources as multiple requests for service occur. Weight refers to the number of units needed to respond for serious emergencies such as a room and contents structure fire, multiple patient incident, a vehicle accident with extrication required, or a heavy rescue incident. In these situations, enough firefighters must be assembled within a reasonable timeframe to safely control the emergency, thereby keeping it from escalating to greater alarms (Citygate 2017). The science of fire crew deployment is to spread crews out across a community to keep emergencies small with positive outcomes, without spreading the crews too far apart that they cannot amass together quickly enough to be effective in major emergencies (Citygate 2017). Access and water supply issues for projects in this area will be addressed upon final plan submissions in the future. In 2011, the City retained Citygate Associates LLC to conduct a fire services deployment planning study to (1) further refine the findings of the Regional Fire Service Deployment Study that Citygate conducted for the County of San Diego that pertained to SDFD deployment within the City; (2) analyze whether the SDFD performance measures are appropriate and achievable given the risks, topography, and special hazards to be protected in the City; and (3) review existing SDFD deployment and staffing models for efficiency and effectiveness and determine how and where alternative deployment and staffing models could be beneficial to address current and projected needs (Citygate 2017).

The study concluded that additional fire-rescue resources were needed, and in response, the SDFD adopted the recommendations of the study and set new deployment standards. The deployment standards and fire station planning measure are described in the following sections.

Distribution of Fire Stations

To treat medical patients and control small fires, the first-due unit should arrive within 7.5 minutes 90% of the time from the receipt of the 911 call in fire dispatch. This equates to a 1-minute dispatch time, 1.5-minute company turnout time, and 5-minute drive time in the most populated areas (Citygate 2017).

Multiple-Unit Effective Response Force for Serious Emergencies

To confine fires near the room of origin, to keep wildland fires under 3 acres when noticed promptly, and to treat up to five medical patients at once, a multiple-unit response of at least 17 personnel should arrive within 10.5 minutes 90% of the time from the receipt of the 911 call in fire dispatch. This equates to a 1-minute dispatch time, 1.5-minute company turnout time, and 8-minute drive time spacing for multiple units in the most populated areas (Citygate 2017).

Fire Unit Deployment Measures**Population Density Measures**

To direct fire station location timing and crew size planning as the City and communities grow, the adopted fire unit deployment performance measures based on population density zones are listed in the General Plan. According to Table PF-D.1 of the General Plan, structure fires in urban areas over 1,000 people per square mile would require a response standard of 5 minutes for first due travel time, 7.5 minutes for total reflex time, 8 minutes for first alarm travel time, and 10.5 minutes for first alarm total reflex. Reflex time is the total time from receipt of a 911 call to arrival of the required number of emergency units (City of San Diego 2008).

Aggregate Population Measures

Standards listed in the General Plan guide the determination of response time measures and the need for fire stations. According to Table PF-D.2 of the General Plan, the first-due unit travel time goal for metropolitan areas of over 200,000 people is 4 minutes. Urban-suburban areas of less than 200,000 people would require a goal of 5 minutes (City of San Diego 2008).

San Diego Municipal Code Section 142.0412

Section 142.0412 of the City's Municipal Code provides brush management regulations. Brush management is required in all base zones on publicly or privately-owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. There are two brush management zones, as identified in this section of the municipal code. Brush Management Zone One is the area adjacent to a structure, shall be least flammable, and shall typically consist of pavement and permanently irrigated ornamental planting. Brush Management Zone Two is the area between Zone One and any area of native or naturalized vegetation and typically consists of thinned, native or naturalized non-irrigated vegetation.

5.14.3 Impacts Analysis

Issue 1: Would the project have an effect upon, or result in a need for new or altered governmental services in any of the following areas: police protection, fire/life safety protection, libraries, parks or other recreational facilities, maintenance of public facilities including roads, and/or schools?

Impact Threshold(s)

Per the City's Significance Determination Thresholds (2016a), impacts to public services and facilities would be significant if a project would result in the need for new or expanded public service facilities, the construction of which would cause direct, adverse physical environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives.

Impact Analysis***Fire-Rescue Services***

The project would introduce 1,200 dwelling units to the project site, resulting in an increase in population base within the Carmel Mountain Ranch community and fire protection service area, thereby increasing the

demand for fire protection and emergency services within the service area. As previously stated, Fire Station 42 is the closest fire station to the project site, located less than 0.25 miles north of the project site at 12110 World Trade Drive. Fire Station 42 could reach the project site within 3.3 minutes, as shown in Table 5.14-1.

As stated above, to treat medical patients and control small fires, the first-due unit should arrive within 7:30 minutes/seconds, 90 percent of the time from the receipt of the 911 call in fire dispatch. San Diego Fire Department Fire Stations 40 and 42, and City of Poway Fire Department Station 3 would all meet this requirement as shown in Table 5.14-1.

To stop wildfires to under 3 acres (when noticed promptly), and to treat up to 5 medical patients, a multi-unit response of at least 17 personnel should arrive within 10:30 minutes/seconds, 90 percent of the time from the receipt of the 911 call in fire dispatch. All fire stations shown in Table 5.14-1 would have the ability to meet this requirement.

The project would meet SDFD site design and construction design standards with respect to assuring adequate safety from fire hazards. The residential buildings and infrastructure proposed to be constructed as part of the proposed project would be constructed per applicable fire codes and comply with applicable City regulations. The project would provide such provisions as adequate turn-around radii for fire trucks within the internal roadway network and cul-de-sacs and key placement and installation of fire hydrants throughout the project site. Additionally, the project would conform to the brush management regulations in accordance with Section 142.0412 of the City's Municipal Code.

The fire stations within proximity to the project site would meet the standard response times required, and SDFD indicated that the project would not result in adverse effects to the department's current response times and the ability to serve the area (City of San Diego Fire Rescue 2020). SDFD has facilities and staffing in the project area to serve the project and no additional capacity would be required. The SDFD indicated that a new planned fire station (Station 48) would be able to assist with increased emergency responses in the area; however, that station has not yet been built.

Overall, existing facilities would continue to serve the project site and would not require construction new or alteration of existing facilities. **Police Services**

The project would introduce up to a total of 1,200 dwelling units within the project site, resulting in the introduction of a new population base that would require police services. The Northeastern Division Substation is located approximately 2.5 miles from the project site, at 13396 Salmon River Road in Rancho Peñasquitos.

As indicated in Table 5.14-4, in 2019, the response times for Priority E, Priority 3, and Priority 4 calls met the General Plan and SDPD response time goals. However, the response times for Priority 1 calls did not meet SDPD response time goals or the General Plan response time goals. Priority 2 response times met the General Plan response time goals, but did not meet SDPD response time goals. The average response times in 2019 were 6.9 minutes for Priority E (emergency) calls, 14.4 minutes for Priority 1 calls, 27.5 minutes for Priority 2 calls, 70.9 minutes for Priority 3 calls, and 78.2 minutes for Priority 4 calls. The SDPD is not meeting the citywide goal of 1.48 officers per 1,000 persons (City of San Diego 2020e)].

Although the proposed project would result in additional residents and new housing that would require police services, the new housing development and the additional residential population base would be located in an area immediately surrounded by similar residential development, previously served by the

same police service division. Although the project would result in an increase in population of the service area, the response times are already exceeding the goals prior to implementation of the project.

While there would be an increase in population through the introduction of 1,200 residential units, the project would not require new facilities and no improvements to existing facilities would be required as a result of implementing the proposed project. Ongoing funding for police services is provided by the City's General Fund, which the project would be required to contribute funds. Given the location adjacent to existing roadways and infrastructure, and SDPD's commitment to serve the project site, the effect on police response times is not considered substantial. Overall, existing facilities would continue to serve the project site and would not require the alteration of construction of new facilities.

Overall, existing facilities would continue to serve the project site and would not require construction new or alteration of existing facilities.

Public Parks and Recreation Facilities

Demands for parks and recreational facilities are directly related to local population levels. The project is intended to provide housing for a new population base within the Carmel Mountain Ranch community, which in turn would generate an additional use of park and recreation areas. As discussed in Chapter 4, Project Description, the project requires a Community Plan Amendment; therefore, it triggers the City's population-based park requirement. The City's General Plan standard is 2.8 useable acres of population-based park land per 1,000 residents. The addition of 1,200 dwelling units would yield an estimated additional 2,364 new residents (based on the population rate coefficient of 1.97 persons per household¹ for the Carmel Mountain Ranch community [American Community Survey SANDAG 2017]). At 2.8 acres per 1,000 residents, the project would be required 6.62 useable acres of population-based parks. The project proposes to include a total of 7.86 acres of neighborhood parks, split between three different locations. A 3.38-acre park is proposed to be constructed within Unit 7 of the project site, a 1.90-acre park would be constructed within Unit 13, and a 2.59-acre park would be constructed within Unit 16. The total amount of parkland provided within the project site would meet the City's park requirements.

In addition, the project would include approximately 111.0 acres of open space, which includes the approximately 6 miles of publicly accessible multi-use trails. Recreational amenities would include picnic pavilions, playgrounds, tot-lots, and trails for walking and biking. The multi-use trail system would circulate throughout the project site to provide mobility and recreational opportunities for pedestrians and bicyclists. Additionally, a trail staging area would provide bike racks, a trail map and rules kiosk, bike station, picnic tables, and shade areas. Trails would range from 5 to 8 feet in width, and all trails would be publicly accessible.

The project would also include a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch Library. This gallery may include up to 6,000 square feet in one or two buildings to house gallery space, studio space with an indoor kiln, and bathroom/kitchen. In addition, this amenity could include an up to 2,000-square-foot outdoor open shed structure to house a wood-burning ceramic kiln, wood storage, and a washing area. A 3,000-square-foot café/restaurant/banquet area is proposed with 2,000 square feet of dining space and a 1,000-square-foot kitchen. One additional caretaker unit up to 1,200 square feet is also proposed. This gallery/studio would be privately owned by a non-profit organization, not for dedication to the City or homeowner's association.

Thus, although the project would increase demand for recreational areas or uses in the community, with the provision of 7.86 acres of public use neighborhood parks and the inclusion of open space areas with publicly accessible multi-use trails, no park and recreation facility expansion beyond what is proposed as part of the project would be required. The project would meet the objective of the Carmel Mountain Ranch Parks and Opens Space Element to incorporate parks, a golf course, recreation areas, and open space opportunities linked by pedestrian, hiking, and/or bike paths to meet the needs and desires of users. In addition, the proposed project would not conflict with the City's General Plan requirements for parks and recreation facilities.

Schools

Potential impacts to schools serving the project site would be related to the number of students generated by the proposed project. Student generation rates vary based on the type of residential development such as single-family attached/detached and multi-family housing. While PUSD does not have standard generation rates, estimates were provided within the PUSD 2020 Development Fee Justification Study produced in May 2020. The estimated student generation rates for elementary, middle, and high schools associated with multi-family dwelling units, as well as the proposed project's estimated student generation amounts (based on the proposed 1,200 multi-family dwelling units), are provided in Table 5.14-7, Student Generation Rates for Multi-Family Housing Units.

Table 5.14-7. Student Generation Rates for Multi-Family Housing Units

School Level (Grades)	Student Generation Rates (Multi-Family)¹	Proposed Trails at Carmel Mountain Ranch Project Student Generation²
Elementary school (K-5)	0.1601	193
Middle school (6-8)	0.0746	90
High school (9-12)	0.1003	121
Total (Combined)	0.3349	404

Source: PUSD 2020b.

Notes:

¹ Student generation rates are a calculation of students per residential unit.

² Rounded up to the nearest whole number.

Based on the PUSD multi-family student generation rates, the proposed project is estimated to generate 193 elementary school students, 90 middle school students, and 121 high school students, resulting in a total of 404 students within the PUSD school system. As shown in Table 5.14-5, there is an existing additional capacity of 2,205/4,646 students within the PUSD under the State Loading/District Loading scenarios. As such, the new student population generated by the project is not anticipated to cause the schools serving the project area to reach or exceed capacity. The project would not require the construction of new school facilities, and the district currently does not have plans for new or expanded school facilities that would serve the project site. The project would not impact PUSD's ability to comply with Senate Bill 50, and the project would be required to pay all applicable school fees to PUSD. The project would not have an adverse effect upon, or result in a need for, new or modified schools, with payment of the school fees.

Libraries

The nearest municipal library to the project is the Carmel Mountain Ranch Library, located adjacent to the project site at 12095 World Trade Drive. This local branch is part of the City library system, which allows residents to use any branch or the main library, and the Serra Cooperative Library System, which allows residents of the City and San Diego County to use public library facilities. Currently, the Carmel Mountain Ranch Library does not satisfy the General Plan's policy recommendation that every branch library be at least 15,000 square feet and thus a public services deficiency exists today. The population increase associated with the project would increase the demand for library services, thereby exacerbating the existing impact. The population increase associated with the project would increase the current need for a larger library in the Carmel Mountain Ranch community, and therefore the project would result in a potentially significant impact. The project will provide a fair share contribution toward potential future improvements to the Carmel Mountain Ranch Library to address the impact caused by the project's population increase. However, no capital improvement program exists to redevelop the library site and no fee program has been established to fund such a project. Although the project will make a fair share contribution to address the impacts caused by the associated population increase, the improvements cannot be guaranteed. Therefore, impacts to library facilities would be **significant and unavoidable (Impact PUB-1)**.

Significance of Impact

Fire-Rescue Services

The project would result in a population increase that would increase fire-rescue service calls, but no new facilities or improvements to existing facilities would be required as a result of the project. Impacts would be **less than significant**.

Police Protection

The project would result in a population increase that would increase police service calls, but no new facilities or improvements to existing facilities would be required as a result of the project. Impacts would be **less than significant**.

Libraries

Although the project will make a fair share contribution to address the impacts caused by the associated population increase, the improvements cannot be guaranteed. Therefore, impacts to library facilities would be significant and unavoidable. Parks and Recreation Facilities

The Project would result in a population increase that would result in the need for population-based park acreage. However, with the provision of 7.86 acres of public use neighborhood parks and the inclusion of open space areas with publicly accessible multi-use trails, no park and recreation facility expansion beyond what is proposed as part of the project would be required. Impacts would be **less than significant**.

Schools

The Project would generate students; however, the existing schools have sufficient capacity in the near term to serve these students and the project applicant would pay facility fees per SB 50. Impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting

No mitigation measures would be required.

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5.15 Public Utilities

This section describes the existing utilities conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable, related to implementation of the project. The following discussion is based on the following technical reports prepared for the project: Water Study prepared by Dexter Wilson Engineering, Inc. (Appendix O; October 2020), Master Sewer Study prepared by Dexter Wilson Engineering, Inc. (Appendix P; November 2020), Water Supply Assessment prepared by the City of San Diego Public Utilities Department (Appendix Q; April 2020) and Waste Management Plan prepared by Dudek (Appendix R; July 2020).

5.15.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Water

Local Water Source and Supply

Water service to the project site is provided by the City's Public Utilities Department (PUD). The PUD serves nearly 1.4 million people populating over 404 square miles, with average deliveries of 200 million gallons per day (mgd). The PUD maintains a complex water system that includes nine surface reservoirs, three drinking water treatment plants, 29 treated water storage facilities, 49 pump stations, and approximately 3,295 miles of water transmission and distribution pipelines (City of San Diego 2017).

The PUD has developed a separate recycled water system to offset the demand for potable water. The goal is to reduce the City's dependence on imported water and increase reliability by providing non-potable water supplies. Recycled water service is available through the North City Water Reclamation Plant (northern service area) and the South Bay Water Reclamation Plant (southern service area). Recycled water is approved for use in some construction activities, recreational water bodies, and the irrigation of parks, playgrounds, schoolyards, residential landscaping, common areas, nurseries, freeway landscaping, golf courses, dual plumbed-uses, and cooling towers. Customers can purchase recycled water for approved uses if they are fronting an existing recycled water distribution pipeline. The project site is located within the northern service area. The nearest recycled water distribution center is the Canyonside Recycled Water Pump Station.

The City currently purchases most of its potable water from the San Diego County Water Authority (SDCWA), a wholesale water agency that provides water to its 24 member agencies in San Diego County (City of San Diego 2016). The SDCWA, in turn, purchases much of its water from the Metropolitan Water District of Southern California (MWD). Below is a summary of these water supply sources.

The Metropolitan Water District of Southern California

MWD is a consortium of 26 cities and water districts that provides imported water to nearly 19 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. MWD currently delivers an average of 1.4 billion gallons of water per day to a 5,200-square-mile service area (MWD 2016). MWD imports its water from two main sources—the Colorado River (via the Colorado River Aqueduct [CRA]) and the Sacramento and San Joaquin Rivers (via the State Water Project [SWP]). Together, these two sources provide approximately 45 percent of Southern California’s water; the remainder comes from various local sources. The CRA is owned and operated by MWD, and extends approximately 242 miles from the Colorado River at Lake Havasu to Lake Mathews in Riverside County. From there, a series of canals, siphons, pipelines, and pump stations moves water west to several MWD reservoirs for local distribution. The principal structure conveying water south through the SWP is the California Aqueduct, which extends approximately 444 miles south from the Sacramento-San Joaquin Delta to Lake Perris in Riverside County (MWD 2016). Additional water sources currently or potentially available to MWD include local supplies, groundwater banking, water transfers, seawater desalination, and water recycling (MWD 2016).

San Diego County Water Authority

The SDCWA is an independent public agency that serves as a wholesale water supplier to its 24 member agencies. The SDCWA supplies approximately 95 percent of the population of San Diego County, in a service area of 951,000 acres (SDCWA 2016a). The SDCWA operates and maintains a regional water delivery system capable of delivering more than 900 mgd of water. This system consists of two major aqueducts and numerous related facilities, including approximately 300 miles of pipeline and over 100 flow control facilities (SDCWA 2016b).

SDCWA water is imported from MWD under a transfer agreement with Imperial Irrigation District, and agreements for the lining of the All American and Coachella Canals, via the Quantification Settlement Agreement of October 2003. Most of this water is obtained from the Colorado River and the SWP through a massive system of pipes and aqueducts (SDCWA 2016b).

Both MWD and SDCWA provide water to their member agencies to meet projected water demand based on regional population forecasts. The San Diego Association of Governments (SANDAG) is responsible for providing and updating land use planning and demographic forecasts for the County. MWD and SDCWA update their water demand and supply estimates based on the most recent demographic forecasts approximately every five years to coincide with preparation of their respective Urban Water Management Plans (UWMPs) (SDCWA 2016b).

SDCWA’s 2015 UWMP includes a summary of the total projected water supplies and demands over the next 20 years in five-year increments (2020–2040) under normal, single dry, and multiple dry water years within SDCWA’s service area (which includes the City and Poway Municipal Water District). SDCWA’s reliability assessment demonstrates that, even with very conservative assumptions regarding the availability of dry year supplies from MWD, the San Diego region’s existing and projected water resource mix is increasingly drought-resilient, but shortages still occur during a single dry year by 2035 (23,907 acre-feet per year [afy]), and during a multiple dry year beginning in 2028 (29,314 acre-feet per year) (SDCWA 2016b). These shortages would be eliminated should MWD supplies approach the supply

levels projected in MWD's 2015 UWMP for single dry and multiple dry water year supply capabilities. Further, SDCWA will address these shortages by the following methods (SDCWA 2016b):

- Implementing extraordinary conservation measures, achieved through voluntary and mandatory water-use restrictions that were used during the 2012–2016 drought period.
- Implementing its carryover storage program, which includes (1) in-region surface storage of approximately 100,000 acre-feet at San Vicente Reservoir, secured as part of the San Vicente Dam Raise Project completed in 2014, with the carryover pool of 100,000 acre-feet full by June 2016; and (2) out-of-region permanent groundwater storage allocation of a total of 70,000 acre-feet in water banks located in Kern County.
- If necessary, securing dry year water transfers, which SDCWA successfully acquired and used during the 2007–2011 shortage management period.

As stated, SDCWA also has applied very conservative assumptions regarding the availability of dry-year supplies from MWD. For instance, SDCWA has assumed that: (1) MWD is limited to 1.4 million acre-feet (maf) of supplies due to dry conditions and increased reductions in deliveries from the SWP (no Sacramento–San Joaquin River Delta improvements) and/or a reduction in Colorado River deliveries; and (2) SDCWA receives its preferential right based on MWD's current method of calculating such rights.

Furthermore, SDCWA's 2015 Annual Report, *Beyond Drought: Reliable Water in an Era of Change*, states that SDCWA has diversified its supply sources to ensure water reliability in drought years when supplies from Metropolitan may be limited (SDCWA 2015). This diversification includes independent water transfers from the Colorado River, working with the member agencies to increase conservation, increasing the use of recycled water, and using local groundwater (SDCWA 2015). The report also states that SDCWA's most significant accomplishment of the year was proving the value of the region's long-term strategy to develop a diversified water portfolio. In a year of serious drought, SDCWA and its member agencies not only had enough water to meet demands, but they had enough to start storing water behind the raised San Vicente Dam, which was completed in 2014 (SDCWA 2015).

As part of a diversified portfolio, the Carlsbad Desalination Plant, which began commercial operations in December 2015, can provide a highly reliable drought-resilient local potable water supply of up to 56,000 afy for the region, available in both normal and dry year conditions. SDCWA provided the opportunity for its member agencies—including the City—to enter into contracts to purchase desalinated water produced from the plant.

In summary, water agencies throughout California continue to face climatological, environmental, legal, and other challenges that impact water supply, such as court rulings regarding listed fish species, State Water Resources Control Board (SWRCB) water quality restrictions, and recent drought conditions. Challenges such as these will always be present. Nonetheless, the regional water supply agencies, MWD and SDCWA, contemplate sufficient, reliable supplies to serve existing and projected future demand.

MWD's and SDCWA's overall reliability goal is to deliver an adequate, reliable, and high-quality water supply for their customers, even during dry periods or severe droughts (MWD 2016; SDCWA 2016b). Based on conservative water supply and demand assumptions contained in MWD's and SDCWA's 2015 UWMPs for a long-term planning horizon over the next 25 years, in combination with conservation of non-essential demand during certain dry years, MWD and SDCWA have determined that implementing their related and coordinated water plans will successfully achieve this goal.

City of San Diego Public Utilities Department

In June 2016, the City issued its most recent UWMP (City of San Diego 2016) which outlines current and future water supplies and demands in the City's service area. The City is engaged in several strategies to increase water reliability, including the development of local groundwater supplies; increased utilization of recycled water, or potable reuse; continued conservation efforts; and ongoing strategic water resources planning. The UWMP projects water supply reliability for average years, single dry years, and multiple dry years, and concludes that the PUD will have sufficient water supplies to serve the City through the year 2040 (City 2016f). Subsequent to publication of the UWMP, Pure Water Phase I was approved as a verifiable water supply source. PUD and interim supply and demand forecast tracking in 2018 also support a reduction in 2015 UWMP projected demands as a possible result of less water consumption than what was originally projected (City of San Diego 2019)

Conservation

A Water Conservation Program implemented by the PUD aims to reduce water use in San Diego by offering various rebate programs, landscaping classes, education, and free water conservation surveys for property owners and tenants. These programs are credited with achieving over 32.2 mgd of potable water savings (City of San Diego 2015). Depending on conditions, these savings can account for as much as 20 percent of raw water purchases annually. Water conservation continues to be a priority throughout California, and water suppliers are tasked with adopting programs and policies designed to promote water conservation practices and implementing comprehensive public information and educational campaigns.

Potable Water Service

The following information is based on the Water Study prepared by Dexter Wilson Engineering (Appendix O) regarding existing water infrastructure on the project site.

There are three pressure zones pertinent to the project: the Rancho Bernardo 793 Pressure Zone, the Carmel Mall 920 Pressure Zone, and the 1130 Golf Course Pressure Zone. As shown in Figure 5.15-1, there are existing public water facilities within and directly adjacent to the project.

There is an existing 24-inch 793 Pressure Zone transmission water line in Rancho Carmel Drive. There are existing 16-inch 920 Pressure Zone transmission water lines in Rancho Carmel Drive, Carmel Mountain Road, and Shoal Creek Drive. The 16-inch 793 Pressure Zone water line in Shoal Creek Drive increases to a 20-inch water line south of Ted Williams Parkway. There is an existing 12-inch 1130 Pressure Zone transmission water line that runs north in Shoal Creek Drive, east in Stoney Gate Place, and northeast in Carmel Ridge Road. This 12-inch line reduces to an 8-inch line, which traverses Unit 9 to the north and runs east into Breezeway Place.

Other public water facilities in the vicinity of the project include the 920 Zone Reservoir, the Carmel Mall WPS (793 Zone/920 Zone water booster station), the Carmel Mountain Ranch High WPS (920 Zone/1130 Zone water booster station), and two 1020 Zone/920 Zone Pressure Reducing Stations.

The existing 920 Zone Reservoir is located on the south side of the Carmel Mall 920 Pressure Zone along Shoal Creek Drive and has a volume of 3.2 million gallons, a spill elevation of 920.5 feet, and a bottom elevation of 890.5 feet. This reservoir serves as the primary feed for the 920 Pressure Zone.

The Carmel Mall Water Pump Station (WPS) is located on Rancho Carmel Drive north of Carmel Mountain Road. This water booster station delivers water from the 24-inch 793 Pressure Zone water line in Rancho Carmel Drive to the 920 Pressure Zone via a 16-inch water line in Rancho Carmel Drive.

The Carmel Mountain Ranch High WPS is located on Shoal Creek Drive east of the existing 920 Reservoir. This water booster station delivers water from the 20-inch 920 Pressure Zone water line in Shoal Creek Drive to the 1130 Pressure Zone via a 12-inch water line in Shoal Creek Drive. This pump station serves as the only feed for the 1130 Pressure Zone.

There are two pressure reducing stations (PRS) north of the project. One of the stations is located at the northeast intersection of Carmel Mountain Road and Rancho Carmel Drive (Rancho Carmel and Carmel Mountain PRS). The second pressure reducing station is located near the intersection of Paseo Lucido and Calle Saucillo (Pas Lucido and Cal Saucillo PRS). Both pressure reducing stations are fed from the Bernardo Heights 1020 Pressure Zone and supply water to the 920 Pressure Zone.

Wastewater

Infrastructure

The PUD's water system consists of more than 3,300 miles of pipelines, including transmission lines up to 84 inches in diameter and distribution lines as small as 4 inches in diameter. Transmission lines are pipelines 16 inches and larger in diameter that convey raw water to the water treatment plants and convey treated water from the water treatment plants to treated water storage facilities. Distribution lines are pipelines 16 inches and smaller in diameter that directly service the retail users connected to a meter. In addition, the PUD maintains and operates 49 water pump stations that deliver treated water from the water treatment plants to more than 276,000 metered service connections in 130 different pressure zones. The PUD also maintains several emergency connections to and from neighboring water agencies, including the following:

- Santa Fe Irrigation District Miramar Wastewater Treatment Plant (WTP);
- City of Poway (Miramar WTP);
- Olivenhain Municipal Water District (Miramar WTP);
- Cal-American Water Company (Alvarado and Otay WTP);
- Sweetwater Authority (Otay WTP); and
- Otay Water District (Otay WTP).

The North City Water Reclamation Plant is located in the Miramar area, and treats an average of 18,482 afy of wastewater, although the plant has an ultimate treatment capability of 33,604 afy. The Northern Service Area distribution system consists of 91 miles of recycled water pipeline, two reservoirs, and two pump stations, with service to 574 meters. The South Bay Water Reclamation Plant is located near the international border with Mexico, and treats an average of 8,961 afy of wastewater, although the plant has a treatment capability of 16,802 afy. The Southern Service Area distribution system consists of 3 miles of recycled water pipeline, one storage tank, one pump station and seven meters.

Wastewater and Infrastructure

Wastewater collection and treatment services are provided by the Wastewater Branch of the PUD. The City wastewater system consists of two components:

- The Metropolitan Sewerage Sub-System treats the wastewater from the City and 15 other cities and districts from a 450-square-mile area. An average of 160 mgd of wastewater is treated. Planned improvements will increase wastewater treatment capacity to serve an estimated population of 2.8 million through the year 2050.
- The Municipal Wastewater Collection Sub-System is responsible for the collection and conveyance of wastewater from residences and businesses in the City, serving a 330-square-mile area.

The City's wastewater facilities include the Point Loma Wastewater Treatment Plant, the North City Water Reclamation Plant, the South Bay Water Reclamation Plant, and the Metro Biosolids Center. The Point Loma WWTP, which would serve the proposed project, treats approximately 10 mgd of wastewater and has a treatment capacity of 30 mgd.

Wastewater Service Infrastructure

The following information is based on the Sewer Study prepared by Dexter Wilson Engineering (Appendix P) regarding existing wastewater infrastructure on the project site.

Figure 5.15-2 presents existing sewer facilities in the vicinity of the project site and identifies five sewer sub-basins. The three sub-basins on the west side of the project site (Chicarita 1, 2, and 3) will flow west to Chicarita Trunk Sewer #90 and the two sub-basins on the east side of the project site (PO5 and PO3M) will flow east to the City of Poway.

Chicarita Sub-Basins

The three sub-basins on the west side of the project are a part of a larger basin that flows into the Chicarita Trunk Sewer. The existing trunk sewer is located just east of Interstate 15 and flows south from Carmel Mountain Road to Poway Road. The 18-inch diameter line increases in size to a 24-inch diameter line in Sabre Springs Parkway and decreases in size to an 18-inch diameter line just before Poway Road. Flows from this trunk sewer are ultimately conveyed to the North City Water Reclamation Plant.

Units 1, 2, 3, 4, 5, 6, 7, 8, and the west side of Unit 9 are located within the Chicarita Sub-basins. Unit 5 is located within the Chicarita 1 Sub-basin, Unit 6 is located within the Chicarita 2 Sub-basin, and Units 1, 2, 8, and the west side of Unit 9 are located within the Chicarita 3 Sub-basin. Units 3, 4, and 7 will consist of park space or open space and will therefore not generate any sewer flows.

Poway Sub-Basins

The two sewer sub-basins on the east side of the project, PO5 and PO3M, flow east to the City of Poway through Exchange Meters PO5 and PO3M, respectively. Due to the location of some areas of the City of San Diego's sewerage system there is an existing Sewage Transportation Agreement between the City of San Diego and the City of Poway that allows the City of San Diego to use a portion of the City of Poway Municipal Sewerage System to transport its sewage to the San Diego Metropolitan Sewerage System.

Units 10, 11, 12, 13, 14, 15, 16, 17, and the east side of Unit 9 are located within the Poway Sub-basins. Units 16, 17, and the east side of Unit 9 are located within the PO5 Sub-basin, and Unit 10 is located within the PO3M Sub-basin. Units 11, 12, 13, 14, and 15 will consist of park space or open space and will therefore not generate any sewer flows.

Solid Waste Management

Solid waste management in the project area is provided by the City Environmental Services Department (ESD) and private collectors. The City provides refuse collection for residents that are located on dedicated public streets, provide adequate safe space and access for storage and collection, and comply with regulations set forth in the Municipal Code and Waste Management Guidelines. Other customers pay for service by private hauling companies that are franchised by the City.

The closest landfill to the proposed project is the Miramar Landfill, which is located approximately 13 miles from the project site. It is located in Kearny Mesa and owned/operated by ESD. The Miramar Landfill receives approximately 870,000 tons of trash per year. At this rate of disposal, the Miramar Landfill, which is the only City-run landfill, will likely be filled to capacity and close by 2028 (City of San Diego 2019b).

Additional active solid waste landfills within San Diego County include Borrego Springs Landfill, Otay Landfill, Sycamore Landfill, San Onofre Landfill, and Las Pulgas Landfill. Of these, the two closest facilities are Sycamore Landfill and Otay Landfill. Sycamore Landfill is located approximately 18 miles from the site, with a remaining capacity of approximately 114 million cubic yards (cy) as of 2016. The Sycamore Landfill is permitted to receive a maximum of 5,000 tons per day and has a maximum permitted capacity of 148 million cy with a projected closing date of December 31, 2042 (CalRecycle 2019a). Otay Landfill is located approximately 31 miles from the project site, with a remaining capacity of approximately 21 million cy as of 2016. This landfill is permitted to receive a maximum of 6,700 tons per day with a maximum permitted capacity of 61 million cy. The projected closing date is February 28, 2030 (CalRecycle 2019b).

Electricity and Natural Gas

The Trails project area is served by San Diego Gas & Electric (SDG&E). SDG&E is a regulated public utility that provides energy service to 3.5 million people through 1.4 million electric meters and 870,000 natural gas meters in San Diego County and southern Orange County, within a service area of 4,100 square miles (SDG&E 2016). Forecasting future energy consumption demand is performed on a continual basis by SDG&E, including the need for installation of transmission and distribution lines. In situations where project with large power loads are planned, other loads in the project vicinity are considered in conjunction with the planned project, and electrical substations are upgraded as needed.

5.15.2 Regulatory Framework

Federal

Federal Water Pollution Control Act of 1972 (Clean Water Act)

The principal federal law regulating water quality in the United States is the 1972 Federal Water Pollution Control Act, also known as the Clean Water Act. The fundamental purpose of the Clean Water Act is the protection of designated beneficial uses of water resources. The Clean Water Act establishes a system of water

quality standards, discharge limitations, and permits; it requires states to adopt water quality standards to protect public health and welfare, enhance the quality of water, and serve the other purposes of the Clean Water Act. The Clean Water Act was amended in 1987 to include urban and stormwater runoff, which required many cities to obtain a National Pollutant Discharge Elimination System permit for stormwater conveyance system discharges.

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates discharges of dredged or fill material into waters of the United States, requiring issuance of a Section 404 permit. Under Section 401 of the Clean Water Act, a state water quality certification must be obtained whenever an application for a federal permit for discharge of pollutants into waters of the United States is submitted, such as a Section 404 permit. The Section 401 certification requires that any activity affecting waters of the United States be in compliance with all applicable water quality standards, limitations, and restrictions.

Safe Drinking Water Act

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act grants the U.S. Environmental Protection Agency the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards, (1) the National Primary Drinking Water Regulations and (2) the National Secondary Drinking Water Regulations. The National Primary Drinking Water Regulations are legally enforceable standards that apply to public water systems. These standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. The National Secondary Drinking Water Regulations are non-mandatory guidelines for certain substances that do not present a risk to public health.

Water Resources Development Act

The Water Resources Development Act (passed December 2016) includes short-term provisions that sunset after five years. These provisions increase pumping operations in the Sacramento–San Joaquin River Delta at the highest levels allowed under biological opinions issued by state and federal wildlife agencies under the Endangered Species Acts, unless the pertinent agencies show that the increased pumping would cause additional adverse effects on listed fish (smelt and salmonid) species beyond the range of effects anticipated in those opinions, using the best scientific and commercial data available. The biological opinions have been subject to years of litigation between farming interests, urban water districts, fishing associations, and environmental groups, with the current versions upheld by the Ninth Circuit Court of Appeals. The new law's long-term provisions include significant funding authorizations that also should result in more water availability throughout California. These funding authorizations include long-term water infrastructure projects such as storage and groundwater projects; water recycling, reuse, and conservation projects; and design and construction of desalination projects. The additional funds will help supplement California's water bond.

State

Safe Drinking Water Act

The State Safe Drinking Water Act (Health & Safety Code, Sections 116270 et seq.) builds on and strengthens the federal Safe Drinking Water Act. The state act authorizes the state's Department of Public Health to protect the public from contaminants in drinking water by establishing maximum contaminant levels that are at least as stringent as those developed by the U.S. Environmental Protection Agency under the federal act.

California Drinking Water Standards

State drinking water standards are based on federal standards and are listed in Title 22 of the California Code of Regulations. The California Department of Health Services administers the state drinking water standards.

Water Conservation Act of 2009

The Water Conservation Act (SBX7-7) (Water Code Section 10608) requires that all water suppliers increase water-use efficiency. This legislation sets an overall goal of reducing per-capita urban water use, compared to 2009 use, by 20 percent by December 31, 2020.

California Water Code

The California Water Code contains provisions that control almost every consideration of water and its use. Division 2 of the California Water Code provides that the SWRCB shall consider and act upon all applications for permits to appropriate waters. Division 6 of the Water Code controls conservation, development, and utilization of state water resources. Division 7 addresses water quality protection and management.

Senate Bill 610

State legislation has improved the link between water supply and land use planning. Senate Bill (SB) 610 (Water Code Sections 10910 et seq.) requires the preparation of a water supply assessment (WSA) for projects within cities and counties that propose any of the following:

- Residential developments of more than 500 dwelling units
- Shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space
- Commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space
- Hotels, motels, or both, having more than 500 rooms
- Industrial, manufacturing, or processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area
- Mixed-use projects that include one or more of the projects specified in Water Code Section 10912(a)
- Projects that would demand an amount of water equivalent to or greater than the amount of water required by a 500-dwelling-unit project

SB 610 stipulates that when environmental review of certain large development projects is required, the water agency that is to serve the development must complete a WSA to evaluate water supplies that are or will be available during normal, single dry, and multiple dry years during a 20-year projection to meet existing and planned future demands, including the demand associated with the proposed project (DWR 2003). Because the proposed project includes more than 500 residential units, a WSA was prepared (Appendix Q).

Senate Bill 221

Enacted in 2001, SB 221 (Government Code Sections 66455.3 and 66473.7) requires that the legislative body of a city or county, which is empowered to approve, disapprove, or conditionally approve a subdivision map, must condition such approval upon proof of sufficient water supply. The term “sufficient water supply” is defined in SB 221 as the total water supplies available during normal, single dry, and multiple dry water years within a 20-year projection that would meet the projected demand associated with the proposed subdivision. The definition of sufficient water supply also includes the requirement that sufficient water encompass not only the proposed development, but also existing and planned future uses, including, but not limited to, agricultural and industrial uses.

SB 221 requirements apply to proposed development that is considered a “project” under SB 610 (DWR 2003). Thus, SB 221 applies to the proposed project.

Urban Water Management Planning Act

The 1983 Urban Water Management Planning Act (California Water Code Sections 10610–10656) requires specified urban water suppliers within the state to prepare a UWMP and update it every five years. State and local agencies and the public frequently use such plans to determine if agencies are planning adequately to reliably meet water demand in various service areas. As such, the plans serve as an important element in documenting water supply availability and reliability for compliance with state laws, including SB 610 and SB 221 (discussed above), which link water supply sufficiency to large land-use development project approvals. Urban water suppliers also must prepare such plans, pursuant to the Urban Water Management Planning Act, to be eligible for state funding and drought assistance.

UWMPs provide information on water usage, water supply sources, and water reliability planning. They also may provide implementation schedules to meet projected demands over a 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. A UWMP's water supply analysis includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption in water supply.

UWMPs are required by all the water purveyors related to the proposed project, including the City, SDCWA, and MWD.

Delta Plan

Water supplies in California are based largely around the Sacramento–San Joaquin River Delta (Delta). Water from Northern California surface waters and snowmelt travels to and through the Delta to Central Valley urban and agricultural users and to Southern California through aqueducts, dams, and other infrastructure. The Sacramento–San Joaquin Delta Reform Act (Water Code Section 85000 et seq.) established the Delta Stewardship Council, which has the primary goal of developing and implementing an enforceable, long-term management plan for the Delta (Delta Plan). The Delta Plan's coequal goals of providing a more reliable water supply for California while restoring the Delta ecosystem are the foundation of all state water management policies. As required by statute, the Delta Plan adopts a science-based adaptive management strategy to manage decision making in the face of uncertainty (Water Code Section 85308(f)). The law requires that the Delta Plan be updated every five years, and each update is intended to build on an evolving base of knowledge, direct near- and mid-term actions, and preserve and protect longer-term opportunities.

California Water Plan

Water Code Sections 10004 through 10013 describe the components and characteristics of the California Water Plan, which addresses the coordinated control, protection, conservation, development, and utilization of the state's water resources. Updated every five years, the most recent water plan is the California Water Plan Update 2018, released in June 2019.

California Water Recycling Standards

The California Legislature has developed state requirements for the production, discharge, distribution, and use of recycled water. These requirements are contained in the California Code of Regulations, Title 22, Division 4, Chapter 3, Reclamation Criteria, Sections 60301 through 60475, and Title 17. The California Department of Public Health administers the state recycling water standards.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen Code) is set forth in California Code of Regulations, Title 24, Part 11, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development and water conservation, among other issues. Under the CALGreen Code, all water closets (i.e., flush toilets) are limited to 1.28 gallons per flush, and urinals are limited to one-half gallon per flush. In addition, maximum flow rates for faucets are established as follows: two gpm at 80 pounds per square inch for showerheads; 1.5 gpm at 60 per square inch for residential lavatory faucets; and 1.8 gpm at 60 per square inch for kitchen faucets.

The CALGreen Code also includes Section 4.408.2, a Construction Waste Management Plan. This plan identifies which waste created during construction could be sorted on site, or bulked and then transported to diversion facilities.

Water Conservation Projects Act

The state requirements for water conservation, which are codified in the Water Conservation Projects Act of 1985 (California Water Code, Sections 11950–11954), encourage local agencies and private enterprise to implement potential water conservation and reclamation projects. Potential water conservation and reclamation projects may include facilities for municipal and industrial advanced wastewater treatment, regulatory impoundments, improvements to water supply and delivery systems, tailwater recovery systems, and sprinkler or drip irrigation systems.

General Waste Discharge Requirements

On May 2, 2006, the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system in order to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

California Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) is the principal state law enacted to establish requirements for adequate planning, implementation, management, and enforcement of water quality controls. The Porter–Cologne Act, which became Division 7 of the California Water Code, establishes a regulatory program to protect water quality and beneficial uses of all state waters, outlined the responsibilities and authorities of the nine Regional Water Quality Control Board (RWQCBs), and established the SWRCB. For the San Diego Hydrologic Region, water quality is regulated by the San Diego RWQCB, Region 9 of the SWRCB. Each RWQCB is directed to create a water quality control plan, to include three main components: (1) beneficial uses that are to be protected, (2) water quality objectives that protect those uses, and (3) an implementation plan to accomplish those objectives.

California Integrated Waste Management Act – Assembly Bill 939

The Integrated Waste Management Act requires each county to prepare a Countywide Integrated Waste Management Plan, with input from each city in a given county. This plan is reviewed at least once every five years to ensure that waste management practices remain consistent with the practices defined in the Public Resources Code. As part of the Countywide Integrated Waste Management Plan, each jurisdiction (cities and county) is required to prepare and maintain Source Reduction and Recycling, Household Hazardous Waste, and Non-Disposal Facility Elements. The Countywide Integrated Waste Management Plan is a summary plan that combines all these elements and is required to be approved by the county Board of Supervisors and the majority of the cities within the county.

California Mandatory Commercial Organics Recycling – Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings that consists of five or more units. Organic waste is defined as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. However, multi-family dwellings are not required to have a food waste diversion program. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

California Solid Waste Reuse and Recycling Access Act of 1991 – Assembly Bill 1327

AB 1327, which was established in 1991, required CalRecycle to develop a model ordinance for the adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects.

Disposal Measurement System Act of 2008 – Senate Bill 1016

SB 1016 maintains the 50 percent diversion rate requirement established by AB 939, and also established revised calculations for those entities that did not meet the 50 percent diversion rate. SB 1016 also established a per-capita disposal measurement system to make the process of goal

measurement, as established by AB 939, simpler, timelier, and more accurate. The new disposal-based indicator—the per-capita disposal rate—uses only two factors, (1) a jurisdiction’s population (or in some cases employment) and (2) its disposal rate as reported by disposal facilities.

Solid Waste Diversion – Assembly Bill 341

Effective July 1, 2012, AB 341 requires that commercial enterprises that generate four cubic yards or more of solid waste weekly participate in recycling programs. This requirement also includes multi-family housing complexes of five units or more, regardless of the amount of solid waste generated each week. The purpose of this requirement is to reduce greenhouse gas emissions by diverting commercial solid waste to recycling, and to expand recycling opportunities in California. As part of implementing AB 341, the California Legislature set an ambitious goal of 75 percent recycling, composting, or source reduction of solid waste by 2020. The law calls for the state and CalRecycle to take a statewide approach to decreasing California’s reliance on landfills. CalRecycle is actively working to develop and implement programs to achieve the 75 percent target.

Local

City of San Diego General Plan

The City’s Public Facilities, Services, and Safety Element of the General Plan addresses facilities and services that are publicly managed, and have a direct influence on the location of land uses. These include Fire-Rescue, Police, Wastewater, Storm Water, Water Infrastructure, Waste Management, Libraries, Schools, Information Infrastructure, Disaster Preparedness, and Seismic Safety. The purpose of this chapter is to provide the public facilities and services needed to serve the existing population and new growth.

Water Infrastructure Goals

- A safe, reliable, and cost-effective water supply for San Diego.
- Water supply infrastructure that provides for the efficient and sustainable distribution of water.

Water Infrastructure Policies

- PF-H.1. Optimize the use of imported supplies and improve reliability by increasing alternative water sources to: provide adequate water supplies for present uses, accommodate future growth, attract and support commercial and industrial development, and supply local agriculture.
 - a. Prepare, implement, and maintain, long-term, comprehensive water supply plans and options in cooperation with the appropriate state and federal agencies, regional authorities, water utilities, and local governments.
 - b. Develop, coordinate, facilitate, and implement water conservation plans and projects that are sustainable in reducing water demands.
 - c. Develop potential groundwater resources and storage capacity, combined with management of surface water in groundwater basins to meet overall water supply and resource management objectives.
 - d. Participate in advanced water treatment processes and non-traditional water production techniques such as brackish groundwater and seawater desalination programs.
 - e. Continue to develop the recycled water customer base, and expand the distribution system to meet current and future demands.

- f. Consider and evaluate water transfers.
- g. Optimize storage, treatment and distribution capacity of potable water systems.
- PF-H.2. Provide and maintain essential water storage, treatment, supply facilities and infrastructure to serve existing and future development.
- PF-H.3. Coordinate land use planning and water infrastructure planning with local, state, and regional agencies to provide for future development, maintain adequate service levels, and develop water supply options during emergency situations.
 - a. Plan for a water supply and emergency reserves to meet peak load demand during a natural disaster such as a fire or earthquake.
 - b. Plan for water supply and emergency reserves recognizing anticipated Climate Change impacts.
 - c. Recognize the water/energy nexus. Plan and implement water projects after consideration of their energy demands in coordination with energy suppliers to minimize and optimize the energy impact of projects.

Wastewater Goals

- Environmentally sound collection, treatment, re-use, disposal, and monitoring of wastewater.
- Increased use of reclaimed water to supplement the region's limited water supply.

Wastewater Policies

- PF-F.1. Meet or exceed federal and state regulatory mandates cost effectively.
- PF-F.2. Produce quality reclaimed water.
- PF-F.3. Minimize sewer spills by best practice infrastructure asset management practices.
- PF-F.4. Maintain conveyance and treatment capacity.
- PF-F.5. Construct and maintain facilities to accommodate regional growth projections that are consistent with sustainable development policies (see also Conservation Element, Section A).
- PF-F.6 Coordinate land use planning and wastewater infrastructure planning to provide for future development and maintain adequate service levels.
- PF-F.7. Ensure facilities meet business, safety, and life-cycle cost concerns.
- PF-F.8. Manage infrastructure assets optimally through efficient repair and replacement.
- PF-F.9. Support informed and timely resource allocation decisions.
- PF-F.10. Develop and execute a financing plan to satisfy requirements validated through the public participation process.
- PF-F.11. Explore entrepreneurial and environmental initiatives (such as the cogeneration of power) and pursue as appropriate.
- PF-F.12. Maximize the beneficial use of sludge.
- PF-F.13. Maintain a cost-effective system of meeting or, preferably, exceeding regulatory standards related to wastewater collection and treatment and storm water pollution prevention.
- PF-F.14. Incorporate new technologies and scientific advancements in the optimal provision of wastewater services.

Waste Management Goals

- Efficient, economical, environmentally-sound waste collection, management, and disposal.
- Maximum diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.

Waste Management Policies

- PF-I.1. Provide efficient and effective waste collection services.
 - a. Route City and private fleets to minimize truck trip distances and use fuel efficient vehicles producing low emissions.
 - b. Design or retrofit City and private operation stations consistent with sustainable development policies (see also Conservation Element, Section A).
 - d. Encourage waste reduction and recycling with source-separated collection of materials.
 - e. Provide space for recycling containers and efficient collection.
 - f. Identify additional funding sources for all waste management services.
- PF-I.2. Maximize waste reduction and diversion (see also Conservation Element, Policy CE.A.9).
 - a. Conveniently locate facilities and informational guidelines to encourage waste reduction, diversion, and recycling practices.
 - b. Operate public and private facilities that collect and transport waste and recyclable materials in accordance with the highest environmental standards.
 - g. Support resource recovery programs that produce soil additives, mulch, or compost from yard debris and organic waste.
 - h. Maximize the separation of recyclable and compostable materials.
 - i. Collaborate with public and private entities to support the development of facilities that recycle materials into usable products or that compost organic materials.
 - j. Reduce and recycle Construction and Demolition (C&D) debris. Strive for recycling of 100 percent of inert C&D materials and a minimum of 50 percent by weight of all other material.
 - k. Use recycled, composted, and post-consumer materials in manufacturing, construction, public facilities and in other identified uses whenever appropriate.
 - l. Encourage advance disposal fees to prevent the disposal of materials that cause handling problems or hazards at landfills.
 - m. Provide sufficient information on the movement of waste and recyclable materials to meet regulatory requirements at public and private transfer stations and materials recovery facilities to allow adequate planning.
 - n. Reduce subsidies to disposal and encourage incentives for waste diversion.
 - o. Promote manufacturer and retailer responsibility to divert harmful, reusable, and recyclable products upon expiration from the waste stream.
 - p. Encourage the private sector to build a mixed construction and demolition waste materials recycling facility.
 - q. Expand and stabilize the economic base for recycling in the local and regional economy by encouraging and purchasing products made from recycled materials.

- r. Continuously assess new technologies for recycling, composting, cogeneration, and disposal to maximize efficient use of City resources and environmental protection.
- PF-I.3. Provide environmentally sound waste disposal facilities and alternatives.
 - a. Design and operate disposal facilities located within the City, or that serve as a destination for City waste, to meet or exceed the highest applicable environmental standards.
 - b. Identify and investigate alternatives to standard disposal practices as fiscally-and environmentally-sound technologies become available.
 - b. Ensure efficient, environmentally-sound refuse and recyclable materials collection and handling through appropriate infrastructure, alternative fuel use, trip coordination, and other alternatives.
 - c. Ensure environmentally and economically sound disposal options for materials that cannot be effectively reduced, reused, recycled, or composted.
 - d. Plan for disposal needs considering factors such as trip distance and environmentally sound disposal capacity.
 - e. Cooperate on a regional basis with local governments, state agencies, and private solid waste companies to find the best practicable, environmentally safe, and equitable solutions to solid and hazardous waste management.
 - f. Maximize environmental benefit in landfill-based waste diversion and effective load check programs by ensuring that recyclable or hazardous materials do not end up in the landfill.
 - g. Use closed and inactive landfill sites for public benefits, such as provision of energy from waste generated methane, creation of wildlife habitat upon proper remediation or other land uses such as parks determined to be appropriate.
- PF-I.4. Promote litter prevention efforts and practices.
 - a. Provide conveniently located public litter containers on public streets and in large public venues and strategically located recyclable materials containers.
 - b. Encourage partnerships and collaborative efforts to sponsor and coordinate neighborhood pride/cleanup events.
 - c. Promote anti-litter education campaign and encourage point of purchase and other funding options to support education and cleanup efforts.
- PF I.5 Plan for sufficient waste handling and disposal capacity to meet existing and future needs. Evaluate existing waste disposal facilities for potential expansion of sites for new disposal facilities.

Utility Goals

- Public utility services provided in the most cost-effective and environmentally sensitive way.
- Public utilities that sufficiently meet existing and future demand with facilities and maintenance practices that are sensible, efficient, and well-integrated into the natural and urban landscape.

Utility Policies

- PF-M.1. Ensure that public utilities are provided, maintained, and operated in a costeffective manner that protects residents and enhances the environment.
- PF-M.2. Coordinate with all public and private utilities to focus utility capital investments and design projects to help implement the City of Villages strategy.

- PF-M.3. Integrate the design and siting of safe and efficient public utilities and associated facilities into the early stages of the long range planning and development process, especially in redevelopment/urban areas where land constraints exist.
- PF-M.4. Cooperatively plan for and design new or expanded public utilities and associated facilities (e.g., telecommunications infrastructure, planned energy generation facilities, gas compressor stations, gas transmission lines, electrical substations and other large scale gas and electrical facilities) to maximize environmental and community benefits.
 - a. Use transmission corridors to enhance and complement wildlife movement areas and preserved open space habitat as identified in the City's Multiple Species Conservation Program (MSCP).
 - b. Provide adequate buffering and maintained landscaping between utility facilities and residential and non-residential uses, including the use of non-building areas and/or rear setbacks.
 - c. Maximize land use and community benefit by locating compatible/appropriate uses within utility easements/right-of-ways (e.g., passive parkland, natural open space, wildlife movement, urban gardens, plant nurseries, parking, access roads, and trails). Trails can be allowed in these easement/right-of-ways, provided proper indemnification, funding and maintenance is set forth in a written agreement between the public utility, the City, and project developer.
 - d. For projects, in particular large-scale developments (such as those requiring redevelopment plans, community plan updates, general plan amendments), consult and coordinate with all appropriate public utilities early on to determine the type, size, and location of facilities that are needed to accommodate the project's increased demand.
 - e. Incorporate public art with public utility facilities, especially in urban areas.
 - f. Ensure utility projects account for maintenance of community streetscape elements and street trees.
 - g. Coordinate projects in the public right-of-way with all utility providers.

City of San Diego Ordinance 0-17327 (Mandatory Water Reuse Ordinance)

This ordinance, adopted by the City Council in 1989, requires that “recycled water shall be used within the City where feasible and consistent with the legal requirements, preservation of public health, safety, and welfare, and the environment.” All development projects are required to install an additional water pipeline reserved for reclaimed water. Compliance with this ordinance for new development is made a condition of tentative maps, land use permits, etc., based on the project's location within an existing or proposed recycled water service area.

City of San Diego Drought Restrictions

The City has year-round city and state permanent mandatory water restrictions (City of San Diego 2018). These restrictions apply to those whose property lies within the PUD's service area. These water restrictions include the following:

- A customer shall not allow potable water to irrigate outdoor landscapes in a manner that causes runoff, such that, water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.
- Customers shall repair or stop all water leaks upon discovery or within seventy-two hours of notification by the City of San Diego.
- Customers shall not wash down sidewalks, driveways, parking areas, tennis courts, or other paved areas without using a power washer or a hose with a shutoff nozzle. Washing any paved areas is

only allowed to alleviate immediate safety or sanitation hazards. Water shall be collected and prevented from leaving the property and entering the municipal separate storm sewer system.

- Customers shall not overfill swimming pools and spas.
- Customers shall not use non-recirculating potable water in ornamental fountains or cascading fountains.
- Customers shall not use a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.
- Single pass-through cooling systems, as part of water service connections, shall be prohibited after the effective date of this section. Non-recirculating systems in all conveyer car wash and commercial laundry systems shall be prohibited after the effective date of this section.
- The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased is prohibited.
- To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.
- Potted plants, non-commercial vegetable gardens and fruit trees, residential and commercial landscapes, including golf courses, parks, school grounds and recreation fields, may only be watered before 10 a.m. or after 6 p.m.
- The irrigation with potable water of ornamental turf on public street medians shall be prohibited.
- The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall shall be prohibited.

City of San Diego Zero Waste Plan

The City's Zero Waste Plan, a component of the City's Climate Action Plan, was approved and adopted by the City Council on July 13, 2015. The Zero Waste Plan lays out strategies to be implemented by the City to accomplish the following goals:

- Target 75 percent diversion by 2020, 90 percent diversion by 2035, and "zero waste" by 2040 by identifying potential diversion strategies for future action. To increase the City's waste diversion rate to 75 percent will require an estimated additional 332,000 tons per year to be diverted from landfill disposal;
- Demonstrate continuous improvement towards a goal of zero waste to landfills;
- Emphasize education by renewing City public information efforts;
- Promote local policies and ordinances and legislation at the state level that encourage
- manufacturers, consumers, and waste producers to be responsible for waste;
- Investigate appropriate new technologies; and
- Re-emphasize market development at the local and state level.

The City's ESD estimates that compliance with existing City codes and ordinances alone (including the Refuse and Recyclable Materials Storage Regulations [Municipal Code Chapter 14, Article 2, Division 8],

Recycling Ordinance [Municipal Code Chapter 6, Article 6, Division 7], and the Construction and Demolition (C&D) Debris Deposit Ordinance [Municipal Code Chapter 6, Article 6, Division 6]) would achieve only an approximate 40 percent diversion rate, which is substantially below the current 75 percent diversion level targeted by the state and the goals of the City's Zero Waste Plan.

The Recycling Ordinance requires all single-family, multi-family, and commercial uses to participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the approved recycling containers. The C&D Debris Deposit Ordinance requires project applicants to submit a Waste Management Form with the building permit or demolition/removal permit, to provide a general estimate of the total waste generated by the project including how much will be recycled. The code requires a minimum diversion rate of 50 percent for building permits or demolition/removal permits issued within 180 calendar days of the effective date of the ordinance, and a minimum diversion rate of 75 percent for building permits or demolition/removal permits issued after 180 calendar days from the effective date of the ordinance, provided that a certified recycling facility which accepts mixed construction and demolition debris is operating within 25 miles of the City Administrative Building, located at 202 C Street, San Diego (City of San Diego 2015a). The Preliminary Waste Management Plan identifies the certified Otay Construction and Demolition (C&D)/Inert Debris Processing Facility in Chula Vista.

City of San Diego Municipal Code

In compliance with AB 939 and AB 341, the City is currently at a waste diversion rate of 67%. The City has adopted programs and policies requiring individual developments to incorporate recycling and waste reduction measures, and waste reduction and recycling programs have been implemented to assist the City in reducing waste in compliance with state law.

The following sections of the Municipal Code target waste reduction:

Chapter 6, Article 6, Division 6. This section (and related ordinances) requires project applicants to submit a Waste Management Form with the building permit or demolition/removal permit, to provide a general estimate of total project waste generation, including how much will be recycled. The code requires a minimum diversion rate of 50% for building permits or demolition/removal permits issued within 180 calendar days of the effective date of the ordinance. A minimum diversion rate of 75% is required for building permits or demolition/removal permits issued more than 180 calendar days after the effective date of the ordinance, provided that a certified recycling facility that accepts mixed construction and demolition debris operates within 25 miles of the City Administrative Building, which is the case here with the Otay C&D/Inert Debris Processing Facility in Chula Vista.

Chapter 6, Article 6, Division 7 (Recycling Ordinance). This section requires all single-family, multifamily, and commercial uses to participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in approved recycling containers.

Chapter 14, Article 2, Division 8 (Refuse and Recyclable Material Storage Regulations). This section is intended to encourage solid waste recycling through requirements to provide permanent, adequate, and convenient space for the storage and collection of refuse and recyclable material. Specific requirements for new nonresidential development include the provision at least one exterior refuse and recyclable material storage area per building, with related storage area capacity based on the gross floor area of associated buildings.

City of San Diego Water System Design Criteria

Book 2 of the City of San Diego Guidelines and Standards was used to analyze the water system. A summary of the design criteria from Book 2 is presented below.

City of San Diego Land Development Code – Landscape Standards

The Landscape Standards establish the minimum plant material, irrigation, brush management, and landscape related standards for work done in accordance with requirements of Land Development Code. They provide guidelines and alternative methods to meet regulations based on various site conditions. Additionally, the Landscape Standards provide the technical standards to create and maintain landscapes that conserve and efficiently use water. Applicants proposing landscape work should also obtain copies of the Submittal Requirements in the Land Development Manual. These establish the materials and information that must be submitted with an application for review by the City and establish applicable drafting standards for landscape drawings (City of San Diego 2009).

Table 5.15-1 City of San Diego Water System Design Criteria

Criteria	Design Requirement
Minimum Static Pressure	65 psi
Maximum Static Pressure	120 psi
Maximum Pressure Drop – Reservoir Out of Service	40 psi
Maximum Pressure Drop – Peak Hour & Max Day Plus Fire	25 psi
Minimum Pressure – Peak Hour	40 psi
Minimum Pressure – Max Day plus Fire	20 psi
Maximum Pipeline Velocity (Fire Flow) ¹	15 fps
Maximum Pipeline Velocity (Normal Operating Conditions) ²	5 fps

¹ Section 3.3.1 E

² Section 3.10.1; pounds per square inch = psi.

5.15.3 Impacts Analysis

Issue 1: *Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts with regard to the following utilities: water; sewer; and solid waste disposal?*

Impact Threshold(s)

According to the City’s Significance Determination Thresholds (2016a), impact analysis of public utilities should focus on the physical impacts associated with the construction or expansion of existing public utilities. Impacts to public utilities would be significant if the removal, construction, and/or relocation of the utility would:

- Result in direct impacts from the construction of new or expanded public utilities needed to serve the project; and/or

- Construct, demolish, and/or renovate 1,000,000 SF or more of building space, which would generate approximately 1,500 tons or more of waste. For projects over 1,000,000 SF, a significant direct solid waste impact would result if compliance with the City 's ordinances and the WMP fails to reduce the impacts of such projects to below a level of significance and/or if a WMP for the project is not prepared and conceptually approved by the ESD prior to distribution of the draft environmental document for public review.

In addition, the City's Significance Determination Thresholds note the following guidance should be considered in determining whether utility work could have significant environmental effects.

Would removal, construction, and/or relocation of the utility:

- Be compatible with existing and adjacent land uses?
- Change drainage or affect water quality/runoff?
- Affect air quality?
- Have a negative aesthetic affect?
- Increase noise levels to existing receptors?
- Affect biological resources including habitat?

Impact Analysis

Water

Public Water System Improvements

One public water system improvement is proposed, and is shown on Figure 5.15-3. The project proposes to construct a new parallel 12-inch (793 Pressure Zone) line within Rancho Carmel Drive¹. This line would connect to an existing 10-inch line west of the existing 24-inch line in Rancho Carmel Drive to the north of Provencal Place and to the existing 12-inch line in Provencal Place. This water main is required in order to provide water system redundancy to Units 5 and 6, and because City of San Diego Standards do not allow direct tapping of transmission water mains for water services. Precise connection locations, valve locations, and alignment details will be determined during final engineering for the project.

Any impacts relative to the construction and installation of water supply infrastructure are included as part of the proposed project and analyzed herein. The proposed improvement described above would be installed within existing roadways and would not result in significant environmental effects beyond what has been analyzed within this EIR.

Carmel Mountain High Water Pump Station Reconfiguration/Retrofit

The project acknowledges the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station. The extent of the upgrades required at the pump station are not known at this time; however, it is anticipated that a new pump would be required at this location. Therefore, the project proposes a fair-share contribution for

¹ This improvement is also proposed by an adjacent project located on Provencal Place (City of San Diego PTS 648597). If the project is delayed past the start of construction for the proposed project, or if it does not get installed, the proposed project would construct the improvement.

the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station (**MM-UTL-1**). This fair-share contribution would be made prior to the issuance of the first building permit for Unit 9.

Private Water System Improvements

Private water system points of connection for each Unit are shown on Figure 5.15-3, Proposed Water System Improvements. All proposed private onsite domestic water systems and fire protection water systems would connect to public City of San Diego water pipelines. Units 1 and 9 would require private water booster stations as described below.

- Unit 1 would require a private domestic water booster system to provide adequate pressure to for domestic service and fire sprinkler service to buildings within the Unit. The number of buildings that would need to have their domestic water boosted would need to be evaluated once site development plans, building designs, and pad elevations are available. The private fire protection system would not require a booster system because the 920 Pressure Zone can provide adequate fire hydrant flow to this Unit.
- Unit 9 would receive domestic water and fire protection service from the 920 Pressure Zone. The existing 8-inch 1130 Pressure Zone water main traversing Unit 9 will not provide water service to Unit 9, is proposed to remain in service, and would require that a new water easement be dedicated to the City of San Diego in accordance with the latest City of San Diego standards. The private domestic water system for Unit 9 would require a private domestic water booster system. The booster system would be designed to provide adequate flow and pressure for domestic service and fire sprinkler service to each building within the Unit. The private fire protection system would not require a booster system because the 920 Pressure Zone can provide adequate fire hydrant flow to this Unit.

Potential significant environmental impacts associated with such construction include air quality, traffic, biological resources, cultural resources, noise, hydrology, water quality, and other impacts as identified and analyzed in Chapter 5 of this EIR. None of those sections identified construction or operation of the project's new or expanded water supply infrastructure as resulting in significant impacts apart from those already analyzed in this EIR. For example, construction of new or expanded water supply infrastructure would require limited amounts of grading and ground disturbance that are already considered in assessing project impacts. Further, to the extent any new or expanded water facilities create noise effects, the project must comply with the City's Noise Ordinance. In addition, pipeline construction would require trenching, also as part of the grading stages of the proposed project, which have been assessed in this EIR.

Private systems would be designed in accordance with City of San Diego standards and plumbing code standards. New public water systems and improvements would be installed prior to occupancy of each Unit and would be adequately designed and sized to meet the project's water needs in conformance with City Design Guidelines and Standards (Appendix O). Final construction design/details for onsite private water systems internal to each Unit would be provided consistent with this EIR and the approved Tentative Map when individual Units proceed with their site development plans. Any impacts relative to the construction and installation of private water supply infrastructure are included as part of the proposed project and analyzed herein. The proposed improvements described above would be installed within the project site and would not result in significant environmental effects beyond what has been analyzed within this EIR.

Wastewater

Wastewater Generation Rates

Sewer generation rates for the proposed project were developed in accordance with the Sewer Design Guide and are based on population. For residential units, a population density of 3.5 persons per dwelling unit was used to estimate population. For the proposed commercial lot in Unit 17, an equivalent population factor of 43.7 persons per net acre was used to estimate population. Per Section 1.3.2.2 of the Sewer Design Guide, a generation rate of 80 gallons per capita per day (gpcpd) is used to determine average dry weather flow (ADWF). Therefore, the sewage generation factors for the proposed residential units and the proposed commercial lot were determined to be 280 gallons per day per dwelling unit and 3,056 gallons per day per net acre, respectively. Table 5.15-2 presents the projected ADWF for each Unit within the proposed project.

Table 5.15-2. Average Dry Weather Sewer Flows

Unit	Description	Sewage Generation Factor	Total Average Dry Weather Flow (gpd)
1	66 Dwelling Units	280 gpd/unit	18,480
2	87 Dwelling Units	280 gpd/unit	24,360
3 and 4	0	0	0
5	78 Dwelling Units	280 gpd/unit	21,840
6	128 Dwelling Units	280 gpd/unit	35,840
7	0	0	0
8	98 Dwelling Units	280 gpd/unit	27,440
9	300 Dwelling Units	280 gpd/unit	84,000
10	200 Dwelling Units	280 gpd/unit	56,000
11, 12, 13, 14, and 15	0	0	0
16	123 Dwelling Units	280 gpd/unit	34,440
17	120 Dwelling Units	280 gpd/unit	33,600
	0.27 Commercial Acres	3,056 gdp/acre	825
Total			336,825

Source: Appendix P.

Notes: gpd = gallons per day.

Total average flow from the project in the Chicarita Sub-Basins is 186,760 gpd (assumes 210 dwelling units from Unit 9 flow west), and total average flow from the project in the PO3M and PO5 Sub-Basins is 150,065 gpd (assumes 90 dwelling units from Unit 9 flow east).

As stated above in Section 5.15.1, wastewater generated by the proposed project would be treated at the Point Loma WWTP. This Point Loma WWTP has a remaining daily capacity of 20 mgd. Project generated wastewater would account for 0.34 mgd (336,825 gpd), which is only 0.02% of the remaining capacity at the Point Loma WWTP. Therefore, existing capacity at the WWTP exists to accommodate the proposed project and no new or expanded wastewater treatment facilities would be required.

Proposed Public Wastewater Infrastructure

Proposed sewer facilities for the project would consist of private sewer facilities internal to each Unit. Each Unit would have a public sewer lateral that would convey sewer flow into the existing public sewer system, except for Unit 5 and Unit 10, which propose private sewer laterals. When private facilities are proposed to be constructed within a City of San Diego easement or in the Public Right-of-Way, an Encroachment Maintenance and Removal Agreement (EMRA) is required. Since Unit 5 and Unit 10 are proposing private sewer laterals within the Public Right-of-Way, one such agreement is required for each of these laterals.

A total of ten connections would be made to existing public sewer lines. The private onsite sewer system for Unit 9 will be designed to allow the west side of Unit 9 to flow west in Carmel Ridge Road within the Chicarita 3 Sub-basin, and the east side of Unit 9 to flow east in Carmel Ridge Road within the PO5 Sub-basin. Units 2, 17, and east side of Unit 9 would connect to the existing public sewer system at existing sewer manholes while Units 1, 5, 6, 8, 10, 16 and west side of Unit 9 would connect to the existing public sewer system at proposed sewer manholes. Sewage would ultimately be conveyed to either the Chicarita Trunk Sewer or a Poway Exchange Meter, as previously described. Flows from proposed project would enter the Chicarita Trunk Sewer at three separate locations.

As shown in Figure 5.15-4, Proposed Sewer System, two reaches of the public sewer would need to be upgraded to accommodate the project as proposed: 1) upsizing 300 linear feet of an existing 10-inch diameter sewer line to a 12-inch diameter sewer line in the private street west of Shoal Creek Drive; and 2) upsizing approx. 2,400 linear feet of an existing 8-inch diameter sewer line to a 10-inch diameter sewer line in Lindamere Lane and Esprit Avenue. In addition, a force main discharge manhole for Unit 5 would be required since this unit requires a private sewer lift station. Flow from the proposed private force main discharge manhole in Unit 5 would flow by gravity in a private sewer line to the east into Rancho Carmel Drive and south in Rancho Carmel Drive in a public sewer line to an existing public sewer. For additional information regarding these upgrades, see Appendix P.

Additional potential public sewer system improvements include 1) upgrading 800 LF of existing 12-inch public sewer located between Carmel Ridge Road and Exchange Meter PO5 (in Unit 14) to 15-inch sewer and 2) upgrading 1,400 LF of 8-inch diameter sewer to 10-inch diameter sewer in Stoney Gate Place and Shoal Creek Drive. The Master Sewer Study included in Appendix P provides more information regarding these potential upgrades.

Onsite Private Sewer Systems

Private sewer system points of connection shown on Figure 5.15-4. All proposed facilities would connect to public City of San Diego sewer pipelines. As previously described, Units 1, 2, 5, 6, 8, and west side of Unit 9 are within the Chicarita Sub-Basin and will flow west to the Chicartia Trunk Sewer. Units 10, 16, 17 and east side of Unit 9 are within the Poway Sub-Basins and will flow east to the City of Poway for transportation to the San Diego Metropolitan Sewerage System. A majority of the proposed project can be served internally by a gravity sewer system with the exception of Unit 5 and Unit 10.

- **Unit 5.** Due to grading constraints, a lift station would be required for Unit 5. The lift station would pump sewage into a private discharge manhole near the southeast corner of Unit 5. Sewage pumped into the discharge manhole would flow east by gravity in a private sewer lateral to a public sewer manhole within and adjacent to the existing Right-of-Way. The sewage would then be conveyed to the existing 8-inch sewer south of Unit 5 via a new public gravity main. It is

recommended that the private sewer lift station designer use an activated carbon filter at the end of the Wet Well Vent to minimize the potential for sewage odors in the vicinity of the private sewer lift station. In addition, water service and power should be routed to the lift station site for use with an odor control system, which can be installed at a later date if necessary.

- **Unit 10.** Unit 10 is proposed to gravity to the existing 8-inch sewer in Chestnut Hill Lane. To do so, a 14-foot wide private sewer easement would be required. If the private sewer easement is obtained, then the private sewer easement will need to be recorded prior to approval of the public improvement drawings. If a private easement cannot be obtained for the proposed gravity sewer for Unit 10 then this Unit would require a private lift station to pump sewage to Carmel Ridge Road. Should a private sewer lift station be required, an odor control system similar to Unit 5 should be implemented as described in the Unit 10 Alternative below.
- **Unit 10 Alternative:** If a private easement cannot be obtained for the proposed gravity sewer for Unit 10 then this Unit would need a private lift station to pump sewage to Carmel Ridge Road. To do so the sewage would be pumped through a force main from the private lift station to a private discharge manhole near the northern boundary of Unit 10. The flow from this manhole would be conveyed into the existing 8-inch sewer fronting the north end of Unit 10 by way of a private gravity main, which would require an EMRA with the City of San Diego. The existing 8-inch sewer fronting the north end of Unit 10 in Carmel Ridge Road conveys flow east towards Exchange Meter PO5. This alternative would require approximately 800 LF of existing 12-inch public sewer located between Carmel Ridge Road and Exchange Meter PO5 (in Unit 14) to be upsized to a 15-inch sewer line. It is recommended that the private sewer lift station designer use an activated carbon filter at the end of the Wet Well Vent to minimize the potential for sewage odors in the vicinity of the private sewer lift station. In addition, water service and power should be routed to the lift station site for use with an odor control system, which can be installed at a later date if necessary.

Potential significant environmental impacts associated with such construction include air quality, traffic, biological resources, cultural resources, noise, hydrology, water quality, and other impacts as identified and analyzed in Chapter 5 of this EIR. None of those sections identified construction or operation of the project's new or expanded wastewater infrastructure as resulting in significant impacts apart from those already analyzed in this EIR. In addition, pipeline construction would require trenching, also as part of the grading stages of the proposed project, which have been assessed in this EIR.

Wastewater infrastructure would be designed in accordance with City of San Diego Sewer Design Guide. Final construction design/details for wastewater systems internal to each Unit would be provided in the future consistent with this EIR and the approved Tentative Map when individual Units proceed with their site development plans. Any impacts relative to the construction and installation of wastewater infrastructure are included as part of the proposed project and analyzed herein. The proposed improvements described above would be installed within the project site and would not result in significant environmental effects beyond what has been analyzed within this EIR.

Solid Waste

Although the project would not demolish, construct or renovate more than 1,000,000 square feet of building space, the project would generate more than 1,500 tons of solid waste materials during construction and operation; therefore, the project would exceed the City's threshold for direct solid waste impacts. Further, the project proposes construction of more than 40,000 SF, thereby also exceeding the City's threshold for cumulative solid waste impacts and therefore refer to Chapter 6, Cumulative Impacts. Pursuant to the City's

Significance Determination Thresholds, a WMP was prepared to identify waste reduction, recycling, and waste diversion measures (WDMs).

The purpose of a WMP is to identify the potential waste generated and diverted during demolition, construction, and operation, associated with a project, and to identify measures to reduce potential impacts associated with management of such waste. The project's WMP addresses construction phases as well as the post-construction/occupancy phase of the project and identifies the types and projected amount of waste that would be generated, disposed, salvaged, and recycled, as applicable. The WMP describes the project measures and design features that would reduce the amount of waste generated and how waste reduction and recycling goals would be achieved. The following discussion of potential solid waste generation resulting from implementation of the project and related WDMs is based on the WMP (Appendix R).

Demolition and Construction Waste

The City's C&D Debris Diversion Deposit Program applies to all applicants for building, demolition, and removal permits. This ordinance (San Diego Municipal Code [SDMC] Section 66.0601) requires that the applicant post a deposit (Table 1, C&D Debris Deposit Table), which is held by the City until the applicant demonstrates that a minimum amount of the material generated has been diverted from landfills. The ordinance requires demolition and new construction projects to divert 65% of the waste produced during the project.

Mixed construction debris recycling facilities in the City are evaluated quarterly to determine how much of the throughput is recycled, and how much is a "residual" material requiring disposal. Facilities that accept mixed debris typically achieve a 68% or less diversion rate. Single material recyclers, such as metal recyclers, often achieve a nearly 100% diversion rate. When comingled materials are sent to a mixed facility, the 75% diversion goal established by AB 341 will not be met. Depending on the project, to ensure that the overall C&D diversion goal is attained, some materials must be separated and trucked to facilities with higher diversion rates, such as aggregate and metal recyclers.

Demolition

Demolition would occur over a period of approximately 2 months and the City's ESD staff would be present for an early pre-construction meeting to evaluate waste segregation, signage, and salvage. The demolition phase will include the deconstruction/demolition and removal of the existing clubhouse, associated structures, asphalt parking and walkway areas, and interior landscaping. Table 5.15-5, Project Waste Generation – Demolition, summarizes the type and amount of demolition materials, as well as diversion/disposal, anticipated from the project. Recycled materials would be redirected to appropriate recipients selected from ESD's directory of facilities that recycle demolition materials, scrap metal, and yard waste, as indicated in Table 5.15-3 below.

Table 5.15-3. Demolition Waste

Material Type	Estimated Waste Quantity (tons)	Handling	Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and concrete	2,428	Hanson Aggregates 9229 Harris Plant Road San Diego, California 92126 (100% diversion)	2,428	—
Landscape materials	2,963	Miramar Greenery 5180 Convoy Street San Diego, California 92111 (100% diversion)	2,963	—
Non-usable C&D materials	5,217	Miramar Landfill 5180 Convoy Street San Diego, California 92111 (0% diversion)	—	5,217
Total	10,608		5,391	5,217

Note: C&D = construction and demolition.

Approximately 10,608 tons of waste is expected to be generated during demolition. Approximately 5,391 tons of material would be recycled, including trees, concrete, asphalt, foundations, building structure, masonry walls, curb and gutter, and green waste. Approximately 5,217 tons of debris would be transported to a landfill, including non-useable lumber, drywall, glass, miscellaneous trash, roofing paper, broken roof tiles, and floor tile.

Construction

Construction activities would generate waste, including packaging materials, wood pallets, and other miscellaneous debris. Construction debris would be separated on site into material-specific containers to facilitate reuse and recycling and to increase the efficiency of waste reclamation in accordance with this WMP. Source separation of materials at the construction site is essential to (1) ensure the appropriate waste diversion rate is met, (2) minimize costs associated with transportation and disposal, and (3) facilitate compliance with the C&D ordinance. The types of construction waste anticipated to be generated include the following: asphalt and concrete, landscape debris, mixed C&D debris, and garbage/trash. The amount of construction waste is estimated in the table below, Table 5.15-4.

Table 5.15-4. Construction Waste

Material Type	Estimated Waste Quantity (tons)	Handling	Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and concrete	217	Hanson Aggregates 9229 Harris Plant Road San Diego, California 92126 (100% diversion)	217	—

Table 5.15-4. Construction Waste

Material Type	Estimated Waste Quantity (tons)	Handling	Estimated Diversion (tons)	Estimated Disposal (tons)
Landscape debris	846	Miramar Greenery 5180 Convoy Street San Diego, California 92111 (100% diversion)	846	—
Mixed C&D debris	2,426	Otay C&D/Inert Debris Processing Facility 1700 Maxwell Road Chula Vista, California 91913 (79% diversion)	1,917	509
Total	3,489		2,980	509

Note: C&D = construction and demolition.

In accordance with State diversion targets, a minimum of 75% of construction materials would be recycled (see Table 5.15-6). Recycled materials would be redirected to appropriate recipients selected from ESD's directory of facilities that recycle construction materials, scrap metal, and yard waste.

Operational Waste

While the construction phase for the project occurs as a one-time waste generation event, project operation requires an on-going plan to manage waste disposal to meet the waste reduction goals established by the City and State. Towards that end, the proposed project would comply with the City's Recycling Ordinance.

As shown in Table 5.15-5, Estimated Solid Waste Generation from the Project – Occupancy Phase, the expected waste generated per year from the project when fully occupied would be approximately 281 tons. The operational solid waste generation was estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod uses annual waste disposal rates from CalRecycle data for individual land uses. If waste disposal information was not available, waste generation data was used. CalEEMod uses the overall California Waste Stream composition to generate the necessary types of different waste disposed into landfills.

Table 5.15-5. Estimated Solid Waste Generation from the Project – Occupancy Phase

Use	Intensity (square feet)	Waste Generation Rate (tons/year/square foot)	Estimated Waste Generated (tons/year)*
Residential	1,200,000	0.0002325	279
Commercial (Art Studio)	12,000	0.000133	2

Note:

* Estimated using the California Emissions Estimator Model 2016.3.2.

On-site recycling services shall be provided. All occupants shall participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the recycling container provided for each unit. Recycling services are required by SDMC Section 66.0707. Based on current requirements, these services shall include the following:

- Collection of recyclable materials as frequently as necessary to meet demand;
- Collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
- Collection of other recyclable materials for which markets exist, such as scrap metal, wood pallets;
- Collection of food waste for recycling by composting, where available (prior to issuance of building and occupancy permits, the applicant will meet with representatives from ESD to ensure that their educational materials and haulers can comply with the requirements for this service);
- Use of recycling receptacles or containers that comply with the standards in the Container and Signage Guidelines established by ESD;
- Designated recycling collection and storage areas; and
- Signage on all recycling receptacles, containers, chutes, and/or enclosures that complies with the standards described in the Container and Signage Guidelines established by ESD.

As required by SDMC Section 66.0707, the recycling hauler shall ensure that occupants are educated about the available recycling services by providing:

- Information, including the types of recyclable materials accepted, the location of recycling containers, and the occupants' responsibility to recycle, shall be distributed to all occupants annually;
- Information and instructions to all new occupants upon move-in; and
- Information and instructions to all occupants upon any change in recycling service.

Landscape maintenance of common areas would include the collection and disposal of green waste at recycling centers that accept green waste by the contracted waste hauler. This will help further reduce the waste generated by the project during operation.

Significance of Impact

Water

The Project would connect to existing water lines adjacent to the site with the exception of Units 5 and 6, which would connect to the new 12-inch diameter public water main in Rancho Carmel Drive. On-site water infrastructure would be designed and sized to meet the project's water needs in conformance with City standards.

The project acknowledges the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station. The extent of the upgrades required at the pump station are not known at this time; however, it is anticipated that a new pump would be required at this location. Therefore, the project proposes a fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station (**MM-UTL-1**). This fair-share contribution would be made prior to the issuance of the first building permit for Unit 9. Prior to implementation of MM-UTL-1, impacts would be **potentially significant (Impact UTL-1)**.

Wastewater

The proposed project's construction impacts associated with installation of new or expanded wastewater facilities would be **less than significant**.

Solid Waste

The project would generate solid waste during both the construction and operational phases and exceed the 1,500 tons of solid waste materials generated threshold. Therefore, the project would be considered to have a direct impact on solid waste facilities. With implementation of the strategies outlined in the project-specific WMP, as well as compliance with applicable City regulations related to solid waste, impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting

MM-UTL-1: A fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station would be required prior to the issuance of the first building permit for Unit 9.

Significance After Mitigation

With implementation of MM-UTL-1, impacts associated with water would be reduced to **less than significant**.

Issue 2: Would the Project result in the use of excessive amounts of water?

Issue 3: Does the project propose landscaping which is predominantly non-drought resistant vegetation?

Impact Threshold(s)

According to the City's Significance Determination Thresholds (2016a), public utility impacts related to water use would be significant if a project would:

- Water Supply – Result in the need to comply with SB 610 to determine the availability of water to meet the projected water demands of the project for a 20-year planning horizon, including single and multiple dry years. The types of projects subject to SB 610 include the following:
 - Residential developments with more than 500 units;
 - Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;
 - Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;
 - Mixed use projects that include one or more of the projects listed above; or
 - Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project.
- Water Conservation
 - Use an excessive amount of potable water; or
 - Propose predominately non-drought resistant landscaping and excessive water usage for irrigation and other purposes.

Impact Analysis

Water Supply

The water demand and corresponding proposed public water facility analysis was developed in accordance with Book 2 of the City of San Diego Design Guidelines and Standards. Residential water demand is estimated based on population and a water demand of 150 gallons per day per person. Water demand for commercial areas is estimated using a water demand factor of 5,000 gpd/acre.

In order to estimate irrigation demands for developed areas it is conservatively assumed that 40 percent of the developed area within developable Units (Units 1, 2, 5, 6, 8, 9, 10, 16, and 17) will be permanently irrigated. A water demand factor of 4,000 gpd/acre is used for permanently irrigated areas. Park water demands are also estimated using a water demand factor of 4,000 gpd/acre. Table 5.15-6 provides the estimated average water demand associated with the proposed project.

Table 5.15-6 Projected Average Water Demand

Unit	Description	Dwelling Unit Density, DU/acre	Average Water Demand Factor	Average Water Demand, gpd
1	66 Dwelling Units	12.9	525 gpd/DU	34,650
	2.0 Acres Permanently Irrigated	-	4,000 gpd/acre	8,000
2	87 Dwelling Units	20.9	480 gpd/DU	41,760
	1.7 Acres Permanently Irrigated	-	4,000 gpd/acre	6,800
3 and 4	Open Space	-	0	0
5	78 Dwelling Units	34.1	450 gpd/DU	35,100
	0.9 Acres Permanently Irrigated	-	4,000 gpd/acre	3,600
6	128 Dwelling Units	37.4	450 gpd/DU	57,600
	1.4 Acres Permanently Irrigated	-	4,000 gpd/acre	5,600
7	3.38 Acre Park	-	4,000 gpd/acre	13,520
8	98 Dwelling Units	14.2	480 gpd/DU	47,040
	2.8 Acres Permanently Irrigated	-	4,000 gpd/acre	11,200
9	300 Dwelling Units	27.0	480 gpd/DU	144,000
	4.4 Acres Permanently Irrigated	-	4,000 gpd/acre	17,600
10	200 Dwelling Units	19.9	480 gpd/DU	96,000
	4.0 Acres Permanently Irrigated	-	4,000 gpd/acre	16,000
11 and 12	Open Space	-	0	0
13	1.9 Acre Park	-	4,000 gpd/acre	7,600
14 and 15	Open Space	-	0	0
16	123 Dwelling Units	25.9	480 gpd/DU	59,040
	2.58 Acre Park	-	4,000 gpd/acre	10,320
	1.9 Acres Permanently Irrigated	-	4,000 gpd/acre	7,600

Table 5.15-6 Projected Average Water Demand

Unit	Description	Dwelling Unit Density, DU/acre	Average Water Demand Factor	Average Water Demand, gpd
17	120 Dwelling Units	36.5	450 gpd/DU	54,000
	0.27 Commercial Acres	-	5,000 gpd/acre	1,350
	1.4 Acres Permanently Irrigated	-	4,000 gpd/acre	5,600
Total				683,980 gpd
				<i>475.0 gpm</i>

Source: Appendix Q.

Notes: gpd =gallons per day; gpm = gallons per minute; DU = dwelling unit. Based on Table 2-1 and Table 2-2 in Book 2 of the City of San Diego Guidelines.

Based on the City of San Diego Guidelines and Standards, the proposed project would result in an estimated maximum day demand of 2,051,940 gpd (1,425 gpm), and an estimated peak hour demand of 3,898,686 gpd (2,707 gpm).

As concluded in the WSA (Appendix Q), prepared for the proposed project, total water supplies available to PUD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the project in addition to the demand of existing and other planned uses.

Water Conservation

The proposed project would incorporate water sustainable design features, techniques, and materials that would reduce water consumption. These sustainability measures as they pertain to water resources include high-efficiency plumbing fixtures and fittings in all structures and the use of recycled water instead of potable water for irrigation at within the open space and park areas. The project applicant has committed to implement these water conservation standards into the design of the new residences, buildings, and other infrastructure that would be constructed as part of the proposed project.

Drought-tolerant landscaping would include a variety of trees, shrubs, grasses, and groundcover that would be native and drought-tolerant species that would not require the excessive use of water, or pesticides and fertilizers. Irrigation of the project site would utilize irrigation applied via low precipitation rate spray heads, drip emitters, or other highly efficient systems. Landscaping would be installed in compliance with the City's Landscape Standards.

Significance of Impact

Water Supply

The project would be consistent with regional water resource planning and applicable water supply regulations. There would be sufficient water supply to meet the projected demands of the project; therefore, impacts related to potable water supplies/demand from project implementation would be **less than significant**.

Water Conservation

The project would incorporate water sustainable features and Landscaping would include California native drought-tolerant plant palette. Overall, the project would be consistent with applicable water conservation requirements; therefore, impacts would be **less than significant**.

Mitigation, Monitoring, and Reporting`

No mitigation measures would be required.

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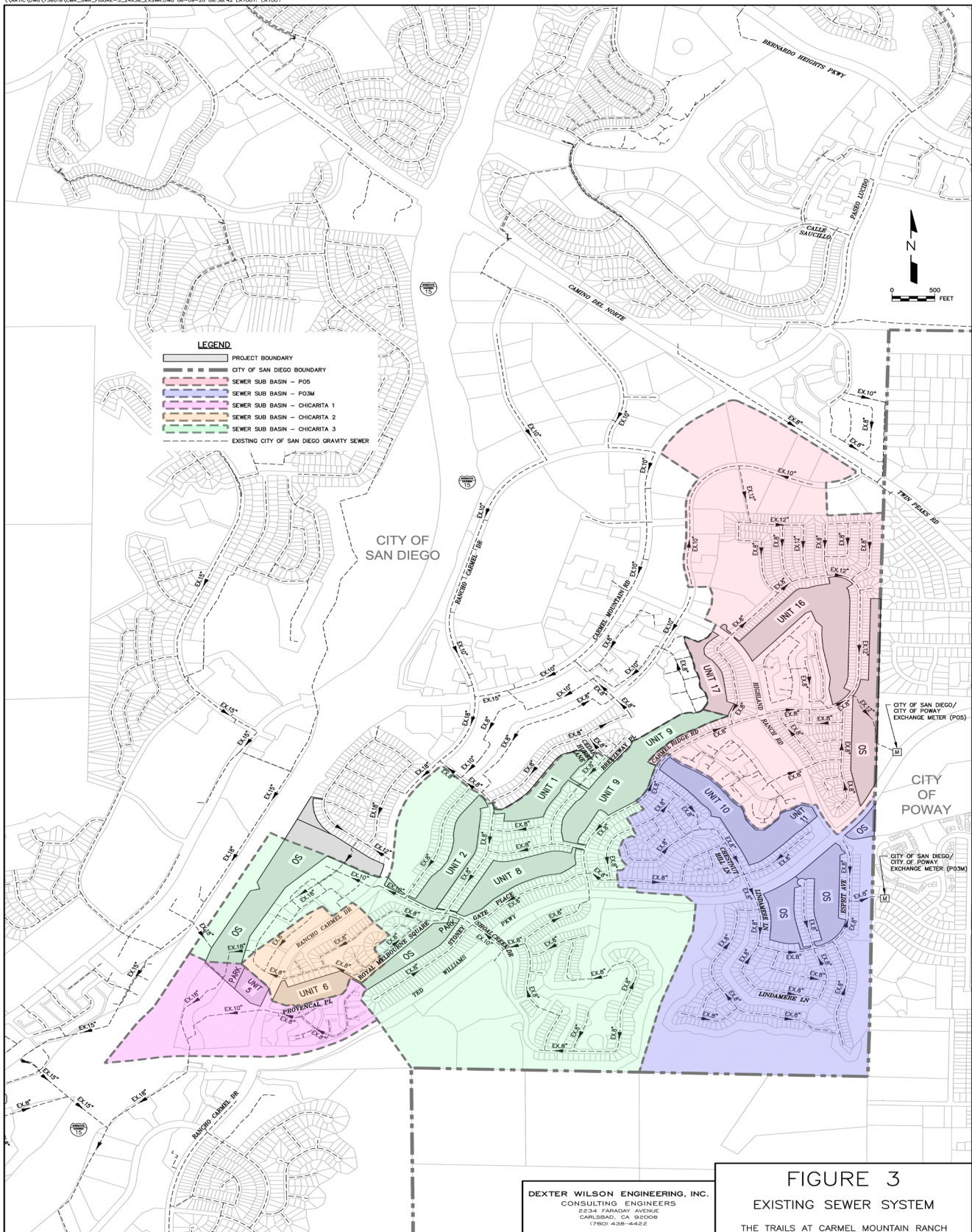
SOURCE: Dexter Engineering 2020

FIGURE 5.15-1

Existing Water System

Trails at Carmel Mountain Ranch

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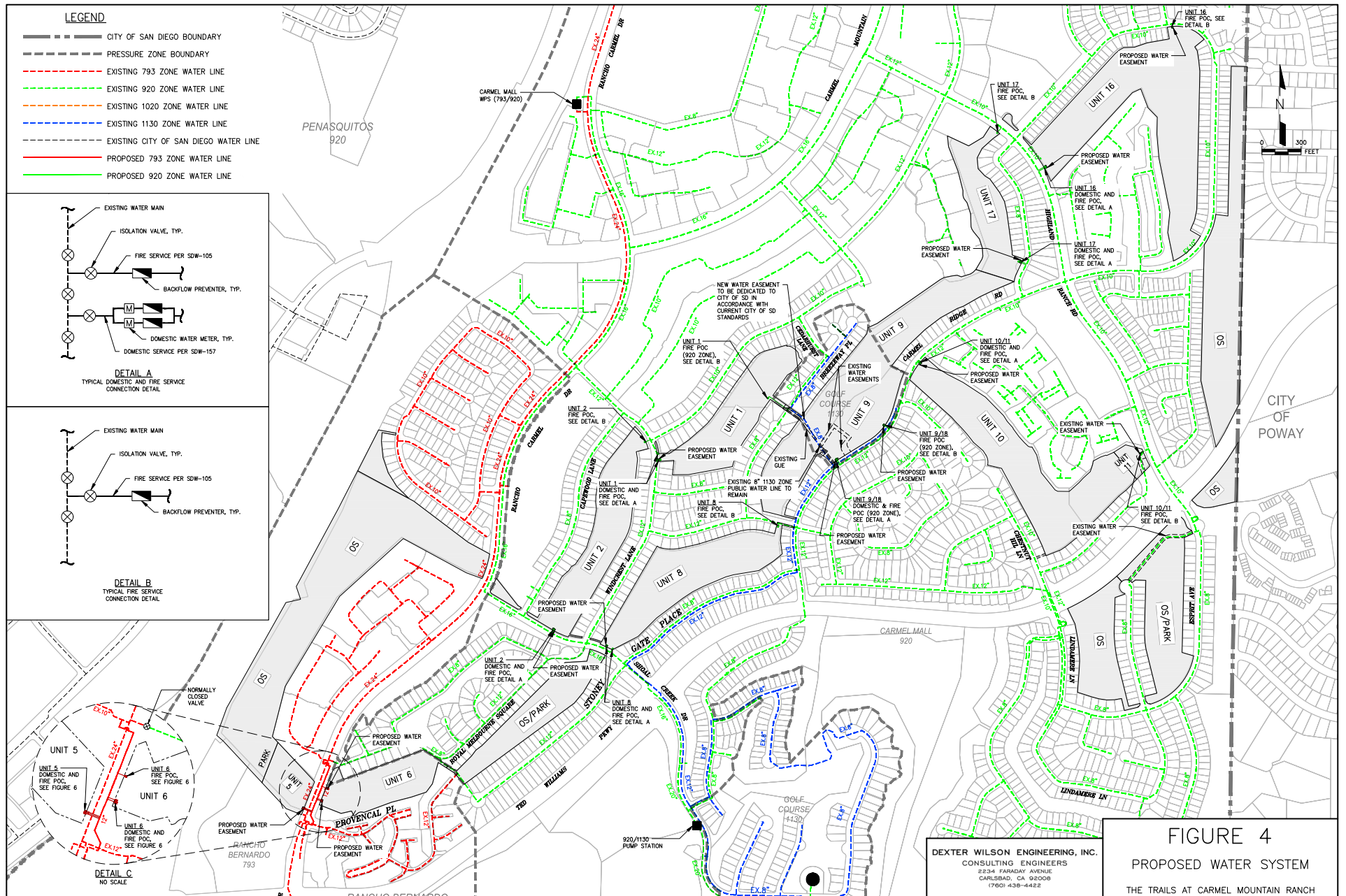
SOURCE: Dexter Engineering 2020

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FIGURE 5.15-2

Existing Sewer System
Trails at Carmel Mountain Ranch

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SOURCE: Dexter Engineering 2020

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FIGURE 5.15-3

Proposed Water System Improvements

Trails at Carmel Mountain Ranch

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5.16 Tribal Cultural Resources

This section describes the existing physical conditions and cultural context of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if required, related to implementation of the project. The following discussion is based on the Cultural Resources Inventory for The Trails at Carmel Mountain Ranch report prepared by Dudek (January 2020) and included as Appendix M. Additionally, the analysis is based on consultation with Native American Tribes traditionally and culturally affiliated with the project area who have requested consultation pursuant to Public Resources Code Section 21080.3.

5.16.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Linear Features

There is a narrow, meandering channel that originates from a small, 6-inch to 8-inch pipe and winds through former playing holes until it reaches a remnant golf cart path. Once the channel reaches the golf cart path, any flows that remain likely dissipate through evaporation. There are also areas mapped as coastal and valley freshwater marsh on the project site along Chicarita Creek, and also in the east and southeast portions of the project site associated with unnamed stream channels.

Ethnographic, Religious, and Cultural Context

Many areas of San Diego County, including mesas and the coast, are known for intense and diverse prehistoric occupation and important archaeological and historical resources. The pre-contact cultural sequences are locally characterized by the material culture recovered during archaeological investigations as early as the 1920s, and through early accounts of Native American life in San Diego, recorded as a means to salvage scientific knowledge of native lifeways. Additional information of Native American lifeways, however, comes from the Kumeyaay themselves, from the stories and songs passed down through the generations, in their own words. According to ethnographies based on interviews with local tribal elders, there are hundreds of words that describe a given landform, showing a close connection with nature. There are also stories associated with the land.

As recognized in 2001 by State Assembly Joint Resolution No. 60, the Kumeyaay Nation has occupied the Southern California and Baja California region, including the City of San Diego (City) and the project's APE. The Kumeyaay are the identified Most Likely Descendants (MLD) for all Native American human remains found in the City.

The last 10,000 years of continuous human occupation in the San Diego region includes the following archaeological cultural periods:

1. Paleoindian (pre-5500 BC)
2. Archaic (8000 BC-AD 500)
3. Late Prehistoric (AD 500-1769)
4. Ethnohistoric (post-AD 1769)

See the Cultural Resources Inventory for The Trails at Carmel Mountain Ranch report provided in Appendix M for a detailed description of each of the cultural periods.

Native American Heritage Commission Sacred Lands File

Dudek requested a Native American Heritage Commission (NAHC) search of its Sacred Lands (SLF) File on August 13, 2019, for the project site. On September 13, 2019, the NAHC provided a list with the results of its search of Native American tribes and individuals/organizations that might have knowledge of cultural resources in or near the project site. The search identified no previously recorded sites within 1 mile of the APE. The NAHC warned that the absence of specific site information in the SLF does not indicate the absence of cultural resources within the area of potential effect (APE) and included a list of Native American contacts that have knowledge of the cultural resources within the region.

Tribal Correspondence

Dudek sent correspondence letters on October 3, 2019, to the listed tribal representatives provided by the NAHC, requesting information, opinions, or concerns relating to project impacts. These letters contained a brief description of the planned project, reference maps, and a summary of the NAHC SLF and South Coastal Information Center search results. Dudek received one response, from the Viejas Band of Kumeyaay Indians (Viejas), in which Viejas did not indicate the presence of any known TCRs within the project APE, but did request Kumeyaay Native American monitoring for the project. Tribal correspondence is included in Appendix C to Appendix M of the EIR.

Further, the City conducted government-to-government consultation with Native American tribes under Assembly Bill (AB) 52. The City provided formal consultation notification to the Lipay Nation of Santa Isabel, Jamul Indian Village, and San Pasqual Band of Mission Indians, who are traditionally and culturally affiliated with the project area. Formal notification letters were sent via electronic mail on May 13, 2020 and May 15, 2020 describing the location of the project site, identifying the positive record search on the California Historic Resources Information System (CHRIS) digital database, and provided a copy of the site-specific archaeological report. The Lipay Nation of Santa Isabel and Jamul Indian Village responded within the 30-day formal notification period. The Lipay Nation of Santa Isabel and Jamul Indian Village concurred with City staff's determination of implementing a monitoring program during ground-disturbing activities, concluding consultation on June 15, 2020 and June 17, 2020, respectively. San Pasqual Band of Mission Indians initiated consultation on June 16, 2020 and requested clarification on native American monitoring as well as avoidance of the recorded archaeological site in conjunction with the monitoring program and concluded consultation on July 31, 2020.

The government-to-government consultation with Native American tribes under SB 18 will begin when the City sends the 45-day notification letter to tribes on the day this EIR goes out for public review.

5.16.2 Regulatory Framework

Federal

United States Code, Title 25, Sections 3001 et seq.

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

National Historic Preservation Act of 1966 and National Register of Historic Places

The National Register of Historic Places (NRHP) is the official list of the nation's historic places worthy of preservation. The NRHP, as authorized by the National Historic Preservation Act of 1966, is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. Once listed in the NRHP, a resource or property is officially recognized as historically significant to the nation, the state, or the community. Properties listed (or potentially eligible for listing) in the NRHP must meet certain significance criteria and possess integrity of form, location, or setting. Barring exceptional circumstances, resources generally must be at least 50 years old to be considered for listing in the NRHP.

Criteria for listing in the NRHP are stated in the Code of Federal Regulations (36 CFR 60). A resource may qualify for listing if there is quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and where such resources:

1. Are associated with events that have made a significant contribution to the broad patterns of history.
2. Are associated with the lives of persons significant in the past.
3. Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
4. Have yielded, or may be likely to yield, information important in prehistory or history.

Eligible properties must meet at least one of the NRHP criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original historic fabric has been retained, and the reversibility of changes to the property. The fourth criterion is typically reserved for archaeological and paleontological resources.

State

California Register of Historical Resources (California Public Resources Code Section 5020 et seq.)

In California, the term "cultural resource" includes but is not limited to "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 Public Resources Code Section 5020.1(j)). In 1992, the California legislature

established the California Register of Historical Resources (CRHR) “to be used by state and local agencies, private groups, and citizens to identify the state’s cultural resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (California Public Resources Code Section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Cultural Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (California Public Resources Code Section 5024.1(c)):

1. Associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. 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.

Resources less than 50 years old are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (see 14 CCR, Section 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 on the NRHP are automatically listed on the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local cultural resource surveys. The State Historic Preservation Office maintains the CRHR.

Native American Historic Cultural Sites (California Public Resources Code Section 5097 et seq.)

The Native American Historic Resources Protection Act (Public Resources Code Section 5097, et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resources Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act, enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The act also provides a process for the identification and repatriation of these items to the culturally affiliated tribes.

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 shall occur until the County coroner has examined the remains (California Health and Safety Code Section 7050.5b). 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 (California Health and Safety Code Section 7050.5c). The NAHC will notify the MLD. With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of NAHC's notification of the MLD. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

California Environmental Quality Act

The following California Environmental Quality Act (CEQA) statutes and CEQA Guidelines are relevant to the analysis of historic, archaeological and tribal cultural resources:

1. California Public Resources Code Section 21083.2(g): Defines "unique archaeological resource."
2. California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a): Defines cultural resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change" in the significance of a cultural resource. It also defines the circumstances when a project would materially impair the significance of a cultural resource.
3. California Public Resources Code Section 21074 (a): defines "Tribal cultural resources" and Section 21074(b): defines a "cultural landscape."
4. California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e): These statutes set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
5. California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4: These statutes and regulations provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; identifies preservation-in-place as the preferred manner of mitigating impacts to significant archaeological sites.

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" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[b]). A "historical resource" is any site listed or eligible for listing in the CRHR. The CRHR listing criteria (14 CCR 15064.5[a][3]) are intended to examine whether the resource in question:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important in our past;
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D. Has yielded, or may be likely to yield, information important in pre-history or history.

The term “historical resource” also includes any site described in a local register of historical resources, or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1[g]).

All historical resources and unique archaeological resources – as defined by statute – are presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; 14 CCR Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; 14 CCR Section 15064.5[a]). A site or resource that does not meet the definition of “historical resource” or “unique archaeological resource” is not considered significant under CEQA and need not be analyzed further (California Public Resources Code Section 21083.2[a]; 14 CCR Section 15064.5[c][4]).

Pursuant to these sections, the CEQA first evaluates whether a project site contains any historical resources, then assesses whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements.

Finally, 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 set forth in California Public Resources Code Section 5097.98.

Assembly Bill 52

AB 52, the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. Under AB 52, a TCR is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the CRHR, or included in a local register of historical resources. A Native American tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB 52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Senate Bill 18

California Senate Bill 18 (SB 18), which took effect on March 1, 2005, requires local (city and county) governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans (Government Code section 65352.3).

5.16.3 Thresholds of Significance

The City’s CEQA Significance Determination Thresholds (City of San Diego 2016) and Appendix G of the CEQA Guidelines contain significance guidelines related to tribal cultural resources. According to the City of San Diego CEQA Significance Determination Thresholds, a significant impact related to tribal cultural resources would occur if the project would:

5.16.4 Impacts Analysis

Issue 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), 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?*

Impact Threshold(s)

The City of San Diego has not yet developed thresholds of significance for potential impacts to Tribal Cultural Resources. Therefore, for purposes of this EIR, guidance provided by issue questions listed in CEQA Appendix G are utilized to evaluate the potential for significant impacts to Tribal Cultural Resources. Would the project:

1. 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).
 - 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.

Impact Analysis

Tribal Cultural Resources include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Native American Tribe. Tribal Cultural Resources include “non-unique archaeological resources” that, instead of being important for “scientific” value as a resource, can also be significant because of the sacred and/or cultural tribal value of the resource. Tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of tribal cultural resources within their traditionally and cultural affiliated geographic area (PRC §21080.3.1(a)).

As discussed under Section 5.7, Historical Resources, nine previously identified resources were identified within the project APE. Eight of these resources were previously evaluated through archaeological testing and recommended not eligible for listing on the CRHR. The remaining resource, P-37- P-37-006082, is the

only previously identified resource within the project APE that has not been completely obscured or destroyed by previous developments. This resource will be avoided during construction.

The NAHC SLF Search indicated that no resources have been previously identified in the APE.

The project site has not been selected as a site recommended for historic designation. Furthermore, the project site is not identified on any of the historic resource lists/databases—the NRHP and the California State Historical Landmarks, Points of Historical Interest, and CRHR.

The City, as the lead agency, determined that TCR (buried cultural resources and/or subsurface deposits) would be potentially impacted due to project implementation.

Therefore, in accordance with the requirements of California Public Resources Code Section 21080.3.1, the City provided formal consultation notification to Lipay Nation of Santa Isabel, Jamul Indian Village, and San Pasqual Band of Mission Indians, who are traditionally and culturally affiliated with the project area. Formal notification letters were sent via electronic mail on May 13, 2020 and May 15, 2020, describing the location of the project site, identifying the positive record search on the California Historic Resources Information System (CHRIS) digital database, and provided a copy of the site-specific archaeological report. The Lipay Nation of Santa Isabel and Jamul Indian Village responded within the 30-day formal notification period concurring with City staff's determination of implementing a monitoring program during ground-disturbing activities. San Pasqual Band of Mission Indians initiated consultation on June 16, 2020 and requested clarification on native American monitoring as well as avoidance of the recorded archaeological site in conjunction with the monitoring program and concluded consultation on July 31, 2020.

Overall, the Native American tribes concurred with the City's determination that potential impacts to TCR could occur as a result of project implementation. Significance of Impact

The project site has not been selected as a site recommended for historic designation. Furthermore, the project site is not identified on any of the historic resource lists/databases—the National Register of Historic Places and the California State Historical Landmarks, Points of Historical Interest, and Register of Historic Places. The area is considered potentially sensitive for TCR as identified by Lipay Nation of Santa Isabel, Jamul Indian Village, and San Pasqual Band of Mission Indians, who are affiliated traditionally and culturally with the project area.

Therefore, there is a potential for TCR to be impacted by project implementation. Impacts would be considered **significant (Impact TCR-1)**.

Mitigation, Monitoring, and Reporting

The following mitigation measure would reduce potential significant impacts to TCR (Impact TCR-1).

MM-TCR-1 Prior to beginning any construction related activity on-site associated with Phase 3 (Units 3, 4, 5, and 7), Owner/Permittee shall implement the conditions as detailed in MM-HR-2 Historical Resources (Construction Monitoring).

Significance After Mitigation

With implementation of mitigation measure MM-TCR-1, impacts to Tribal Cultural Resources would be reduced to below a level of significance. This measure ensures a discovery, protection and recovery program for unanticipated and unknown Tribal Cultural Resources that may be located on the site. Impacts after mitigation would be **less than significant**.

5.17 Visual Effects/Neighborhood Character

This section describes the existing visual conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project.

5.17.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Existing Landforms

The existing visual environment of the Carmel Mountain Ranch community mostly consists of built features including residential and commercial development, schools, parks, and roads. Despite the extent of development, elevations across the community vary and are notable across and in the vicinity of the project site. South of the project site and Ted Williams Parkway, natural and primarily undeveloped mountain terrain is present in the community. Hilly terrain, including Van Dam Peak, which is covered in chaparral vegetation and occasionally, small rock outcroppings, lies outside the community plan boundary. Primarily undeveloped open space comprising mountainous terrain is also located west of Interstate (I) 15 (outside of the community plan boundary) and includes Black Mountain.

According to the Carmel Mountain Ranch Community Plan, the dominant resources within the community include “topography, boulders and rock outcroppings ... and views” (City of San Diego 1999).

The project site is developed as a golf course. Operations of the existing golf course ceased in summer 2018, and the course is primarily unmaintained. On-site elevations generally follow the underlying terrain of the area. Although elevations across the site vary, no naturally occurring topographic features or steep slopes are present. The project site does however support several vegetated channels and man-made earthen ponds. For example, Chicarita Creek (a narrow, vegetated channel) is located in the southwestern portion of the project site and generally parallels I-15 (the creek traverses Units 3, 4, and 5 (see Figure 3-1; units generally coincide with existing golf course holes). In addition, a narrow meandering channel occurs in the southern extent of Unit 9, and discontinuous segments of an unnamed tributary to Los Penanquitos Creek featuring cattail and tamarisk vegetation are distributed throughout Units 16 and 15. Lastly, two isolated wetlands (i.e., two man-made earthen ponds) occur near the southeastern corner of the golf course on Units 12 and 13. The Project Boundary and delineated units are depicted on Figure 3-1.

Scenic Highways

According to the California Department of Transportation Scenic Highway Mapping System, the project site is not located adjacent to, or in the vicinity of, a designated state scenic highway (Caltrans 2020). The nearest state scenic highway, State Route (SR) 52 from La Jolla east to SR-67 near Santee (an eligible state scenic highway), is located approximately 8.5 miles to the south of the project site. Due to distance and intervening terrain, the project site is not visible from SR-52 or any other state scenic highway in San Diego County.

While I-15 is located adjacent to the southwestern portion of the project site, this particular segment of the interstate has not been designated scenic by the state or the City of San Diego (City).

Scenic Vistas

A scenic vista is typically defined as a panoramic view or vista from an identified view/vista point, public road, public trails, public recreational areas, or scenic highways.¹ The City's General Plan does not identify any designated scenic vistas (City of San Diego 2008). However, the Carmel Mountain Ranch Community Plan identifies specific views into and outside of the Carmel Mountain Ranch Community (see Figure 19, Landform and Visual Analysis, of the Community Plan). These views are not considered scenic vistas by the community plan; however, they address the general availability of views into the community from I-15 and longer views extending beyond the community plan boundaries. For example, two locations on I-15 are identified as providing views into the community near Chicarita Creek (see Figure 5.17-1, Community Plan Views Into and Outside of Community). While views into the community (and southwestern portion of the project site) are available from I-15 at these locations, the growth of intervening landscaping since the adoption of the community plan has limited these views to fleeting and partially screened views. The site is currently fenced, and no access is provided to the public.

Additional distant views to the Carmel Mountain Ranch Community Plan area are available from the mountainous open space area located to the south of the site, across Ted Williams Parkway. Traversed by a network of public pedestrian/hiking trails, the Sabre Springs Open Space area is located both in the City's Sabre Springs community and the City of Poway. Views towards the project site are available from north-facing slopes and ridgelines in the area. Similarly, long views to the community including towards the project site are available from some east-facing slopes and ridgelines in the Black Mountain Open Space Park, which is located in the City's Rancho Peñasquitos community. Several public trails are located in the park and provide access to mountain terrain including the 1,554-foot summit of Black Mountain.

Community and Neighborhood Character

To aid in the following description of the project site and surrounding area, Dudek conducted a photographic inventory of portions of the site and nearby Carmel Mountain Ranch community. Staff visited the site and surrounding area on May 4, 2020, when conditions were sunny and clear. Photographs were taken with an iPhone 7 enabled with location services to capture geolocation information. A map of the photographs referenced in the discussion below is provided as Figure 5.17-2, Existing Visual Character: Key Map.

¹ Potential scenic views from private properties are not under consideration in this analysis.

Project Site

The project site is a former 18-hole golf course and country club. As shown in Figures 5.17-3 and 5.17-4, Existing Visual Character: Project Site, the project site is composed of several discontinuous greens and fairways that are primarily surrounded by residential development (the southwestern portion of the project site parallels the I-15 freeway). Access to the site is controlled via chain-link fencing. With the exception of the surface parking lot and clubhouse, which can still be rented out and used for special events, the Carmel Mountain Ranch Country Club and golf course are no longer active, and golf-related operations ceased in the summer of 2018. As such, the majority of the site is primarily characterized by disturbed and mostly unmaintained lands. The grass fairway nearest to the clubhouse is still maintained and mowed. Visually, the majority of the project site is composed of relatively narrow areas (i.e., fairways) of moderately tall (4 to 5 feet) and overgrown, weedy shrubs and grasses with occasional patches of exposed soils, graveled paths, and low, wet grasses. In addition to Chicarita Creek (located in the southwestern portion of the site), narrow drainages are occasionally present on site and typically support low trees, shrubs, and tufts of pampas grass. The former golf course fairways and greens are bordered by mature trees (primarily pine trees) and thin, linear bands of disturbance associated with overgrown concrete cart paths. The dominant colors displayed by on-site vegetation are light browns, golds, and greens.

As described above, the project site also includes several structures including a large, white-wood panel clad clubhouse, associated surface parking lot and concrete paths. In addition to the fairways nearest to the clubhouse (Units 9 and 18), landscaping in and around the parking lot is maintained for event space use. The clubhouse and parking lot are generally located within the central portion of the project site. A maintenance building is located within the southeast portion of the site.

Current photographs of the golf course (which comprises the majority of the project site) and clubhouse are provided on Figures 5.17-3 and 5.17-4, Existing Visual Character: Project Site. The location of these photographs is depicted on Figure 5.17-2.

The majority of the project site has limited visibility from public viewing locations due to existing adjacent residential development and intervening features (e.g., terrain and vegetation) between the project site and public vantage points, including most roads and parks. As previously stated, the project site is surrounded by residential development and public roads. Natural open space and vegetation (e.g., Chicarita Creek and Black Mountain Open Space Park) is also present along the southwestern portion of the project site, west of I-15 and residential developments), and to the south of the site, across Ted Williams Parkway (i.e., Sabre Springs Open Space). Views of the project site are available from a few locations including various portions of Carmel Ridge Road, Eastbourne Road, Rancho Carmel Drive, Ted Williams Parkway, and various locations along I-15. These viewpoints provide brief, partially screened views to the project site.

Surrounding Area

Surrounding land uses include residential development in all directions, as well as I-15 and a community park to the southwest. While not adjacent to the site, an elementary school and attached park, and neighborhood and regional commercial shopping centers are located nearby.

Existing residential development surrounding the project site includes single-family and multi-family homes. The golf course is primarily bordered by two-story, single-family residences with light-colored stucco exteriors, wood trim, and wood or composite shingles. Other materials including wood paneling and brick are occasionally incorporated. Further, these homes typically have small, grass (or artificial turf) covered

front yards with low shrubs and/or tall trees. Served by two-lane neighborhood roads, these homes back up to the golf course; however, several homes fronting Carmel Ridge Road face the country club and attached surface parking lot. In addition to single-family residential, apartment and condominium developments are adjacent to the project site and display a distinct aesthetic style. For example, the three-story, wood panel clad apartment development off Rancho Carmel Drive (i.e., Carmel Landing) incorporates a distinct lime-green painted exterior that is intermixed with more muted greys, whites, and tans. To the north of this development (north of Windcrest Lane) the two- to three-story stucco Carmel Terrace apartment development displays off-white and grey exteriors with rectangular and slightly arched openings.

As previously stated, I-15 parallels the southwestern portion of the project site, and Carmel Mountain Ranch Community Park borders the site's southwestern corner. The community park features two baseball diamonds separated by a large grass field that is surrounded by mature trees. Additional amenities include a concrete path, children's playground, two-story recreation center, and basketball courts.

Additional land uses in the surrounding area include Highland Ranch Elementary School and adjoining Highland Ranch Park, located northeast of Unit 16 and Eastbourne Road. Highland Ranch Park is developed with a baseball diamond, meandering concrete path and children's playground. Adjacent Highland Ranch Elementary School is composed of one- to two-story rectangular structures painted with a light tan/peach exterior with blue trim.

Commercial development including neighborhood and regional shopping centers Carmel Mountain Plaza and Carmel Mountain Ranch Town Center are located further to the north and northwest of the project site and to the east and west of Carmel Mountain Road. Development in these areas include large one- to two-story rectangular buildings, with mostly white or off-white stucco exteriors, while some building exteriors (primarily in the town center) feature wood as a prominent building material. The large regional shopping centers in the areas are typically composed of a long line of connected buildings along the periphery, scattered freestanding single-story buildings (primarily restaurants) along the development edges adjacent to Carmel Mountain Road (a six-lane road with a raised and landscaped center median), and large asphalt parking lots.

Lastly, natural open space area is also present further to the south of the site, across Ted Williams Parkway. Elevations of this area ranges from 700 to 880 feet above mean sea level (amsl) and therefore views of the project site towards the northwest are available from this location. The mountainous areas are generally covered with dense chaparral shrubs and occasionally, trees, and typically display tones of browns and greens. The terrain is crossed by dirt trails include Van dam Peak Trail that provides hiking and mountain biking access to Van Dam Peak (approximately 1,113 feet amsl).

Photographs of existing residential, park, and commercial uses in the surrounding area are provided on Figures 5.17-5 and 5.17-6, Existing Visual Character: Surrounding Area. The location of these photographs is depicted on Figure 5.17-2.

Existing Light and Glare Conditions

As the project site is largely composed of an unmaintained and fenced 18-hole golf course, sources of existing light and glare are limited. For example, interior and exterior lighting from the clubhouse and lighting installed in the surface parking lot are present on site, but no lighting is installed on inactive portions of the former golf course. With the exception of the lighting sources and glass windows at the clubhouse, the project site does not contain any reflective surfaces that would act as sources for glare.

Adjacent and more distant areas to the west, north, east, and south contain lighting sources typical of residential and commercial development including interior lighting emanating through windows, outdoor lighting fixtures on structures, streetlights, and parking lot lighting. Parks also contain limited lighting sources via light poles and overhead parking lot lighting. With the exception of glass windows, lights, and traffic signals, sources of glare in the surrounding area are generally limited.

5.17.2 Regulatory Framework

State

California Public Resources Code Section 20199 and Senate Bill 743

In September 2013, the governor signed Senate Bill 743, which became effective on January 1, 2014. Among other provisions, Senate Bill 743 adds California Public Resources Code Section 21099. California Public Resources Code Section 20199(d)(1) stipulates 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.”

Local

City of San Diego General Plan

The Urban Design Element of the General Plan contains the goals, recommendations, and urban design objectives that relate to visual issues and community and neighborhood character. The stated purpose of the Urban Design Element is to guide physical development toward a desired scale and character that is consistent with the social, economic, and aesthetic values of the City (City of San Diego 2008). The Urban Design Element defines community and neighborhood character as the visual and sensory relationship between people and the built and natural environment. The Urban Design Element identifies several goals and policies to help guide compact, efficient, and environmentally sensitive patterns of development. The Economic Prosperity Element links economic prosperity goals with land use distribution and employment land use policies to support existing and new businesses and also encourages community revitalization. Goals and policies contained in the Urban Design Element that relate to visual effects and neighborhood character are identified below.

Urban Design Element

General Urban Design

Goals

- A pattern and scale of development that provides visual diversity, choice of lifestyle, opportunities for social interaction, and that respects desirable community character and context.
- A city with distinctive districts, communities, neighborhoods, and village centers where people gather and interact.
- Utilization of landscape as an important aesthetic and unifying element throughout the City.

Policies

Policy UD-A.4: Use sustainable building methods in accordance with the sustainable development policies in the Conservation Element.

Policy UD-A.5: Design buildings that contribute to a positive neighborhood character and relate to neighborhood and community context.

Policy UD-A.6: Create street frontages with architectural and landscape interest to provide visual appeal to the streetscape and enhance the pedestrian experience.

Policy UD-A.8: Landscape materials and design should enhance structures, create and define public and private spaces, and provide shade, aesthetic appeal, and environmental benefits.

Policy UD-A.9: Incorporate existing and proposed transit stops or stations into project design.

Policy UD-A.11: Encourage the use of underground or above-ground parking structures, rather than surface parking lots, to reduce land area devoted to parking.

Policy UD-A.12: Reduce the amount and visual impact of surface parking lots.

Policy UD-A.14: Design project signage to effectively utilize sign area and complement the character of the structure and setting.

Distinctive Neighborhoods and Residential Design

Goal

- A city of distinctive neighborhoods

Policy

Policy UD-B.1: Recognize that the quality of a neighborhood is linked to the overall quality of the built environment. Projects should not be viewed singularly, but viewed as part of the larger neighborhood or community plan area in which they are located for design continuity and compatibility.

Public Spaces and Civic Architecture

Goal

- Significant public gathering spaces in every community.

Policy

Policy UD-E.1: Include public plazas, squares or other gathering spaces in each neighborhood and village center.

Carmel Mountain Ranch Community Plan

The Community Environment, Conservation & Design Element of the Carmel Mountain Ranch Community Plan contains goals, objectives, guidelines and proposals to guide the form of development within the Carmel Mountain Ranch Area. The Carmel Mountain Ranch Community Plan provides the following applicable proposals and guidelines for retaining the topographic character of the area by preserving scenic areas, retaining the character of natural landforms, design compatibility, ensuring interesting and aesthetic views of areas visible from the freeway and major roadways, compatibility with adjacent communities, and street treatment and urban design.

Proposals

- Proposal 1. Community Theme: A community theme has been developed for Carmel Mountain Ranch to establish a distinctive identity for this new community along the I-15 corridor. The theme incorporates the extensive use of boulders, stone material, topographic relief and landscaping throughout the community to create an attractive image that will integrate the existing character of the site with the planned urban development. Additionally, the theme will provide a sense of community for Carmel Mountain Ranch residents, employees and visitors, and differentiate the community from surrounding developments in a distinct yet complementary manner.
- Proposal 2 (a). Landform/Topography. The topographic character of the site will be retained by preserving the more scenic areas on site as natural open space and by incorporating special grading and landscaping design guidelines within the urbanized area of the community.

Guidelines

- Guideline 3 (a). General Guidelines. Utilize daylight cut and fill methods where feasible to decrease grading.
 - Cut and fill slopes will reflect the natural hillside forms as much as possible. Smooth flowing planes will be the goal.
 - Level terrain areas such as parkways, medians and landscaped open space can be recontoured to create interesting forms.
 - The use of a variety of plant species, as well as fast and slow growing plant material, will ensure an attractive short-term and long-term landscape character.
- Guideline 4 (a). Transitional Elements between Community Land Uses. While the community theme will provide a unified appearance throughout Carmel Mountain Ranch, particular attention should be given to the treatment of adjoining land uses within the community, as well as the interface of Carmel Mountain Ranch with surrounding communities. Compatibility between adjoining land uses can be enhanced through architectural design, building materials and landscaping. In some situations, however, it may be more appropriate to separate adjoining land uses through transitional elements such as grade separations, berms, landscaped setbacks, screens, fences and walls, open spaces and wide streets. The following examples illustrate the use of typical transitional elements that should be used in Carmel Mountain Ranch.
 - The golf course that will meander through Carmel Mountain Ranch will provide a visual recreational amenity for the community, as well as an attractive separation between the various residential neighborhoods. The separation, coupled with the use of an internal street system, restricted circulation (cul-de-sacs) and a neighborhood landscape theme, will provide screened neighborhood units. Landscaping should be used between the edge of the golf course and

residential parcels to frame views from the dwelling units, as well as to soften the view of units from the golf course.

- Figure 29 [of the Carmel Mountain Ranch Community Plan] depicts the transition between ridgetop development and low-lying development, as well as the design methods that should be utilized to blend the interface of urban areas with natural open space. As shown, the top of slopes should be rounded and graded terrain and should be blended into the natural contours. Native and naturalized plant material should be used to soften the transition and to harmonize with the existing native plant species. Natural rock should be retained in open spaces and placed on man-made slopes, where feasible, to simulate a naturalistic appearance.
- Guideline 4 (b). High Visibility Areas. The following guidelines should be used to ensure interesting and aesthetic views of areas visible from the freeway and major roads:
 - Landscaping along the roads should be grouped to frame views and create view windows to specific areas of the community. The landscaping along roads and within development areas should not totally screen buildings, but rather provide intermittent views of the development.
 - In situations where land uses are located below the grade of a road, views should be directed to long-range background areas rather than foreground views which focus on roof tops.
 - Views of parking areas should be screened by landscaped berms or dense planting.
 - When major roads will be located at or below grade development, parkways and slopes should be well landscaped with diverse and colorful plant materials to enhance views. Careful attention to architectural detailing should be emphasized for buildings which will be highly visible from roads.
- Guideline 5. Tree-lined streets and boulevards will direct motorists, bicyclists and pedestrians through Carmel Mountain Ranch and contribute to the aesthetic appearance of the community. A variety of streetscape elements, including signage, will be used to enhance the appearance and function of the community circulation system. The streetscape design will also contribute in establishing individual identities for residential neighborhoods and the industrial and commercial centers.
- Guideline 5 (c). Community Signage. A unified system of signs consistent with the community design character has been developed for Carmel Mountain Ranch. A hierarchy of signs and design guidelines are addressed in the Carmel Mountain Ranch Special Sign District Guidelines, (Ordinance 0-16456). These guidelines address all uses of signage within the project, including permanent and temporary signage for both the public and private use areas. Signage is designed to serve a functional, as well as aesthetic purpose, generating harmony with diverse architectural styles and complementing the public use areas of the community.
- Guideline 6 (a). Site Planning. Precise site planning should consider the total context of the site: views; building pads and streets; the placement of buildings on lots; the relationships to adjoining sites; the creation of spaces; service functions; and the treatment of yards, slopes and transitions to natural open space. Siting of buildings should maximize views from industrial and commercial, as well as from residential projects. Views of projects from roadways, nearby development and adjacent communities should also be considered in site planning. Site planning will be done on the large scale to accomplish views across the community from external vantage points and assure that important community statements are visible and lesser ones become obscured in the total scene.
- For residential projects, site conditions may dictate flexibility in siting units and project designs accommodating difficult terrain. The use of variable setbacks and variable lot sizes may be appropriate in best fitting residential development to the land. These measures would be

particularly suitable for Units 22 and 23 [of the Carmel Mountain Ranch Community Plan]. Usable open spaces for common recreational usage, as well as private outdoor spaces, are encouraged in attached development that are not located adjacent to some type of open space (i.e. parks or golf course). Planning will create defensible neighborhoods by the street layouts and by land use separation of incompatible elements.

- Guideline 6 (c). Architecture. Architecture will play an important role in creating an aesthetic visual appearance for Carmel Mountain Ranch. The building design of structures within a development should possess both similar architectural styles and visual variety. The backsides of buildings on relatively high areas facing into lower areas and along roadways should be well detailed and interesting. Buildings should be diverse in height, mass, and roofline and should have shadow relief and visual interest.

Special care should be taken in roof design and selection of roofing materials, particularly in hillside areas and in low creekside areas where roofs will be especially visible.

San Diego Municipal Code

Lighting within the City is regulated by the City's Outdoor Lighting Regulations contained in San Diego Municipal Code Section 142.0740 (Outdoor Light Regulations). The City's Outdoor Lighting Regulations are intended to protect surrounding land uses from light pollution, including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. General regulations limit illumination intensities and times of operation require shielding and directional controls, and mandate compliance with applicable regulatory standards (i.e., California Building Code and California Electric Code, Federal Aviation Administration).

Glare within the City is controlled by San Diego Municipal Code Section 142.0730 (Glare Regulations), which include the following proscriptions:

- A maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light-reflectivity factor greater than 30 percent (Section 142.0730 [a]).
- Reflective building materials shall not be permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space (Section 142.0730 [b]).

5.17.3 Impacts Analysis

As previously mentioned, California Public Resources Code Section 21099 dictates that aesthetic impacts of a residential project on an infill site within a transit priority area shall not be considered significant impacts on the environment. According to Section 21099(d)(1), an "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." The project site is located on a vacant lot that has been previously utilized as a golf course and more than 75% of the project boundary is adjacent to "qualified urban uses" (i.e., residential and commercial) per California Public Resources Code Section 21072. Per this Code, a "qualified urban use" means any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses.

Furthermore, per California Public Resources Code Section 21071, an “urbanized area” is defined as “(a) an incorporated city that meets either of the following criteria: (1) has a population of at least 100,000 persons, or (2) has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.” The proposed project is located within the City, which has a population of approximately 1.4 million (U.S. Census Bureau 2019). Thus, the City is considered an urbanized area per CEQA.

Finally, the project site is located within a “transit priority area” according to California Public Resources Code Section 21099. A “transit priority area” is defined as “an area within one-half mile of a major transit stop that is existing or planned.” Per California Public Resources Code Section 21064.3, a major transit stop means any of the following: (a) an existing rail or bus rapid transit station, (b) a ferry terminal served by either a bus or rail transit service, or (c) the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. The Sabre Springs Transit Station, located less than 0.5 miles from the project site, provides one rapid bus service, the Rapid Express 235 line from Escondido to downtown (San Diego Metropolitan Transit System 2019). Therefore, this existing transit station is considered to be a major transit stop per California Public Resources Code Section 21064.3.

Thus, the proposed project would be considered a residential project on an infill site within a transit priority area per California Public Resources Code 21099. Therefore, aesthetic impacts shall not be considered significant impacts on the environment.

Despite the clear streamlining direction of California Public Resources Code Section 21099, potential impacts to aesthetics are discussed below for informational purposes only.

Issue 1: Would the project result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan?

Impact Threshold(s)

According to the City’s CEQA Significance Determination Thresholds, a project is considered to have a significant impact if the project would block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas (e.g., Pacific Ocean, downtown skyline, mountains canyons, waterways). To meet this significance threshold, one or more of the following conditions must apply (City of San Diego 2016):

- The project would substantially block a view through a designated public view corridor as shown in an adopted community plan or the General Plan or Local Coastal Program. Minor view blockages would not be considered to meet this condition.
- The project would cause substantial view blockage from a public viewing area of a public resource (such as the ocean) that is considered significant by the applicable community plan.
- The project exceeds the allowed height or bulk regulations, and this excess results in a substantial view blockage from a public viewing area.

Designated Public View Corridors

As discussed under Section 5.17.1, the project site is not identified as a protected scenic vista in the City’s General Plan (City of San Diego 2008). The distance between various portions of the project site to the

natural open space located to the south of the site ranges from 625 feet from the southernmost portion of the site to 1 mile from the northernmost portion of the site. On-site elevations range from approximately 548 feet amsl (in the western portion of the project site) to 810 feet amsl (in the middle portion of the project site). The natural open space area also sits at an elevation of 700 feet amsl to 1,110 feet amsl, and therefore views of the project site and the surrounding area towards the north, northwest, and northeast are available from this location. Lastly, the Carmel Mountain Ranch Community Plan identifies I-15 (near the southwestern portion of the project site) as providing views into the community.

The project would be visible from the natural open space area located south of the project site (i.e., Sabre Springs Open Space), identified in the Carmel Mountain Ranch Community Plan as providing distant views that extend to outside of the community. The Sabre Springs Open Space area is traversed by a small network of publicly accessible trails that can be accessed through residential neighborhoods to the south of Ted Williams Parkway and near Shoal Creek Elementary School. However, existing residential developments surround the project site and, similar to the project, include one- to three-story, single- and multi-family residences constructed at a range of densities and displaying various architectural design, exterior colors, and building materials. Elevation of rowhomes and townhomes proposed on the project site, including an example of potential building materials and exterior colors, are provided on Figures 5.17-7, Proposed Rowhomes Elevations, and 5.17-8, Proposed Townhomes Elevations. Proposed building materials are depicted on Figure 5.17-9. In addition to adjacent lands, commercial and residential development is located to the north and west of the project site and contributes to the existing developed character of the valley landscape visible from trails within the Sabre Springs Open Space area.

Development of the project site would be guided by design guidelines. Per the Design Guidelines, the project would adapt to the topography of the site, wherever possible, in order to complement the existing natural topography and hillsides of the project site, through the provision of multi-level landscape and structures, integration of building step downs at existing slopes and retaining walls (although provision of retaining walls would be minimal), and design of the proposed rooftops to emphasize the character of the adjacent hillsides. Therefore, although the project would be visible from the natural open space area located to the south of the site, the project would be compatible with the surrounding environment including the existing topography of the site and its surrounding. Also, due to distance between the project site and the open space area, and the elevation difference between the project site and open space trails, new structures on the project site would tend to blend with adjacent residential developments when viewed from the Sabre Springs Open Space area. Therefore, the project would not result in the obstruction of vistas or scenic view from the existing natural open space area to the south of the project site.

Regarding I-15, although views of the southeastern portion of the project site are available from the interstate, these views are interrupted by existing trees and mounded topography. Views from the I-15 looking west towards the project site generally display light- to dark-green vegetation (including trees and shrubbery present along the western portion of I-15 and near existing residential development), views of elevated areas of the Sabre Springs Open Space in the backdrop, and some existing residential development. Further, proposed development along the southwestern portion of the site would generally be limited to open space. Although medium-density residential development is proposed within Unit 5, as shown in Figure 3-1, Chapter 3, Project Description, located approximately 520 feet east of I-15 and within the southwestern portion of the project site, Unit 5 development would not exceed 30 feet in height. Further, this development is proposed at an elevation lower than that of I-15. Lastly, existing landscaping along I-15 provides an intermittent barrier to views of the project site and as a result, development proposed in Unit 5 would be partially screened from view. Therefore, due to distance between the

proposed development within Unit 5 and I-15, the elevation difference between the interstate and Unit 5, and intervening landscaping, the project would not result in substantial obstruction of an existing scenic views from I-15.

Public Viewing Areas of a Public Resource

Visual resources described in the Carmel Mountain Ranch Community Plan are identified as “gently rolling hills ascending to rugged, rock covered terrain in the south” (City of San Diego 1999). As discussed in Section 5.17.1, the majority of the project site is not visible from public viewing locations due to existing adjacent development and a general lack of public vantage points. Brief, interrupted views of the project site are available from various points within nearby public roadways, including Carmel Ridge Road, Eastbourne Road, Summerbreeze Lane, Highland Ranch Road, Boulton Avenue, Shoal Creek Road, and Rancho Carmel Drive. However, views of the project site afforded from motorists and pedestrians along these roadways are very brief. Further, due to the angle of orientation and the fact that the distance from each of these roadways to the project site varies, views are generally interrupted by existing vegetation, which would remain after implementation of the proposed project. Therefore, mountain views from roads near the project are fleeting and momentary. Because of this, and because the project is not visible from many public viewing locations, the project would not result in obstruction of views of existing mountains to the south, outlined as visual resources in the Carmel Mountain Ranch Community Plan, from any of the nearby roadways.

Views of the project site from Rancho Carmel Drive (both east and west) are currently fairly uninterrupted, although a few shrubs provide a partial visual barrier to the project site from this location. Development in this area would include Medium Residential to the west and Medium/High Residential to the east. The proposed Medium/High Residential would be surrounded by open space and only a small portion of the proposed structures would front Rancho Carmel Drive, providing reduced visibility from this location. Both the proposed Medium Residential and Medium/High Residential development along Rancho Carmel Drive would be required to incorporate street frontage setbacks of 50 feet, consistent with San Diego Municipal Code Table 131-04G.

Additionally, views of the project site are less interrupted along Shoal Creek Drive, between Stoney Gate Place and Windcrest Lane and Royal Melbourne Square. Development to the south of Shoal Creek Drive would be limited to open space, while Low-Medium Residential, which would be surrounded by open space, is proposed to the north of Shoal Creek Drive. Low-Medium Residential development would be required to comply with street front setbacks of 50 feet, per San Diego Municipal Code Table 131-04G.

Views of the project site can also be afforded from limited portions of Carmel Ridge Road, looking both northwest and southeast. The proposed project would result in demolition of the existing clubhouse and development of Low-Medium Residential within Unit 9, which is the most elevated point of the project site (approximately 810 feet amsl). Height of the proposed structures in this area would not exceed 48 feet. Further, additional multi-family residential units are located in the vicinity of Unit 9. This includes the two- to three-story residential development present to the northwestern portion of the project site, to the east of World Trade Drive, as well as clusters of multi-use, two-story residential development present to the south of Carmel Ridge Road. The project would be similar in height and scale to these existing developments.

Although views of the project site are available from Ted Williams Parkway, towards the southern portion of the project site (Units 12, 13, and 14), development along Ted Williams Parkway would be limited to open

space and Low Residential. Low Residential Development would be setback 15 feet, and height would be restricted to 35 feet, per San Diego Municipal Code Table 131-04G.

Lastly, views of the project site from Highland Ranch Road looking northeast towards Unit 16 are largely uninterrupted. Development within Unit 16 would include Low-Medium Residential surrounded by open space. Setbacks provided along Highland Ranch Road would be 50 feet and would not exceed a height of 48 feet, per San Diego Municipal Code Table 131-04G. Further, development within Unit 16 would be surrounded by residential development to the north and south along Highland Ranch Road and thus the project would be consistent with the surrounding development at this location.

Given the short length of the available views and the lack of significant visual landmarks within the viewshed of all public roadways mentioned above, these views are not considered to be scenic vistas for purposes of this analysis. The project would be partially visible from these roadways and would rise above the southern horizon line; however, project structures would not substantially block public views and would not obscure or otherwise interrupt available views to a significant visual landmark.

Height or Bulk Regulations

The project would require a rezone of the project site, which would increase the intensity of use and allow for the proposed residential development on site (see Section 5.9, Land Use, for details). Development of the residential neighborhoods would be implemented through City-wide zoning with modifications to development standards described in the Design Guidelines and through the Master Planned Development Permit. Table 4-1, in Chapter 4, provides a breakdown of zoning, density, and height limits allowed by the applicable City-wide zoning. Areas zoned RM-1-1 and RM-1-3 would include two- and three-story townhomes, with two or three bedrooms. Heights of the proposed structures would range from 30 to 48 feet. Areas zoned RM-2-4 through RM-3-7 would include three- and four-story apartments. The project would be required to comply with the floor area ratio provided in San Diego Municipal Code Table 131-04G. Through compliance with these regulations and the project's Design Guidelines, the project would be consistent with the height and bulk regulations of the proposed zoning. Lastly, the design and architectural styles of the proposed residential structures would be required to comply with the Design Guidelines prepared for the proposed project, which include architectural articulations such as offsetting building planes, changes in materials, porches, stoops, balconies, bay windows, and other elements, which would be used to provide visual relief in comparison to other buildings and reduce scale and massing.

Significance of Impact

While scenic vistas are not identified, the Carmel Mountain Ranch Community Plan depicts distant views that extend outside of the community plan area. These view locations include elevated vantage points in the natural open space located to the south of the site, across Ted Williams Parkway (City of San Diego 1999). However, due to distance and elevation difference between the open space area and project site, and because the proposed project is surrounded by existing residential development, the project would not cause substantial view blockage from a public viewing area of a public resource (such as the ocean) that is considered significant by the applicable community plan. Further, the project would be consistent with height and bulk regulations of the proposed zoning. Lastly, as previously noted, aesthetic impacts of the proposed project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099. Thus, the project would not have a substantial adverse effect on a scenic vista or view from a public viewing area as identified in the community plan. Impacts would **be less than significant**.

Mitigation, Monitoring and Reporting

Impacts would be less than significant.

Issue 2: Would the project result in the creation of a negative aesthetic site or project?

Impact Threshold(s)

According to the City's Significance Determination Thresholds (2016), a project may have a negative visual appearance if one or more of the following conditions occur:

- The project would create a disorganized appearance and would substantially conflict with City codes (i.e., a sign plan that proposes extensive signage beyond the City's sign ordinance allowance);
- The project significantly conflicts with the height, bulk, or coverage regulations of the zone and does not provide architectural interest (e.g., a tilt-up concrete building with no offsets or varying window treatment);
- The project includes crib, retaining, or noise walls greater than 6 feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public; and/or
- The project is large and would result in an exceeding monotonous visual environment (e.g., a large subdivision in which all of the units are virtually identical).

Potential for Disorganized Appearance, Conflict with City Codes, and Potential for Monotonous Visual Environment

As proposed, future development would be guided by the prepared Master Planned Development Permit and Design Guidelines which would facilitate the creation of unique residential neighborhoods displaying variety and interesting architectural elements. Bay windows, porches, projecting eaves, and awnings are envisioned in the Design Guidelines as elements of visual interest that would help reduce building mass and scale. A range of building types (including townhomes, garden walk-ups, and stacked flats and apartments) and densities are proposed and, once constructed, would result in a diverse development that would be aesthetically linked by the Design Guidelines. An example of proposed residential development is shown on Figures 5.17-7 and 5.17-8. Proposed building materials are illustrated on Figure 5.17-9 and are intended to enhance compatibility with nearby existing residential developments. Residential land uses would compose approximately 52.9 acres and would range in density from 12.94 to 37.43 dwelling units per acre. The project would also incorporate open space and recreational uses throughout the project site for residents and the community. Open space uses would be composed of approximately 111.27 acres, which includes approximately 6 miles of publicly accessible trails and 9.79 acres of publicly accessible parkland (see Figure 2-1, Site Plan). Gathering spaces, passive seating areas/open lawns, fitness stations, play areas, and community gardens may also be developed. Further, the project would be required to comply with City codes, including the San Diego Municipal Code, and would be consistent with signage requirements outlined in Chapter 14 Article 2 Division 12 of the San Diego Municipal Code and the Carmel Mountain Ranch Special District Sign Guidelines.

The proposed buildings would generally display a rectangular form. As previously stated, the project would incorporate elements that would add visual interest at the project site. These features include bay windows, decorative panels, color accents, offsets, and framed openings to reduce visual bulk and scale. Further, building façades composed of large expanses for flat wall panes would be avoided in

order to reduce a monotonous, unadorned appearance. Building corners would also be enhanced with architectural elements such as pronounced building forms, enhanced window treatments, and/or projections. Therefore, along with incorporation of a range of building types and densities, the inclusion of elements of visual interest in building façades would reduce the potential for future development to result in a monotonous visual environment.

Through compliance with the Design Guidelines and applicable regulations such as the San Diego Municipal Code and the Carmel Mountain Ranch Special District Sign Guidelines, the project would not result in the creation of a negative aesthetic site or project.

Bulk and Scale Regulations

As discussed above, the project would be required to comply with zoning, density, and height limits allowed by the applicable City-wide zoning. Through compliance with the San Diego Municipal Code and the project's Design Guidelines, the project would be consistent with the height and bulk regulations of the proposed zoning.

Walls

Some proposed residential development would be located within hillsides present within Unit 9, Unit 10, Unit 8, Unit 2, Unit 5, Unit 6, and Unit 17. Where needed for hillside development at these locations, the project would incorporate retaining walls. However, per the Design Guidelines, use of retaining walls shall be minimized, wherever possible. For example, proposed buildings sited at the bottom of a slope would be set back enough to allow for adequate landscaping, pedestrian paths, and minimal retaining walls to soften the impact of the slope to homes. This approach would reduce the need for relatively high retaining walls. Further, proposed buildings sited at the top of a slope would be set back enough to allow for stoops, porches, landscaping, garden walls, and planters to soften the transition in slope.

The potential for high retaining walls would also be reduced through compliance with San Diego Municipal Code Section 142.0340. Specifically, Section 142.040 permits the construction of two retaining walls with a maximum height of 6 feet each in the required side and rear yard if the two retaining walls are separated by a minimum horizontal distance equal to the height of the upper wall. In addition, the project would not include any walls that would exceed 50 feet in length. Per the Design Guidelines, garden walls would also be utilized throughout the project site to help screen mechanical equipment, garages, maintenance areas, and utilities so that these are not exposed to view from the street, major walkways, or residences within the development. The design of these walls, as well as the materials used, would be consistent with the overall project's design, and fence and wall color would be compatible with the design and color of the project.

Significance of Impact

Implementation of the project would result in changes in the aesthetics of the site and its surroundings. However, through implementation of Design Guidelines and compliance with the San Diego Municipal Code, these changes would not be characterized as a negative aesthetic impact. Development of the project site would occur in an organized manner that would be guided by a site plan and Design Guidelines. While a range of building types and densities are proposed, the overarching guidelines would result in compatible themes and elements across the proposed neighborhoods. Further, as previously noted, aesthetic impacts of the project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099. Thus, the project would not create a negative aesthetic site or project. Therefore, impacts concerning a negative site aesthetic or project would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required

Issue 3: Would the project result in a project bulk, scale, materials, or style which would be incompatible with surrounding development?

Issue 4: Would the project result in substantial alteration to the existing or planned character of the area such as could occur with the construction of a subdivision in a previously undeveloped area?

Impact Threshold(s)

According to the City's Significance Determination Thresholds, a project is considered to have a significant impact if a project would contrast the surrounding neighborhood character. To meet this significance threshold, one or more of the following conditions must apply (City of San Diego 2016):

- The project exceeds the allowable height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity of the project by a substantial margin.
- The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme.
- The project would result in the physical loss, isolation or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or local coastal program.
- The project is located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage or architectural projections.

Impact Analysis

Bulk, Height, and Scale

As previously discussed, the project would require a rezone of the project site. Development of the project would be consistent with height and bulk regulations of the proposed zoning . Through compliance with the San Diego Municipal Code and the project's Design Guidelines, the project would be consistent with the bulk, height, and scale regulations of the zone.

Architectural Styles

As shown in Figure 5.17-9, the proposed structures would feature building materials such as stucco, brick, stone, and some copper for accents and trims. Stucco, brick, and stone are commonly incorporated into existing residential development surrounding the project site. Similar to existing residential neighborhoods in the vicinity, deep to light earth and natural tones would be utilized on building exteriors including but not limited to, white, brown, beige, tan, grey, and cream. In addition, a variety of architectural styles would be permitted across the neighborhoods, so long as a consistency is established within each planning unit neighborhood to help create a sense of place. Examples of proposed architectural styles are illustrated in Figures 5.17-7 and 5.17-8. As shown on the figures, the project would incorporate elements such as bay windows, decorative panels, color accents, offsets, and framed openings to reduce visual bulk and scale. Further, building façades that have large expanses for flat wall panes would be avoided, and design elements such as recessed windows, pop-outs, bay windows, decorative trims, and other treatments would be incorporated to add visual interest to building façades.

Community Landmark

No specific community identification symbols or landmarks identified in the General Plan or Carmel Mountain Ranch Community Plan are present at the project site (City of San Diego 2008, 1999). The Carmel Mountain Ranch Community Plan identifies the existing golf course on site as a visual recreational amenity for the community, as well as an attractive separation between the various residential neighborhoods. However, the majority of the golf course is currently gated and unmaintained. As a result, the golf course supports weedy and overgrown vegetation (see Figures 5.17-3 and 5.17-4, which illustrate the existing visual character of the project site). The project would introduce approximately 164.38 acres of open space, recreation, and trail amenities at the project site, providing improved visual recreational amenities compared to the unmaintained, inactive, and inaccessible golf course. As the former golf course has not been identified as a community identification symbol or landmark, the project would not result in the physical loss, isolation, or degradation of a community identification symbol or landmark that is identified in the General Plan, applicable community plan, or local coastal program.

Project Visibility and Contrast

The project is not located in a highly visible area such as on a canyon edge or hilltop. While the southwestern portion of the project site is adjacent to I-15 and SR-56 is nearby, intervening terrain and vegetation partially screens the nearest areas of the project site from view. The majority of the project site is screened from view of interstate and state route motorists by intervening terrain, landscaping, and development. As such, the project site is not located in a highly visible area. Further and as previously discussed, development of the project site would not strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage or architectural projections. Development of the project site would occur in an organized manner that would be guided by a site plan and Design Guidelines. Although the project is visible from the natural open space located south of the project site, the proposed project would be compatible with the surrounding environment, existing topography of the site, and its surroundings, and would blend with adjacent residential developments.

Lastly, the project is visible from various public roadways surrounding the project site. However, given the short length of the available views from local roads to the project site, intervening features including landscaping and development, compliance with the Design Guidelines and the San Diego Municipal Code, and the presence of surrounding residential development, the project would not be highly visible from any of these locations and would not be incompatible with surrounding development. As discussed above, the project would adapt to the topography of the site, wherever possible, in order to complement the existing natural topography and hillsides of the project site, through providing multi-level landscape and structures, integration of building step downs at existing slopes, and retaining walls (although provision of retaining walls would be minimal). In addition, design of the proposed rooftops would emphasize the character of the adjacent hillsides. Therefore, the project would complement and not strongly contrast with the natural topography of the project site.

Alteration to Existing or Planned Character

The project site is identified as Golf Course and Driving Range in the Carmel Mountain Ranch Community Plan (City of San Diego 1999) and designated Park, Open Space, and Recreation in the City of San Diego's General Plan (City of San Diego 2008). Further, most of the parcels within the project site are zoned as Agricultural-Residential (AR-1-1), while a few parcels are zoned as Residential-Single Unit Zones (RS-1-12 and RS-1-14) or Residential-Multiple Unit Zones (RM-1-1, RM-2-5, and RM-3-7) (City of San Diego 2005). Development of the site with residential uses was not

envisioned in the Carmel Mountain Ranch Community Plan or the General Plan; however, the project is concurrently processing a proposed amendment to the General Plan and Carmel Mountain Ranch Community Plan, as well as a Rezone, which would increase the intensity of use and allow for the proposed residential development on site. As described in Chapter 4, Project Description, and Section 5.9, Land Use, development of the residential neighborhoods will be implemented through City-wide zoning with modifications to development standards described in the Design Guidelines and through the Master Planned Development Permit. Although the project site has been previously developed and is currently an unmaintained and disturbed golf course, the project would introduce structures at the project site that would increase height, bulk, and scale compared to existing conditions. The Design Guidelines and Master Planned Development Permit would include standards for height, bulk, and scale requirements, which would ensure that, although the project would be constructed in an area previously developed as a golf course, the project would be consistent with the bulk, height, and scale of the surrounding development (see analysis in the threshold above for more details). As discussed above, because the proposed project would not be located in a highly visible location, and through compliance with the Design Guidelines and the San Diego Municipal Code, the project would not result in bulk, scale, materials, or style which would be incompatible with surrounding development. Further, the project site is surrounded by residential development on all sides. Therefore, the project would be consistent with its surroundings and would not result in substantial alteration to the existing or planned character of the area.

Lastly, as previously noted, aesthetic impacts of the proposed project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099.

Significance of Impact

Incompatibility with Surrounding Development

Because the project would not be located in a highly visible location, and through compliance with the Design Guidelines and the San Diego Municipal Code, the project would not result in bulk, scale, materials, or style which would be incompatible with surrounding development. Further, as previously noted, aesthetic impacts of the proposed project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099. Thus, the project would not result in significant impacts related to bulk, scale, materials, or style which would be incompatible with surrounding development. Therefore, impacts would be **less than significant**.

Alteration to Existing or Planned Character

The proposed project would not result in a significant impact related to substantial alteration to the existing or planned character of the area such as could occur with the construction of a subdivision in a previously undeveloped area. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 5: Would the project result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan? (Normally, the removal of non-native trees within a wetland as part of a restoration project would not be considered significant.)

Impact Threshold(s)

According to the City's Significance Determination Thresholds (2016a), a project is considered to have a significant impact if the project would result in the physical loss, isolation, or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) that is identified in the General Plan, applicable community plan, or local coastal program (City 2016a).

Impact Analysis

While various trees species including pine and pepper are present on site, there are no distinctive or landmark trees designated on the project site in the City's General Plan or the Carmel Mountain Ranch Community Plan (City of San Diego 2008, 1999). Therefore, implementation of the project would not result in the loss of any distinctive or landmark trees. Further, as previously noted, aesthetic impacts of the proposed project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099. Thus, the Project would not result in a significant impact related to a loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan.

Significance of Impact

There are no community identification symbols or landmark trees designated on the project site. Therefore, implementation of the project would not result in the loss of any distinctive or landmark trees. **No impact** would result.

Issue 6: Would the project result in a substantial change in the existing landform?

Impact Threshold(s)

According to the City's CEQA Significance Determination Thresholds (a), a project is considered to have a significant impact if a project would result in more than 2,000 cubic yards of earth per graded acre by either excavation or fill. In addition, one or more of the following conditions (1–4) must apply to meet this significance threshold (City of San Diego 2016):

1. The project would disturb steep hillsides in excess of the encroachment allowances of the Environmentally Sensitive Lands regulations (Land Development Code Chapter 14, Article 3, Division 1).
2. The project would create manufactured slopes higher than 10 feet or steeper than 2:1 (50%).
3. The project would result in a change in elevation of steep hillsides as defined by the San Diego Municipal Code Section 113.0103 from existing grade to proposed grade of more than 5 feet by either excavation or fill, unless the area over which excavation or fill would exceed 5 feet is only at isolated points on the site.
4. The project design includes mass terracing of natural slopes with cut or fill slopes in order to construct flat-pad structures.

However, the above conditions may not be considered significant if one or more of the following apply:

1. The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed landforms will very closely imitate the existing on-site landform and/or the undisturbed, pre-existing surrounding neighborhood landforms. This may be achieved through “naturalized” variable slopes.
2. The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed slopes follow the natural existing landform and no point vary substantially from the natural landform elevations.
3. The proposed excavation or fill is necessary to permit installation of alternative design features such as step-down or detached buildings, non-typical roadway or parking lot designs, and alternative retaining wall designs which reduce the projects overall grading requirements.

Impact Analysis

On-site elevations range from approximately 548 feet amsl in the western portion of the project site to 810 feet amsl in the middle portion of the project site. However, steep hillsides are not present at the project site. As discussed above, per the Design Guidelines, the project would adapt to the topography of the site, wherever possible, in order to complement the existing natural topography and hillsides of the project site, through providing multi-level landscape and structures, integration of building step downs at existing slopes and retaining walls (although provision of retaining walls would be minimal), and design of the proposed rooftops to emphasize the character of the adjacent hillsides. Thus, manufactured slopes and mass terracing of natural slopes in order to construct flat-pad structures would not be implemented at the project site. Therefore, through implementation of Design Guidelines, which require that the project adapts to the topography of the site, the project would not result in a substantial change in the existing landform. Further, as previously noted, aesthetic impacts of the project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099.

Significance of Impact

The proposed project would not result in a significant impact related to a substantial change in the existing landform. Therefore, impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 7: Would the project result in substantial light or glare which would adversely affect daytime or nighttime view in the area?

Impact Threshold(s)

According to the City’s Significance Determination Thresholds, a project is considered to have a significant impact if a project would (City of San Diego 2016):

- Be moderate to large in scale, more than 50% of any single elevation of a building’s exterior is built with a material with a light reflectivity greater than 30 percent (see Land Development Code Section 12.07330(a)), and the project is adjacent to a major public roadway or public area.
- Shed substantial light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and industrial uses, and natural areas.

Impact Analysis

Lighting

The project site is located in an urbanized and highly disturbed area that contains existing sources of lighting associated with existing development (e.g. Carmel Terrace, Carmel Summit, Jefferson at Carmel Mountain Ranch, Tivoli Park Row, Highland Ranch Road, Provencal Place, and Carmel Mountain Plaza), and with street lighting along major arterials and local roadways. Development of the project would introduce lighting to a site that is currently an unmaintained golf course. With the exception of the clubhouse and parking lot, limited sources of lighting occur on site. New lighting at the project site would include lighting for parking areas, parks, and paseos between buildings. Specialty lighting may also be incorporated within entry gateways throughout the site. Lastly, the project would introduce interior and exterior lighting within proposed residential units, lighting within proposed on-site roadways, and proposed signage.

All lighting proposed would be constructed in compliance with the standards contained in the City's Outdoor Lighting Regulations (San Diego Municipal Code Section 142.0740), which requires that all outdoor lighting fixtures shall be installed in a manner that minimizes negative impacts from light pollution, including light trespass, glare, and urban sky glow, in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Therefore, exterior lighting would be directed away from adjoining properties. Compliance with the San Diego Municipal Code would minimize and restrict nighttime light pollution and light trespass on adjacent properties.

Glare

As shown in Figure 5.17-9, the proposed structures would feature building materials such as stucco, brick, stone, and some copper for accents and trims. The use of reflective building materials and finishes, as well as reflective lighting structures and metallic surfaces would be minimized to the extent feasible to impede the creation of project-generated glare. The proposed residential structures would have façades incorporating windows for internal lighting and visual articulation. Further, exterior color finishes would include deep to light earth and natural tones, including but not limited to, white, brown, beige, tan, grey, and cream. Lastly, all lighting proposed would be constructed in compliance with the standards contained in the City's Outdoor Lighting Regulations (San Diego Municipal Code Section 142.0740), which includes measures to minimize the negative impacts of glare. Therefore, the project does not propose any features that would be characterized as creating a substantial new source of glare that would adversely affect daytime or nighttime views in the area.

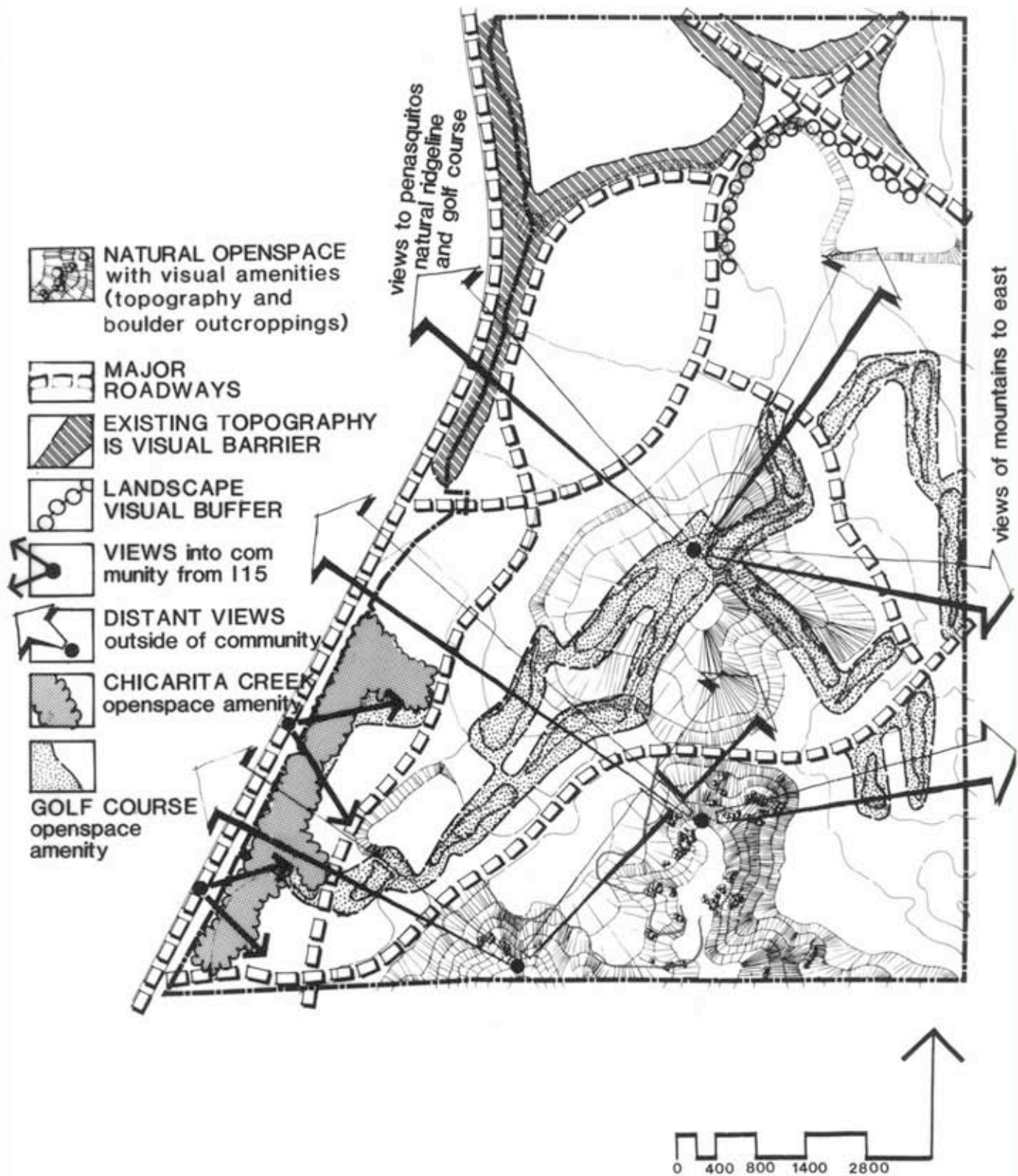
Significance of Impact

Through compliance with the San Diego Municipal Code, the proposed project would not introduce sources of day or nighttime lighting associated with the project would not be considered substantial. Further, the project does not incorporate any features that would be characterized as creating a substantial new source of glare that would adversely affect daytime or nighttime views in the area. As previously noted, aesthetic impacts of the project, which is an infill residential project within a transit priority area, cannot be considered a significant impact under California Public Resources Code Section 21099. Thus, the project would not result in a significant impact to light and glare. Therefore, **no impact** to would occur as a result of the project.

Mitigation, Monitoring and Reporting

No mitigation would be required.

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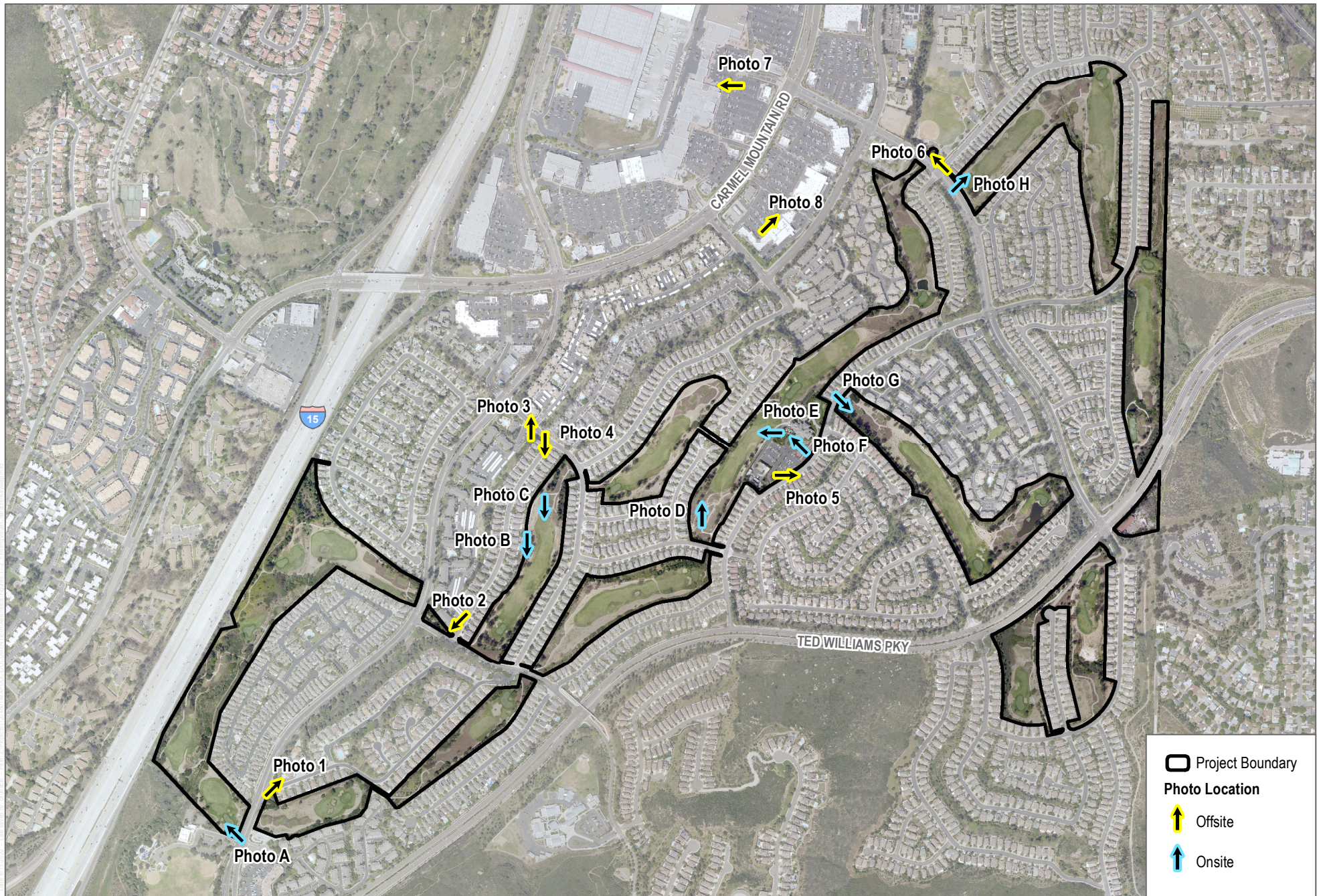


SOURCE: City of San Diego 1999 (CMR CP Figure 19)

FIGURE 5.17-1

Community Plan Views
Trails at Camel Mountain Ranch

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SOURCE: SANGIS 2017; Dudek 2020

FIGURE 5.17-2
Existing Visual Character: Key Map
Trails at Carmel Mountain Ranch

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Photo A



Photo B



Photo C



Photo D

SOURCE: Dudek 2020

INTENTIONALLY LEFT BLANK



Photo E



Photo F



Photo G



Photo H

SOURCE: Dudek 2020

INTENTIONALLY LEFT BLANK



Photo 1



Photo 2



Photo 3



Photo 4

SOURCE: Dudek 2020

INTENTIONALLY LEFT BLANK



Photo 5



Photo 6



Photo 7



Photo 8

SOURCE: Dudek 2020

INTENTIONALLY LEFT BLANK



SOURCE: Citythinkers, MIG 2020

FIGURE 5.17-7
Proposed Rowhomes Elevations
Trails at Carmel Mountain Ranch

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SOURCE: Citythinkers, MIG 2020

FIGURE 5.17-8
Proposed Townhomes Elevations
 Trails at Carmel Mountain Ranch

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SOURCE: Citythinkers, MIG 2020

FIGURE 5.17-9

Proposed Building Materials
Trails at Camel Mountain Ranch

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5.18 Water Quality

This section describes the existing water quality conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies associated regulatory requirements, evaluates potential impacts related to implementation of the project. The following analysis is based in part on the Stormwater Quality Management Plan, prepared by Project Design Consultants (August 2020) and included as Appendix S.

5.18.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

Existing runoff from the western half of the project site is conveyed to Chicarita Creek, and runoff from the eastern half of the project site is conveyed to Los Peñasquitos Creek.

The project site is located within the Los Peñasquitos Watershed Management Area (WMA) (Hydrologic Unit 906.00), which extends from the foothills east of the City of Poway to the coastal plain where the watershed drains into Los Peñasquitos Lagoon before flowing into the Pacific Ocean through a narrow mouth at Torrey Pines State Beach. The Los Peñasquitos WMA is 60,424 acres and encompasses the drainage areas of Los Peñasquitos Creek (37,028 acres), Carmel Creek (11,180 acres), and Carroll Canyon Creek (11,004 acres). The remaining 1,107 acres are composed of the lagoon and coastal drainages. The Los Peñasquitos WMA consists of two hydrologic areas (HAs): Miramar Reservoir (906.10) and Poway (906.20). The Los Peñasquitos WMA contains one water storage facility, Lake Miramar, and one groundwater basin, the Poway Valley basin.

The project site is located within the Poway HA (906.20). The Poway HA is located to the east of Miramar Reservoir HA and is covered entirely by the upper portion of the Los Peñasquitos Creek sub-watershed (City of San Diego 2020). The majority of surface runoff in the Poway HA is eventually directed into Los Peñasquitos Creek by way of a number of smaller creeks and tributaries. Los Peñasquitos Creek then makes its way through the Los Peñasquitos Lagoon before being discharged into the Pacific Ocean.

Chicarita Creek

Chicarita Creek runs adjacent to the western side of the project site. Total length of the creek is approximately 13,095 feet (San Diego Integrated Regional Water Management 2013). Designated beneficial uses of the creek include agricultural supply, recreation (contact and non-contact activities), warm freshwater habitat, and wildlife habitat (RWQCB 1994). Chicarita Creek is known to support riparian habitat suitable for least Bell's vireo (*Vireo bellis pusillus*; vireo), a state and federally listed endangered species, and for California gnatcatcher (*Polioptila californica californica*; gnatcatcher), a federally listed threatened species and a California Species of Special Concern.

Other Linear Features

There is a narrow, meandering channel that originates from a small, 6-inch to 8-inch pipe and winds through former playing holes until it reaches a remnant golf cart path. Once the channel reaches the golf cart path, any flows that remain likely dissipate through evaporation. There are also areas mapped as coastal and valley freshwater marsh on the project site along Chicarita Creek, and also in the east and southeast portions of the project site associated with unnamed stream channels.

5.18.2 Regulatory Framework

Federal***Clean Water Act***

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of waters in the United States. The CWA also directs state governments to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The U.S. Environmental Protection Agency (EPA) has delegated responsibility for implementation of portions of the CWA to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB), including water quality control planning and control programs such as the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program is a set of permits, designed to implement the CWA, that apply to various activities that generate pollutants with potential to impact water quality.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires the EPA to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the EPA has published water quality criteria and which reasonably could be expected to interfere with designated uses of a water body.

The following two total maximum daily loads have been adopted in the Los Peñasquitos WMA:

- The Pacific Ocean Shoreline at Torrey Pines State Beach at Del Mar was 303(d) listed in 2010 for coliform as impairing shellfish beneficial use.
- The Los Peñasquitos Lagoon was 303(d) listed in 2012 for sedimentation and siltation as impairing beneficial use.

A total of 92% of the waterbodies in the Los Peñasquitos WMA are not impaired or have not been assessed by the RWQCB (City of San Diego 2020).

State***Porter-Cologne Water Quality Control Act***

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater) and directs the RWQCB to develop regional basin plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Water Quality Control Plan for the San Diego Basin (Basin Plan) is designed to preserve and enhance the quality of water resources in the San Diego Region for the benefit of present and future generations. The purpose of the plan is to designate beneficial uses of the region's surface water and groundwater, designate water quality objectives for the reasonable protection of those uses and establish an implementation plan to achieve the objectives.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCBs. Land and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits. These regulations are applicable to the projects.

NPDES Construction General Permit

Construction activities exceeding 1 acre (or meeting other applicable criteria) are subject to pertinent requirements under the Construction General Permit. This permit was issued by the SWRCB, pursuant to authority delegated by the EPA, as previously noted. Specific conformance requirements include implementing a Stormwater Pollution Prevention Plan (SWPPP), an associated Construction Site Monitoring Program, employee training, and minimum best management practices (BMPs), as well as a Rain Event Action Plan for applicable projects (e.g., those in Risk Categories 2 or 3). Under the Construction General Permit, project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment erosion and receiving water risk), with Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the SWPPP and related plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in stormwater runoff. Depending on the risk level, these may include efforts such as minimizing/stabilizing disturbed areas, mandatory use of technology-based action levels, effluent and receiving water monitoring/reporting, and advanced treatment systems. Specific pollution control measures require the use of best available technology economically achievable and/or best conventional pollutant control technology levels of treatment, with these requirements implemented through applicable BMPs. While site-specific measures vary with conditions such as risk level, proposed grading, and slope/soil characteristics, detailed guidance for construction-related BMPs is provided in the permit and related City standards (as outlined below), as well as additional sources including the EPA National Menu of Best Management Practices for Stormwater Phase II – Construction (EPA 2020), and Stormwater Best Management Practices Handbooks (CASQA 2020). Specific requirements for the project under this permit would be determined during SWPPP development, after completion of project plans and application submittal to the SWRCB.

NPDES Groundwater Permit

While shallow groundwater is generally not expected to occur on site, if project-related construction activities entail the discharge of extracted groundwater into receiving waters, the applicant would be required to obtain coverage under the Groundwater Permit. This permit is issued by the RWQCB after a public hearing, and must be obtained prior to construction. It is not anticipated that the proposed project

would require a groundwater permit. Conformance with this permit is generally applicable to all temporary and certain permanent groundwater discharge activities, with exceptions as noted in the permit fact sheet. Specific requirements for permit conformance include: (1) submittal of appropriate application materials and fees; (2) implementation of pertinent (depending on site-specific conditions) monitoring/testing, disposal alternative, and treatment programs; (3) provision of applicable notification to the associated local agency prior to discharging to a municipal storm drain system; (4) conformance with appropriate effluent standards (as outlined in the permit); and (5) submittal of applicable documentation (e.g., monitoring reports).

NPDES Municipal Permit

The Municipal Permit implements a regional strategy for water quality and related concerns, and mandates a watershed-based approach that often encompasses multiple jurisdictions. The overall permit goals include: (1) providing a consistent set of requirements for all co-permittees; and (2) allowing the copermitees to focus their efforts and resources on achieving identified goals and improving water quality, rather than just completing individual actions (which may not adequately reflect identified goals). Under this approach, the copermitees are tasked with prioritizing their individual water quality concerns, as well as providing implementation strategies and schedules to address those priorities. Municipal Permit conformance entails considerations such as receiving water limitations (e.g., Basin Plan criteria as outlined below), waste load allocations, and numeric water quality-based effluent limitations. Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable involve methods such as: (1) using jurisdictional planning efforts (e.g., discretionary general plan approvals) to provide water quality protection; (2) requiring coordination between individual jurisdictions to provide watershed-based water quality protection; (3) implementing appropriate BMPs, including Low Impact Development measures to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification and the discharge of pollutants in urban runoff; and (4) using appropriate monitoring/assessment, reporting, and enforcement efforts to ensure proper implementation, documentation, and (as appropriate) modification of permit requirements. The City has implemented a number of regulations to ensure conformance with these requirements, as outlined in the following Local section.

Local

San Diego Basin Plan

The Basin Plan adopted by the RWQCB sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, the San Diego Basin Plan is designed to accomplish the following:

- Designate beneficial uses for surface water and groundwater.
- Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy.
- Describe implementation programs to protect the beneficial uses of all waters within the region.
- Describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

The Basin Plan incorporates by reference all applicable SWRCB and RWQCB plans and policies.

City of San Diego Stormwater Standards Manual

Stormwater BMP standards for City projects are outlined in the City's Stormwater Standards Manual (City of San Diego 2018). The Stormwater Standards Manual constitutes the City's implementation of the Regional Municipal Separate Storm Sewer System (MS4) Permit and Stormwater Management and Discharge Control Ordinance (San Diego Municipal Code Section 43.0301 et seq.). Specific requirements for implementing BMPs vary based on the project type and amount of impervious surface proposed.

The City's Stormwater Requirements Applicability Checklist (Form DS-560) is used to determine whether a project is a priority development project; a standard development project; or exempt from permanent, post-construction stormwater BMP requirements (City of San Diego 2018a). Post-construction BMP requirements in the Stormwater Standards Manual and the Regional MS4 Permit apply to new development or significant redevelopment projects that exceed size thresholds and/or fit under specific use or location categories. The size threshold is typically the amount of impervious area added and/or replaced. An additional criteria requires post-construction BMPs when a project results in disturbance of 1 or more acres of land and is expected to generate pollutants after construction (even if there is no addition or replacement of impervious area).

City Stormwater Management and Discharge Control Ordinance

The purpose of San Diego Municipal Code Sections 43.0301 to 43.0312 (Stormwater Management and Discharge Control) is to restore and maintain the water quality of receiving waters and further ensure the health, safety, and general welfare of the citizens of the City. The ordinance prohibits non-stormwater discharges, including spills, dumping, and disposal of materials other than stormwater to the MS4, and reduces pollutants in discharges from the MS4 to receiving waters, to the maximum extent practicable, in a manner consistent with the CWA. The ordinance also requires the implementation of BMPs required in the Jurisdictional Runoff Management Plan, including erosion and sediment control BMPs as required by the Stormwater Standards Manual, and describes enforcement authorities and remedies that can be used in instances of noncompliance.

City of San Diego General Plan

The City General Plan (City of San Diego 2008a) addresses water quality concerns in the Public Facilities, Services, and Safety Element; and the Conservation Element, as summarized below. Consistency with the goals and policies in the following elements can be found in Table 5.9-2 of Section 5.9, Land Use, of this environmental impact report.

Public Facilities, Services, and Safety Element. This element includes a number of goals and policies related to the provision of adequate public facilities and services for existing and proposed development. For stormwater, these involve efforts to provide appropriately designed and sized infrastructure and ensure adequate conveyance capacity, protect water quality, and provide conformance with applicable regulatory standards (e.g., the NPDES).

Conservation Element. The Conservation Element provides a number of goals and policies related to preserving and protecting watersheds and natural drainage features, minimizing runoff and related pollutant generation during and after construction activities, and protecting drinking water resources.

5.18.3 Thresholds of Significance

Issue 1: Would the proposal result in an increase in pollutant discharge to receiving waters during or following construction, or discharge identified pollutants to an already impaired water body?

Issue 2: What short-term and long-term effects would the proposal have on local and regional water quality and what types of pre- and post-construction Best Management Practices (BMPs) would be incorporated into the project to preclude impacts to local and regional water quality?

Impacts Threshold(s)

The City's Significance Determination Thresholds note that compliance with applicable City Water Quality Standards is assured through permit conditions provided by LDR Engineering. Adherence to the City storm water standards is thus considered adequate to preclude surface water quality impacts. Because the Project does not involve activities that could directly affect groundwater quality (e.g., underground fuel storage tanks or septic systems), potential impacts to groundwater quality are limited to the percolation of project-related surface runoff and associated pollutants (e.g., in pervious portions of the proposed storm drain system). Accordingly, conformance with the City storm water standards is the applicable threshold for both surface and groundwater water resources.

Impact Analysis

Potential project-related pollutant discharge and water quality impacts are associated with both short-term construction activities related to the proposed project as well as long-term maintenance and occupation of the project site.

Short-Term Construction Impacts

Proposed demolition, grading, excavation, and construction activities associated with the proposed project could create additional sources of polluted runoff, which could have short-term impacts on surface water quality. Additional sources of polluted runoff could include heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, pesticides, sediments, and nutrients could occur as a result of project uses.

Demolition of the existing clubhouse building and associated structures would occur initially. It is assumed that site-preparation of the project site (i.e., grading, soil import, trenching for dry and wet utilities, and surface improvements) for vertical building construction would follow. Pollutants associated with construction could degrade water quality if those pollutants are washed into surface waters. Sediment is often the most common pollutant associated with construction sites because of the associated earth-moving activities and areas of exposed soil. Hydrocarbons such as fuels, asphalt materials, oils, and hazardous materials such as paints and concrete discharged from construction sites could also result in impacts downstream. Debris and trash could be washed into existing storm drainage channels to downstream surface waters. These activities could impact aquatic habitat, upland wildlife, and aesthetic land values.

Under the NPDES permit program, BMPs are mandated for construction sites in which grading would be greater than 1 acre, through preparation of SWPPPs in order to reduce the occurrence of pollutants in surface water. SWPPPs are submitted to the RWQCB prior to ground-disturbing activities and set forth the measures that will be employed during construction to avoid runoff into surface waters. Project temporary construction

BMPs would typically include street sweeping, waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, and proper handling and storage of hazardous materials. Typical erosion and sediment control BMPs include silt fences, fiber rolls, gravel bags, temporary desilting basins, velocity check dams, temporary ditches or swales, stormwater inlet protection, and soil stabilization measures. Implementation of these state-mandated measures, and implementation of the required SWPPP for the proposed project, would ensure that short-term impacts from construction-related activities would not violate any water quality standards or WDRs and not further contribute to water quality impacts identified in the CWA Section 303(d) List of Water Quality Limited Segments.

Furthermore, the proposed project would incorporate construction BMPs in accordance with the City's Stormwater Standards Manual. The project would also be required to comply with all of the City's stormwater standards, including San Diego Municipal Code Sections 43.0301 to 43.0312, which prohibits non-stormwater discharges, including spills, dumping, and disposal of materials other than stormwater to the MS4, and reduces pollutants in discharges from the MS4 to receiving waters, to the maximum extent practicable, in a manner consistent with the CWA.

With implementation of a SWPPP and compliance with applicable water quality requirements, runoff from the project site during construction would not adversely affect surface waters or water quality.

Long-Term Operation Impacts

During operation of the proposed project, all on-site runoff would be collected through the proposed internal storm drain system and then routed to one of the biofiltration basins that would detain and attenuate 100-year peak flows per City design standards.

Under developed conditions, runoff would be conveyed to 18 on-site bioretention basins, curb inlets, and flow-through planter boxes for water quality treatment and hydromodification prior to being discharged off site. Roof runoff from the proposed buildings would initially outfall to landscaped areas and then would flow into a private storm drain system. A Stormwater Management Modeling analysis was prepared for the proposed project for pre- and post-development conditions to determine if the proposed Low Impact Development bioretention facilities would have sufficient volume to meet the current hydromodification management plan requirements from the San Diego RWQCB. Hydromodification modeling and analysis was conducted by Project Design Consultants (Appendix S). The hydromodification analysis demonstrated that the BMPs provided for the project site are sufficient to meet the current hydromodification management plan criteria (Appendix S).

Implementation of proposed BMPs, recommendations in the project-specific drainage study (Appendix E) and Stormwater Quality Management Plan (Appendix S), and preparation and implementation of the required SWPPP would ensure that the proposed project would comply with regulatory ordinances and with the standards set forth in the City's Stormwater Standards Manual. Site-specific source control BMPs include prevention of illicit discharges, storm drain stenciling, integrated pest management principles, and efficient landscape and irrigation design. Treatment BMPs selected for the proposed project include multiple lined biofiltration basins.

The City's Stormwater Standards Manual, which is the jurisdiction-specific BMP manual for the City, addresses updated on-site post-construction stormwater requirements for standard projects and priority development projects and provides updated procedures for planning, preliminary design, selection, and design of permanent stormwater BMPs based on the performance standards presented in the MS4 Permit. All of the proposed BMPs on the project site would be designed per City specifications and the drainage study recommendations (Appendix E).

Project-specific site design, source control, and treatment control BMPs, Low Impact Development practices, and project design measures would be implemented to ensure proposed water quality would not degrade further beyond existing conditions. Moreover, proposed project drainage flow volumes would remain the same as under existing conditions or would decrease following project implementation. Therefore, runoff from the project site would not adversely affect surface waters, water quality, or discharge pollutants to an already impaired water body.

Significance of Impacts

Through implementation of project-specific site design, source control, treatment control BMPs, Low Impact Development practices, project design measures, related maintenance efforts, and conformance with City storm water standards and associated requirements (including the NPDES Construction General, Municipal and Groundwater permits), potential pollutant discharge and water quality impacts associated with construction and operation of the project would result in **less than significant** impacts.

Mitigation, Monitoring, and Reporting

No mitigation would be required.

5.19 Wildfire

This section describes the existing wildfire conditions of the proposed Trails at Carmel Mountain Ranch Project (project) site, identifies regulatory requirements, evaluates potential impacts, and identifies mitigation measures if applicable related to implementation of the project. The following discussion is based on the Fire Fuel Load Modeling Report prepared by Dudek (April 2020) and included as Appendix D.

5.19.1 Existing Conditions

Physical Conditions

Currently, the project site is a former 18-hole golf course surrounded by existing residential development. The Carmel Mountain Ranch Country Club and golf course are no longer active, with the exception of the clubhouse, which can still be rented out and used for special events. The site is primarily characterized by developed land/disturbed habitat (comprised of graded and previously maintained areas of the golf course as well as ornamental plantings and landscaping associated with the golf course use) and some native habitat (upland and wetland species). Surrounding land uses include residential development in all directions, with some adjacent park land.

The project site is surrounded on all sides by residential neighborhoods, within SDFRD jurisdiction; therefore, the project site is currently served by SDFRD. Additionally, SDFRD Fire Station 42 is located adjacent to the project site to the north, at 12110 World Trade Drive, San Diego, California 92128. Fire Station 42 serves Carmel Mountain Ranch and the surrounding area and has one fire engine (City of San Diego 2020).

The southern portion of the project site is located within a Very High Fire Severity Zone (CAL FIRE 2009).

Wildfire is a continuous threat in Southern California and is particularly concerning in the wildland-urban interface, the geographic area where urban development either abuts or intermingles with wildland or vegetative fuels. Due to climate, vegetation, and topography, the City of San Diego (City) is subject to both wildland and urban fires. The region's climate and increasingly severe dry periods result in large areas of dry vegetation that provides fuel for wildland fires. Late summer and fall are the most critical seasons for wildland fires when Santa Ana winds bring hot, dry desert air from the east into the region. When the high air temperature, low humidity, and powerful winds combine with dry vegetation, the result can be large-scale fire events. Since these winds push wildland fires westward toward denser development, Santa Ana wind-driven fires have the potential to result in a greater risk of property damage. The City contains over 900 linear miles of wildland-urban interface due to established development along the open space areas and canyons within urban and suburban areas (City of San Diego 2008).

Fire Hazard Mapping

The California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program database includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different Fire Hazard Severity Zones (FHSZs), ranging from moderate to very high. CAL FIRE uses FHSZs to classify anticipated fire-related hazards for the entire state, and includes classifications for State Responsibility Areas, Local Responsibility Areas, and Federal Responsibility Areas. Fire hazard severity classifications take into account vegetation, topography, weather, crown fire production, and ember production and movement. As shown in Figure 5.19-1, Very High Fire Hazard Severity Zones in Local Responsibility Area, the southern portion of the project site (Assessor's Parcel Numbers 31303132, 31304062,

31370401, and 31303128), as well as lands to the south and to the east across Interstate (I-) 15 are designated as a Very High FHSZ within the Local Responsibility Area (CAL FIRE 2009).

Fire History

Fire history data provides valuable information regarding fire spread, fire frequency, ignition sources, and vegetation/fuel mosaics across a given landscape. Fire frequency, behavior, and ignition sources are important for fire response and planning purposes. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and, therefore, may provide a tactical defense position, or what type of fire burned on the site and how a fire may have spread. According to available data from CAL FIRE's Fire and Resource Assessment Program (CAL FIRE 2018a), approximately 55 fires have burned within 5 miles of the project site since the beginning of the historical fire data record (Appendix D). These fires occurred between in 1910 and 2014, with some years including more than one fire. Three of the fires in the historical record burned on the project site, including the 1943 unnamed fire that burned roughly 40,000 total acres, the 1967 unnamed fire that burned roughly 29,000 total acres, and the 1980 Assist No. 138 Fire that burned roughly 1,200 total acres. These fires preceded development of the site. The City of San Diego Fire-Rescue Department (SDFRD) may have data regarding smaller fires (less than 10 acres) that have occurred near the site that are not included in CAL FIRE's dataset.

Vegetation Communities and Land Covers

Based on species composition and general physiognomy, the existing project site supports a total of 13 vegetation communities (11 native and 2 non-native) and 2 land cover types were identified within the project site as described in detail in Section 5.2, Biological Resources, and the project's biological technical report (Appendix I). The golf course contains areas of hardscape such as golf cart pathways, along with areas of landscaping and native habitat. The areas associated with the golf course (planted trees and other landscaping, fallowed greens, and hardscape) are all grouped under the category developed/disturbed habitat. Any area with native habitat was mapped according to Oberbauer et al. (2008).

In summary, native and non-native uplands vegetation communities and land covers present within the project site included coastal sage scrub, coastal sage scrub (disturbed), coastal sage scrub (Baccharis-dominated), coastal and valley freshwater marsh, disturbed habitat, disturbed wetland, eucalyptus woodland, southern arroyo willow riparian forest, southern coast live oak riparian forest, southern cottonwood-willow riparian forest, southern sycamore-alder riparian woodland, southern willow scrub (disturbed), southern willow scrub, undifferentiated open woodland, developed land/disturbed habitat and an unvegetated channel. The site's vegetation fire risk is primarily determined by development-adjacent vegetation that would be preserved in the open space directly adjacent to the project's brush management zones. The growth of vegetation types/fuel models is influenced by aspect (orientation), soil constituents, soil depth, soil moisture, and weather. The vegetation occurring on the slopes adjacent to the site is part of the site's fuel load, an important component of the site's wildfire risk assessment.

Topography and Terrain

Topography within the project site consists of a relatively flat areas, with elevations within the project area ranging from approximately 532 feet above mean sea level in the southwest portion of the project area near I-15 to approximately 810 feet above mean sea level center of the project area.

Per standard fire behavior analysis (Andrews and Rothermel 1982), topography affects wildfire movement and spread. Steep terrain typically results in faster fire spread due to pre-heating (and drying) of uphill vegetation. Flat areas typically result in slower fire spread, absent of windy conditions. Topography may form unique conditions which result in concentrated winds or localized fire funneling, such as saddles, canyons, and chimneys (land formations that collect and funnel heated air upward along a slope). Similarly, terrain may slow the spread of fire. For example, fire generally moves slower downslope than upslope. Terrain may buffer or redirect winds away from some areas based on canyons or formations on the landscape. The occurrences of terrain features that may affect fire behavior on the project site were analyzed and incorporated into the risk assessment and in development of fire protection features.

Climate, Weather, and Wind

North San Diego and the project site are influenced by the Pacific Ocean and are frequently under the influence of a seasonal, migratory subtropical high pressure cell known as the “Pacific High.” Wet winters and dry summers, with mild seasonal changes, 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. The average high temperature for the San Diego area is approximately 73°F, with average highs in the summer and early fall months (July–October) reaching 79°F. The average precipitation for the area is approximately 10 inches per year, with the majority of rainfall concentrated in the months of December (2.2 inches), January (1.7 inches), February (1.8 inches), and March (1.0 inches), while smaller amounts of rain are experienced during the other months of the year.

The prevailing wind pattern is from the west (on-shore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west-southwest (sea), and at night winds are from the northeast (land), averaging 3 mph. During the summer season, the diurnal winds may average slightly higher (approximately 18 mph) 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. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds.

Typically, the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires in San Diego County exceeded 30 mph and 50 mph during extreme conditions. The 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. Santa Ana winds are 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 or mesas. Santa Ana winds generally coincide with the regional drought period and the period of highest fire danger. The project site is affected by Santa Ana winds. Winds funneled through mountains and onto the flat mesas dissipate and produce lower average wind conditions. The wind information used for fire behavior modeling for this site includes actual data from a Remote Automated Weather Station located in a similar inland location (latitude: 32.85917, longitude: -117.10556, elevation: 539 feet) in San Diego County (Camp Elliott Remote Automated Weather Station).

5.19.2 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 laws or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the local fire agency.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 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 is based on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy (National Wildfire Coordinating Group 2009):

- Firefighter and public safety are 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, officially titled Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President In Response to the Wildfires of 2000, 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 provides technical, financial, and resource guidance and support for wildland fire management across the United States. U.S. Forest Service

and the Department of the Interior are working to successfully implement the key points outlined in the plan (DOI/USDA 2000).

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. 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 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 Code Council 2017).

State

California Government Code

California Government Code, Sections 51175 through 51189 provide guidance for classifying lands in California as fire hazard areas and requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria, and makes the information available for public review. Further, local agencies must designate, by ordinance, Very High FHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. Defensible space around structures in fire hazard areas must consist of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Code of Regulations

Title 14 Natural Resources

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, also sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape landscaping or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Building Code—California Code of Regulations Title 24, Part 2, Chapter 7A.

Title 24 California Building Standards Code

California Building Code

Part 2 of Title 24 contains the California Building Code. Chapter 7A of the California Building Code regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a fire hazard area. Fire hazard areas as defined by the California Building Code include areas identified as a FHSZ within a State Responsibility Area or a wildland-urban interface fire area. The purpose of Chapter 7A is to establish minimum standards for the protection of life and property by increasing the ability of structures located in a fire hazard area to resist the intrusion of flames or burning embers projected by a wildfire, and to contribute to a systematic reduction in structural losses from a wildfire. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in Chapter 7A.

California Fire Code

Part 9 of Title 24 contains the CFC, which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of the CFC is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. Chapter 49 of the CFC contains minimum standards for development in the wildland-urban interface and fire hazard areas.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission. The 2019 CFC took effect on January 1, 2020.

California Public Resources Code

California Public Resources Code, Section 4290, requires minimum fire safety standards related to defensible space that are applicable to residential, commercial, and industrial building construction in State Responsibility Area lands and lands classified and designated as Very High FHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations that equal or exceed minimum regulations required by the state.

California Public Resources Code, Section 4291, requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered in flammable material. Section 4291 requires 100 feet of defensible space around all sides of a structure, but not beyond the property line unless required by state law, local ordinance, rule, or regulations. Further, California Public Resources Code, Section 4291 requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

Fire Hazard Severity Zones

CAL FIRE maps FHSZs based on fuel loading, slope, fire history, weather, and other relevant factors as directed by California Public Resources Code, Sections 4201–4204, and California Government Code, Sections 51175–51189. FHSZs are ranked from Moderate to Very High, and are categorized for fire protection within a Federal

Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. As shown in Figure 5.19-1, the southwestern portion of the project site, as well as lands to the south and to the east across I-15 are designated as a Very High FHSZ within the Local Responsibility Area (CAL FIRE 2009).

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California reflects CAL FIRE's focus on fire prevention and suppression activities to protect lives, property, and ecosystem services, and 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 Strategic Fire Plan for California provides 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.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid 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 Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after a local declaration of emergency, after the California Emergency Management Agency gives concurrence with the local declaration, or after the governor issues a proclamation of a state emergency. Once the California Natural Disaster Assistance Act is activated, local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

State Fire Regulations

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, and include regulations concerning building standards (as also set forth in the CBC), 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. The state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

Local***County of San Diego Office of Emergency Services***

The Unified San Diego County Emergency Services Organization has primary responsibility for preparedness and response activities in the County of San Diego (County). The County Office of Emergency Services serves as staff to the Unified Disaster Council, the governing body of the Unified San Diego County Emergency Services Organization. Emergency response and preparedness plans include the Operational Area Emergency Response Plan and the County Multi-Jurisdictional Hazard Mitigation Plan.

Multi-Jurisdictional Hazard Mitigation Plan

The City is a participating jurisdiction in the Multi-Jurisdictional Hazard Mitigation Plan, a Countywide plan that identifies risks, minimizes damage from natural and human-made disasters, and is generally intended to provide compliance with regulatory requirements associated with emergency response efforts. The Multi-Jurisdictional Hazard Mitigation Plan includes an overview of the risk assessment process, vulnerability assessments, and identifies hazards present in each jurisdiction of the County. Hazards profiled in the plan include wildfire, structure fire, flood, coastal storms, erosion, tsunamis, earthquakes, liquefaction, rain-induced landslide, dam failure, hazardous materials incidents, nuclear materials release, and terrorism. The plan sets forth a variety of objectives and actions based on a set of broad goals including the following: (1) promoting disaster-resistant future development; (2) increased public understanding and support for effective hazard mitigation; (3) building support of local capacity and commitment to become less vulnerable to hazards; (4) enhancement of hazard mitigation coordination and communication with federal, state, local and tribal governments; and (5) reducing the possibility of damage and losses to existing assets, particularly people, critical facilities or infrastructure, and County-owned facilities, due to dam failure, earthquake, coastal storm, erosion, tsunamis, landslides, floods, structural fire/wildfire, and human-made hazards.

As part of the emergency response efforts, the City of San Diego Office of Health and Safety oversees emergency preparedness and response services for disaster-related measures, including administration of the City Emergency Operations Center and alternate Emergency Operations Center (City of San Diego 2017).

City of San Diego General Plan

Multiple elements of City's General Plan (City of San Diego 2008) address wildfire safety and risk within the City. The General Plan provides policies for protecting communities from unreasonable risk of wildfire, including the following.

- **Conservation Element**
 - CE-B.6. Provide an appropriate defensible space between open space and urban areas through the management of brush, the use of transitional landscaping, and the design of structures (see also Urban Design Element Policy UD-A.3). Continue to implement a citywide brush management system.
- **Urban Design Element**
 - UD-A.3h. Use building and landscape materials that blend with and do not create visual or other conflicts with the natural environment in instances where new buildings abut natural areas. This guideline must be balanced with a need to clear natural vegetation for fire protection to ensure public safety in some areas.
 - UD-A.3p. Design structures to be ignition and fire-resistant in fire prone areas or at-risk areas as appropriate. Incorporate fire-resistant exterior building materials and architectural design features to minimize the risk of structure damage or loss due to wildfires.
- **Public Facilities, Services, and Safety Element**
 - PF-D.12. Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones.
 - a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment. (see also LU-C.2.a.4)
 - b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after a fire.
 - c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires.
 - d. Provide and maintain water supply systems to supplies for structural fire suppression.
 - e. Provide adequate fire protection. (see also PF-D.1 and PF-D.2 [analyzed in Public Services and Utilities in Section 5.13]).
 - PF-D.13. Incorporate fire safe design into development within very high fire hazard severity zones to have fire-resistant building and site design, materials, and landscaping as part of the development review process.
 - a. Locate, design and construct development to provide adequate defensibility and minimize the risk of structural loss from wildland fires.
 - b. Design development on hillsides and canyons to reduce the increased risk of fires from topography features (i.e., steep slopes, ridge saddles).

- c. Minimize flammable vegetation and implement brush management best practices in accordance with the Land Development Code.
- d. Design and maintain public and private streets for adequate fire apparatus vehicles access (ingress and egress), and install visible street signs and necessary water supply and flow for structural fire suppression.
- e. Coordinate with the Fire-Rescue Department to provide and maintain adequate fire breaks where feasible or identify other methods to slow the movement of a wildfire in very high fire hazard severity zones.
- o PF-D.14. Implement brush management along City maintained roads in very high fire hazard severity zones adjacent to open space and canyon areas.
- o PF-D.15. Maintain access for fire apparatus vehicles along public streets in very high fire hazard severity zones for emergency equipment and evacuation.
- o PF-D.16. Provide wildland fire preparedness education for fire safety advance planning.
- o PF-D.17. Coordinate with local, state, and federal fire protection agencies with respect to fire suppression, rescue, mitigation, training and education.
- o PF-D.18. Coordinate with local, state, and federal agencies to update emergency, evacuation, and hazard mitigation plans, as necessary (also see section PF-P. Hazard Mitigation & Disaster Preparedness).
- o PF-D.19. Support city-wide emergency and disaster preparedness education programs. (Also see Section PF-P. Hazard Mitigation & Disaster Preparedness).
- o PF-D.20. Locate, when feasible, new essential public facilities outside of very high fire hazard severity zones, including but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communication facilities, or identify construction methods or other methods to minimize damage if these facilities are located in very high fire hazard severity zones.

City of San Diego Municipal Code

The San Diego Municipal Code contains the fire hazard severity zone maps and identifies the fire protection Very High FHSZs and local agency Very High FHSZs for the City area of responsibility. The adopted Fire Hazard Severity Zone Maps from CAL FIRE are maintained and codified in San Diego Municipal Code Sections 55.9401 and 145.0703(a)(2).

The Very High FHSZs are located throughout the City. Inclusion within these zones is based on five factors: density of vegetation, slope severity, 5-minute fire department response time, road class/proximity and proximity to fire hydrants, and CAL FIRE's vegetation cover and fire behavior/fuel spread model. Based on these factors, the Very High FHSZs encompass a large portion of the City, including most land use designations, major freeways and roads, various structures, and major utilities and essential public facilities.

The City's Wildland Management and Enforcement program provides information and guidelines on brush management and weed abatement in FHSZs. The City's Fire Safety and Brush Management Guide summarizes guidelines for brush management in canyon areas and landscape standards. San Diego Municipal Code Section 142.0412 regulates brush management and requires 100 feet of defensible space between structures and native wildlands. The City's Landscape Standards acknowledge fire safety is achieved by reducing flammable fuel adjacent to structures. Requirements of the landscape standards are included for pruning and thinning native and naturalized vegetation, and revegetation with low-fuel-volume plantings.

Brush Management

The City's brush management regulations (San Diego Municipal Code Section 142.0412) are intended to minimize wildland fire hazards through prevention activities and programs. These regulations require the provision of mandatory setbacks, irrigation systems, regulated planting areas, and plant maintenance in specific zones, and are implemented at the project level through the grading and building permit process.

Brush management is required in all base zones on publicly or privately owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. The City requires brush management plans for all new development. These plans are intended to reduce the risk of significant loss, injury, or death involving wildland fires. Unless otherwise approved by the City fire marshal, the brush management plans for all future development would consist of two separate and distinct zones, as follows:

- **Zone One:** the area adjacent to structures where flammable materials would be minimized through the use of pavement and/or permanently irrigated ornamental landscape plantings. This zone is not allowed on slopes with a gradient greater than 4:1.
- **Zone Two:** the area between Zone One and any area of native or non-irrigated vegetation. This zone would consist of thinned native or naturalized vegetation.

5.19.3 Impacts Analysis

Issue 1: Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Threshold(s)

Based on the City's Significance Determination Thresholds (2016a), a project would result in a significant impact if it would interfere with an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

As discussed in Section 5.6.2, Relevant Plan, Policies, and Ordinances, the City is a participating entity in the MHMP (County of San Diego 2017), which is generally intended to provide compliance with regulatory requirements associated with emergency response efforts. The EOP (County of San Diego 2018a) identifies a broad range of potential hazards and a response plan for public protection. The EOP identifies major interstates and highways within San Diego County that could be used as primary routes for evacuation. As part of the emergency response efforts, the San Diego Office of Homeland Security oversees emergency preparedness and response services for disaster-related measures, including administration of the City EOC and alternate EOC (City of San Diego 2017). For emergency evacuation, the EOP identifies I-15 and SR-56 as emergency evacuation routes in the vicinity of the project site. Portions of the project site are located adjacent to I-15 to the east and to the northeast of SR-56. Per the VMT Analysis (Appendix G to this EIR), the proposed project is anticipated to add 7,928 average daily trips to and from the project site.

Further, the FFLMR prepared for the proposed project would require various design features to ensure fire protection. As discussed in Section 4.3.1, each unit within the project is proposed to have a private domestic water system and a private fire protection system. In accordance with City of San Diego standards, private domestic water systems will include a meter and backflow preventer, and private fire protection systems will include backflow preventers.

In addition, all private access roads would be constructed in accordance with San Diego Municipal Code Sections 55.8701 and 55.8703, which outline the requirements for fire apparatus access roads and gates to ensure adequate emergency access within the project site. Therefore, the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Primary evacuation routes consist of the major interstates, highways, and prime arterials within the City. For emergency evacuation, the Emergency Operations Plan identifies I-15 and State Route 56 as emergency evacuation routes in the vicinity of the project site. A County of San Diego Emergency Plan, including an Evacuation Annex, is in place to provide for the effective mobilization of all the resources of San Diego. The Project would not impair implementation of, or physically interfere with, the San Diego Emergency Plan. Additionally, the project is subject to review by the San Diego Fire-Rescue and the SDPD to ensure compliance with applicable safety standards.

Significance of Impact

The project would not impair or physically interfere with an adopted emergency response or evacuation plan and impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 2: *Would the proposal expose people or structures to significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Impact Threshold(s)

Per the City's Significance Determination Thresholds, impacts related to wildfire hazards would be significant if a project would expose people or structures to significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact Analysis As shown in Figure 5.19-1, the southwestern portion of the project site, as well as lands to the south and to the east across I-15 are designated as a Very High FHSZ within the Local Responsibility Area (CAL FIRE 2009). The project site is located in and near lands classified as Very High FHSZ and is subject to analysis pursuant to the CEQA Guidelines Appendix G thresholds.

A FFLMR was prepared for the proposed project and is included as Appendix D of this EIR. The FFLMR discuss the project site and its fire environment, provides an assessment of fire risk and includes fire behavior modeling. The purpose of the FFLMR is to address alternative compliance measures related to brush management at the wildland urban interface associated with the revelation of open space adjacent to existing residential structures. The existing condition in areas where former golf holes are located adjacent to existing residential structures includes protected riparian drainages. These drainages create a condition where it is not possible to achieve a standard BMZ. As such, the FFLMR provides an alternative approach that provides for an existing irrigation zone (existing rear or side yards) and a thinning BMZs that isolate the riparian drainages and minimize the potential for a vegetation fire to transition into a riparian tree crown fire.

Brush Management is required for development with structures that are within 100 feet of any highly flammable area of native or naturalized vegetation. Where brush management is required, a comprehensive program would be implemented to reduce fire hazards around all structures by providing a defensible space/fire-break between structures and areas of flammable vegetation. A standard defensible space, as required by the Land Development Code, consists of two distinct brush management zones (BMZ): a 35-foot-wide BMZ 1 and a 65-foot-wide BMZ 2, for a total of 100 feet of BMZ. Generally, no habitable structures, structures that are directly attached to habitable structures, or combustible structures that provide a means for transmitting fire to habitable structures are allowable in BMZ 1. No structures are allowed in BMZ 2.

Modifications to the standard defensible space dimensions may be approved based on the site plan and site conditions. The Fire Chief may allow implementation of alternative compliance measures to achieve an equivalency of a full defensible space as allowed under Section 142.0412(i). Approval of such measures are based on documentation which addresses topography, existing or potential fuel loads, and other characteristics related to fire protection and the context of the proposed development.

BMZs for the proposed project area include a standard BMZ for the proposed new structures and a modified irrigated existing Zone 1 condition, thinned Zone 2, and an extended protective brush thinning zone. The existing Zone 1 condition consists of a minimum 10-foot irrigated area within the rear yards of the existing single-family residential homes adjacent to the closed Carmel Mountain Ranch Country Club Golf Course, measured from the rear of the structure to the property line. The existing Zone 1 is not part of the Project, nor would the Project have maintenance responsibilities; maintenance would be the responsibility of the existing single-family property owners. Zone 2 consists of a minimum 30-foot thinning zone, measured from the property line of the existing residence adjacent to the existing former fairways out as much as 90 feet into the project site. Portions of Zone 2 consist of existing undisturbed open space areas and City's required wetland buffers, that would not be impacted by brush management activities. Since brush management activities cannot occur within the wetland areas, an extended protective brush thinning zone has been created as additional brush management where Zone 2 does not extend beyond the wetland areas. The extended protective brush thinning zone consists of an additional minimum 20 feet and up to 50 feet of thinning around all sides of the wetland area to create a buffer and reduce the potential of a ground fire transitioning into a crown fire. The wetland buffers are planned for areas on Unit 12 Lot 1, Unit 13 Lot 2, and Unit 16 Lot 2.

Table 5.19-1 summarizes the modified BMZ widths within the Trails at Carmel Mountain Ranch project area and Figure 5.19-2 provides a graphic presentation of the BMZs. The adequacy of the provided BMZ widths is based on a variety of analysis criteria including predicted flame length, fire intensity (BTUs) and duration, site topography, extreme weather, position of roadways, adjacent fuels, and position of existing residential structures on neighboring communities relative to the proposed project.

Table 5.19-1. Trails at Carmel Mountain Ranch Brush Management Zones (BMZ)

Project Area	Existing Zone 1 Condition (feet)¹	Zone 2 (feet)²	Extended Protective Brush Thinning Zone (feet)³	Total BMZ Width (feet)⁴
Unit 4 Lot 1 (Holes 4 and 5) ⁵	Minimum 10 feet	90	20	90 to 110

Table 5.19-1. Trails at Carmel Mountain Ranch Brush Management Zones (BMZ)

Project Area	Existing Zone 1 Condition (feet)¹	Zone 2 (feet)²	Extended Protective Brush Thinning Zone (feet)³	Total BMZ Width (feet)⁴
Unit 3 Lot 1 (Holes 3 and 4)	Minimum 10 feet	50 to 90	20	50 to 110
Unit 7 Lot 2 (Hole 7)	Minimum 10 feet	90	0	90
Unit 9 Lot 3 (Hole 18)	Minimum 10 feet	90	0	90
Unit 12 Lot 1 (Hole 12)	Minimum 10 feet	90	50	90
Unit 16 Lot 2 (Hole 15)	Minimum 10 feet	90	50	90
Unit 16 Lot 5 (Hole 15)	Minimum 10 feet	90	20	90 to 110

Notes: BMZ = brush management zone.

- ¹ The existing Zone 1 condition is the irrigated rear yards of the existing single-family residences adjacent to the fairways of the closed Carmel Mountain Ranch Country Club Golf Course. The existing Zone 1 condition is a minimum of 10 feet and extends from the rear of the existing structures to the property line. The existing Zone 1 is not part of the Project and the Project would not have any responsibility to maintain it, maintenance is the responsibility of the existing single-family property owners.
- ² Zone 2 is a minimum 50-foot thinning zone that extends from the property line of the existing residence adjacent to the fairways out as much as 90 feet. It should be noted that some areas within Zone 2 include riparian wetland areas and an extended Zone 2 thinning zone is being recommended as additional brush management.
- ³ The extended protective brush thinning zone consists of an additional 20 feet of thinning around the riparian wetland area to reduce the likelihood of fire extending into the riparian area. An additional 50 feet of extended protective brush thinning zone is included as the 'wetland buffer' zone around the riparian areas on Unit 12 Lot 1, Unit 13 Lot 2, and Unit 16 Lot 2.
- ⁴ Total BMZ equals minimum 50 to 90-foot Zone 2 thinning area plus additional 20 to 50 feet of thinning around riparian wetland areas (an extended protective brush thinning zone).
- ⁵ Fire prone vegetation (acacia species) directly adjacent to existing residential property lines will be removed and replanted with fire-resistive, low maintenance planting materials.

The modified BMZ widths are considered appropriate alternative compliance, as determined in the FFLMR, because the extended protective brush thinning zone around the riparian areas will create a fuel reduction buffer, reducing the potential of a ground fire transitioning into a crown fire. Additionally, providing a thinned zone and removing fire prone plant species adjacent to existing residential structures and replanting them with low maintenance, fire-resistive plant material, reduces the fire intensity and flame lengths significantly. BMZs are delineated on the Trails at Carmel Mountain Ranch Project Brush Management Plan (Appendix F to Appendix D).

In addition to the proposed BMZs, it is also recommended the existing Eucalyptus trees that line the fairway adjacent to the rear property fences of the existing residential properties within Unit 7, be properly maintained by creating vertical separation from the ground cover vegetation below the tree's crown. This would include a combination of raising tree crowns through branch removal and maintaining understory fuels so they would not transmit fire into the tree crowns. If routine maintenance of the Eucalyptus trees

and the understory fuels cannot be provided on at least an annual basis, the Eucalyptus trees would be removed as part of an overall fire hazard reduction approach to the site's landscaping.

All fuel modification area vegetation management would occur as-needed for fire safety, compliance with the BMZ requirements detailed in the FFLMR, and as determined by the SDFRD. The Trails at Carmel Mountain Ranch HOA or similar, funded entity would be responsible for all vegetation management throughout the project area,. The HOA or similar entity would be responsible for ensuring long-term funding and ongoing compliance with all provisions of this report. The HOA would be responsible for enforcing the landscape maintenance at least annually and prepare a report for submittal to the SDFRD.

As discussed above, post-development BMZs in conjunction with proper long-term maintenance would substantially lower fire behavior intensity during peak weather conditions. This would provide the existing adjacent residential structures and proposed structures on site with the ability to survive a vegetation fire on the project site with little intervention of firefighting forces.

The proposed combination of BMZs and alternative compliance measures would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties. In addition, all habitable structures would be equipped with automatic alarm and sprinkler systems and would have fire resistance construction per Chapter 7A of the CBC. The City's Landscape and Fire Review staff have reviewed the Brush Management Plan and concluded that it adequately addresses the fire safety potentially affecting the project site. The Project and identified project features have been designed in accordance with the City's Landscape Regulations.

Significance of Impact

The Project would comply with applicable state and City standards associated with fire hazards and prevention, including alternative compliance measures. Therefore, potential impacts related to wildfire hazards would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 3: Would the proposal, due to slope, prevailing winds, and other factor exacerbate wildfire risks and thereby expose project occupants to pollutant concentration from wildfire or the uncontrolled spread of a wildfire?

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix G, a project would result in a significant impact to wildfire if due to slope, prevailing winds, and other factor exacerbate wildfire risks and thereby expose project occupants to pollutant concentration from wildfire or the uncontrolled spread of a wildfire.

Impact Analysis

Based on the analysis provided in the FFLMR, worst-case fire behavior under pre-project conditions, is expected in untreated, non-native grasses and surface shrub and chaparral fuels north and east of the

project site under peak weather conditions (represented by fall weather). The fire is anticipated to be a wind-driven fire from the north/northeast during the fall. Under such conditions, expected surface flame lengths reach 41 feet with wind speeds of 50+ mph. Under this scenario, fireline intensities reach 18,349 BTU/feet/second with fast spread rates of 6.2 mph and could have a spotting distance up to 2.3 miles away.

Based on the post-development analysis provided in the FFLMR, fire behavior expected in the BMZs adjacent to the project site with 50% thinning of the existing grasses and shrubs outside of the Riparian area (BMZ Zone 2 - Gr2) under peak weather conditions (represented by fall weather), expected surface flame length would be significantly lower, with flames lengths reaching approximately 14 feet with wind speeds of 50+ mph. Under this scenario, fireline intensities would reach 1,791 BTU/feet/second with relatively slow spread rates of 1.7 mph and could have a spotting distance up to 1.1 miles away. Therefore, the extended BMZ (extended protective brush thinning zone) proposed for the project is approximately 5-times the flame length of the worst-case fire scenario under peak weather conditions and would provide adequate defensible space to augment a wildfire approaching the Riparian area before reaching the existing perimeter of single-family residences adjacent to the project site.

Pollutant concentrations or exposure from a wildfire event near the project site could occur if the wildfire is not suppressed after it first starts. In areas where the public might be experiencing wildfire smoke, the EPA recommends that public health and air quality agencies provide advice on strategies to limit exposure, which include staying indoors; limiting physical activity; reducing indoor air pollution sources; effectively using air conditioners and air filters or cleaners; creating cleaner air shelters; and using respiratory protection appropriately. The most common advisory during a smoke episode is to stay indoors, where people can better control their environment. Whether at home or in a public space, indoor environments that have filtered air and climate control can provide relief from smoke and heat (EPA 2019).

Significance of Impact

The assessment in the project's fire report considers the project area's fire history, historical weather and wind data, terrain, and fuels, and concludes that the project would not exacerbate wildfire risks, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, or other factors. Impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation measures would be required.

Issue 4: *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?*

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix G, a project would result in a significant impact to wildfire if the project would 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?

Impact Analysis

Construction

The project would involve the construction of multi-family homes, an art gallery/studio, interior roadways and parking, and connections to existing water, sewer, electricity, and gas infrastructure would be required. Utility connections would be required to comply with the current 2019 California Code of Regulations, Title 24 Parts 1-12, as well as, City regulations which would require review and approval through the building permit process. All private access roads would be constructed in accordance with San Diego Municipal Code Sections 55.8701 and 55.8703, which outline the requirements for fire apparatus access roads and gates to ensure adequate emergency access within the project site. Additionally, the project is subject to review by the San Diego Fire-Rescue and the SDPD to ensure compliance with applicable safety standards.

Operation

Operation of utility infrastructure would be underground, within the project site, and would not exacerbate fire risks.

Significance of Impact

Therefore, the project would not exacerbate wildfire risk during construction or operation, and impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

No mitigation would be required.

Issue 5: 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?

Impact Threshold(s)

Consistent with State CEQA Guidelines Appendix G, a project would result in a significant impact to wildfire if the project would 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.

Impact Analysis

As discussed in Section 5.4, Geologic Conditions, and the geotechnical investigation, no evidence of landslide deposits were encountered at the site (Appendix J). Topographically, the project site consists of gentle to moderately sloping terrain. Compliance with building and land development code requirements for any existing or manufactured slopes would minimize potential slope instability.

As discussed in Section 5.8, Hydrology, the Drainage Report prepared for the project concludes that redevelopment would result in an overall increase in the 100-year runoff from the site, but peak flows after detention would be less than either backbone storm drain system capacity or existing condition peak flow at the project outfall, whichever condition governs. The project includes detention sizing based on impervious surfaces percentages. For all outfalls, the proposed project includes detention basins to address peak flows

that are greater than existing condition peak flows. Flooding as a result of runoff or drainage changes under post-fire conditions would not expose people or structures to significant risk.

Due to the proposed development of the site, lack of evidence of previous landslides, improved runoff conditions, and existing surrounding residential development on all sides, it is unlikely that the project would expose people or structures to downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

Significance of Impact

The project would 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. Impacts would be **less than significant**.

Mitigation, Monitoring and Reporting

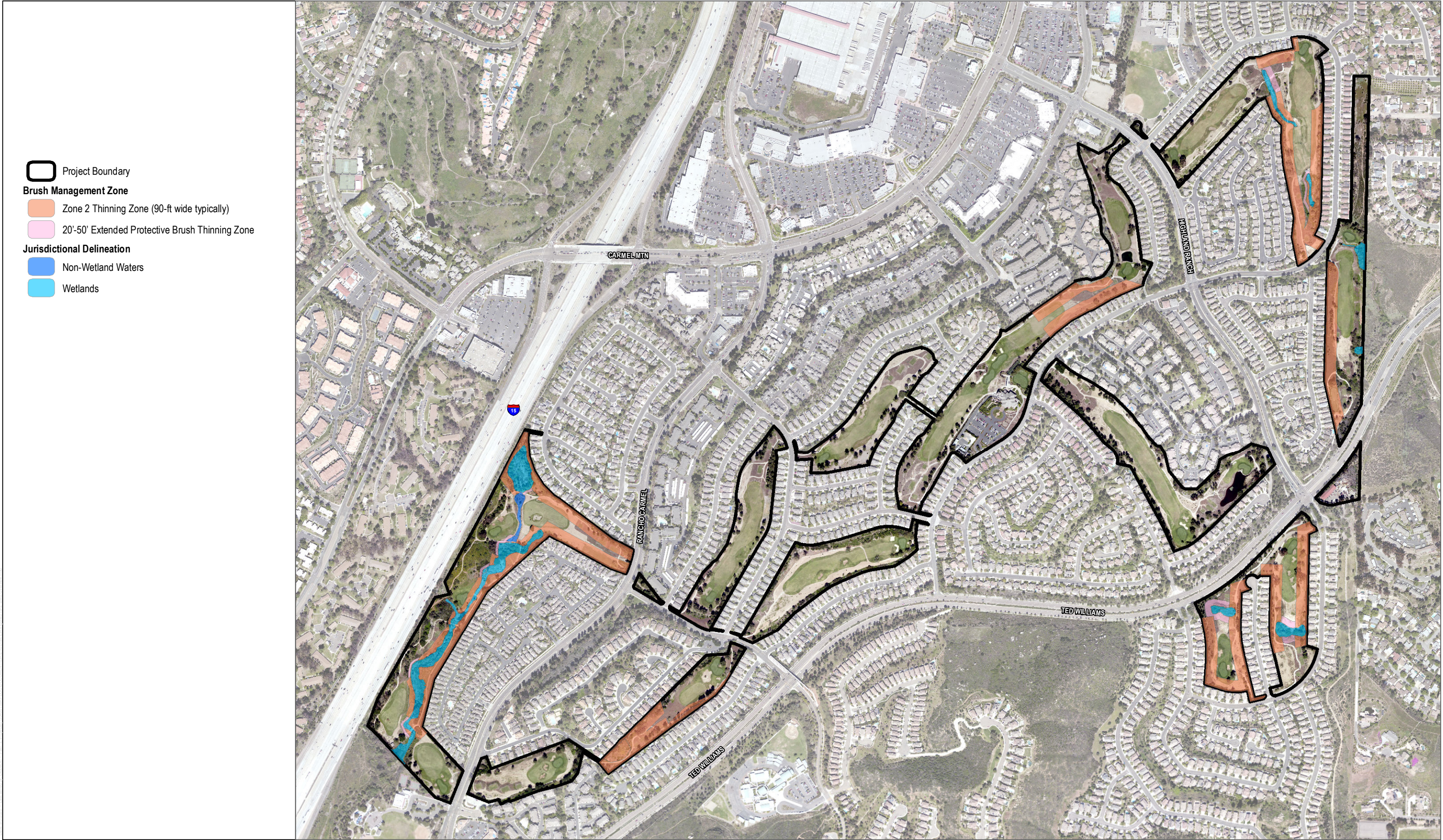
No mitigation would be required.



SOURCE: SANGIS 2009, 2017

FIGURE 5.19-1
Very High Fire Hazard Severity Zones in Local Responsibility Area
Trails at Carmel Mountain Ranch

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6 Cumulative Effects

California Environmental Quality Act (CEQA) Guidelines Section 15130(a) requires that an environmental impact report (EIR) discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable as defined in Section 15065(a)(3). CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (14 CCR 15355).

According to CEQA Guidelines, Section 15130(b), "the discussion [of cumulative impacts] need not provide as great detail as is provided for the effects attributable to the project alone" (14 CCR 15130[b]). Section 15130(b) further states that a cumulative impacts discussion "should be guided by standards of practicality and reasonableness" (14 CCR 15130[b]). The evaluation of cumulative impacts is to be based in either "(A) a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (B) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified which described or evaluated regional or area-wide conditions contributing to the cumulative effect." This cumulative impact analysis uses the list method. The locations of the cumulative projects are depicted in Figure 6-1, Cumulative Projects Locations. A brief description of each cumulative project is presented in Table 6-1, Cumulative Projects; the numbers in the list correspond to the locations shown on Figure 6-1. The basis and geographic area for the cumulative impacts discussed in Table 6-1 are dependent on the nature of the issue and the project.

Table 6-1. Cumulative Projects

No.	Name	Project Description	Project Status
<i>City of San Diego</i>			
1	Pacific Village	601 residential units	Approved and under construction
2	The Junipers	536 age-qualified residential units	Under review
3	24-Hour Fitness	33,618-square-foot health club	Approved 6/5/19 and constructed
4	Park & Ride Development (Alante)	50 multi-family residential units	Approved on 7/23/20
5	Black Mountain Ranch North Village (Subarea 1)	master planned community	Approved 11/1/07
<i>City of Poway</i>			
6	The Farm in Poway	160 residential units plus non-residential amenities	Under review
7	Aria Estates	7 residential units	Under review
8	Villa de Vida	54 affordable residential units	Approved and under construction

Table 6-1. Cumulative Projects

No.	Name	Project Description	Project Status
9	Outpost	retail/restaurant, residential, fitness	Approved and under construction
10	Chik-fil-A	6,500-square-foot restaurant	Under review
11	Poway Commons	residential and retail mixed use	Approved 3/19

6.1 Cumulative Effects Analysis

6.1.1 Land Use

As discussed in Section 5.1, Land Use, deviations requested under the proposed project would not affect any other environmental issue or sensitive resource, and they would not result in a physical impact on the environment. Further, Section 5.1 provided an analysis to ensure that the project would implement many of the applicable goals, policies, guidelines, and recommendations contained within the City's General Plan and the Carmel Mountain Ranch Community Plan. Although the project is concurrently processing a proposed amendment to the General Plan and Carmel Mountain Ranch Community Plan, as well as a rezone, which would re-designate the land use from Private Recreation-Golf Course to Low-Medium Residential (6-29 du/ac), and Medium Residential (30-43 du/ac) to allow for the proposed residential development on site, and impacts associated with the increase in use intensity on the site are analyzed and addressed through this EIR. Additionally, although the project is located within the Airport Influence Area for the Marine Corps Air Station-Miramar – Review Area 2 of the Miramar Airport Land Use Compatibility Plan, the project would not conflict with the plan. Lastly, the proposed project would not result in a conflict with the provisions of the City's Multiple Species Conservation Program Subarea Plan.

Other projects under review by the City would also be required to comply with the General Plan, any applicable Community Plan, and existing zoning. Projects that would not be consistent would require implementation of a General Plan amendment, community plan amendment, and/or zone change and be required to demonstrate conformance with pertinent goals, policies, and recommendations. Each project would be required to be considered in combination with other foreseeable projects, and would be required to demonstrate consistency with an adopted land use plan, land use designation, or policy. Therefore, land use impacts would **not be cumulatively considerable**.

6.1.2 Transportation

As discussed in Section 5.2, Transportation, the proposed project would include multi-modal features such as an interconnected trail system available to the public and the project are within close walking distance and biking distance of the Sabre Springs/Penasquitos Transit Station. The project would not result in inadequate emergency access or create hazardous design features. The proposed project would also be consistent with plans, policies, and regulations related to the transportation system.

Further, the census tracts containing the project site (170.56, 170.55, and 170.39) have a VMT per capita of 21.7, 21.4, and 23.2, respectively. These values are between 32-43% above the VMT significance threshold of 16.2 VMT per capita. While modeling the project in the SANDAG model would provide the specific estimate of VMT per Capita, it can be inferred from the land use characteristics of the surrounding census tracts and their VMT rates, that it is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions. In addition, since cumulative VMT per capita is expected to decrease regionally (and within the project) over time with the implementation of regional and citywide measures/policies that reduce VMT (outside of the project's control), the project level VMT analysis is expected to be the worst-case scenario; therefore can be used as the cumulative analysis. Even with the implementation of mitigation measures **MM-TRA-1** at the project-level, the project would be unable to reduce VMT impacts to a less than significant level, and the project's contribution to traffic/VMT in the surrounding area, in addition to that of the projects listed in Table 6-1, would be **cumulatively significant**.

6.1.3 Air Quality

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the San Diego Air Pollution Control District develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

The SDAB has been designated as a federal nonattainment area for O₃ and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. The air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOCs and NO_x for O₃) potentially contribute to worsened air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the CAAQS and NAAQS. If the 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 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, a 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).

Regarding short-term construction impacts, the SDAPCD thresholds of significance are used to determine whether the project may have a short-term cumulative impact. As shown in Table 5.1-6, the project would not exceed any criteria air pollutant during construction. Therefore, the project would have a less than significant cumulative impact during construction.

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the proposed project would not result in significant regional growth that is not accounted for within the RAQS. As a result, the proposed project would not result in a cumulatively considerable contribution to pollutant emissions.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the proposed project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted based on the City's Significance Determination Thresholds (City of San Diego 2016) CO hotspot screening guidance. The City recommends that a quantitative analysis of CO hotspots be performed if a proposed development causes a six-lane or four-lane roadway to deteriorate to a LOS E or worse, causes a six-lane roadway to drop to LOS F, or if a proposed development is within 400 feet of a sensitive receptor and the LOS is D or worse. The proposed project would not exceed the City's screening guidance for CO hotspots (Fehr & Peers 2020).

As a result, the proposed project would not result in a cumulatively considerable contribution to pollutant emissions. Impacts to air quality would **not be cumulatively considerable** during construction and operation.

6.1.4 Biological Resources

Cumulative impacts consider how a project may affect biological resources on a regional scale. As discussed in Section 5.4, Biological Resources, the project would result in potentially significant indirect impacts to special-status wildlife species from construction-related noise that may occur the breeding season of the Cooper's hawk, yellow warbler, and the least Bell's vireo. (Impact BIO-1). The project would result in less-than-significant or no direct and indirect impacts to sensitive vegetation and special-status plant species, and less-than-significant direct impacts to special-status wildlife species.

The project proposes no impacts to jurisdictional resources regulated by the ACOE, RWQCB, CDFW or City. In addition, no wetlands will be impacted by proposed maintenance activities required within the wetland buffer. No impacts to jurisdictional habitats result from brush management. Periodic brush management also would remain outside of the 5-foot "no touch" zone established directly adjacent to wetlands on-site.

Impacts to wildlife corridors, habitat conservation plans, natural community conservation plan, or other approved local regional or state habitat conservation plan, or any local policies or ordinances would be less than significant. Impacts related to the introduction of invasive plant species to natural open space area would also be less than significant.

Impacts to special-status wildlife species would be mitigated through the implementation of **MM-BIO-1**, which requires construction outside of the breeding season for these species. Related projects could also result in impacts to special-status wildlife species. However, all future projects would be required to comply with all City regulations pertaining to impacts to biological resources and implement similar project design features and mitigation measures, as appropriate, to ensure impacts would be less than significant. Therefore, impacts to biological resources would not be considerable and **not be cumulatively significant**.

6.1.5 Energy

Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. The proposed project, in addition to all cumulative projects, would be required to comply with Title 24, Part 6, per state regulations. In accordance with Title 24 Part 6, the proposed project would have (a) sensor-based lighting controls—for fixtures located near windows, the lighting would be adjusted by taking advantage of available natural light—and (b) efficient process equipment—improved technology offers significant savings through more efficient processing equipment. Similar energy efficiency equipment would be required for the other cumulative projects as well.

Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the proposed project, and all other cumulative projects as well, under the California Green Building Standards Code. Cumulative projects would result in an increased demand for electricity, natural gas, and petroleum. However, in accordance with Title 24, Part 11, mandatory compliance, each project applicant would have (a) 50% of its construction and demolition waste diverted from landfills; (b) mandatory inspections of energy systems to ensure optimal working efficiency; (c) low pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards; and (d) a 20% reduction in indoor water use. Compliance with all of these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum.

The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, either during project construction or operation. In addition, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Other cumulative projects would also be required to demonstrate compliance with regulations, which aim to increase energy efficiency and reduce wasteful or inefficient use. Impacts would **not be cumulatively considerable**.

6.1.6 Geologic Conditions

As discussed in Section 5.6, Geologic Conditions, per the geotechnical investigation, no soils or geologic conditions were encountered that would preclude the development of the project site as proposed, with incorporation of the recommendations outlined in the geotechnical investigation. Short-term erosion and sedimentation impacts would be addressed through conformance with applicable elements of the City stormwater program and related National Pollutant Discharge Elimination System (NPDES) standards. Specifically, this would entail conformance with applicable City regulatory codes, as well as the NPDES Construction General Permit.

Due to the localized nature of geology and soils, cumulative projects would address potential impacts to geology and soils on a project-by-project basis, as potential geologic hazards and soil composition varies by site. Each cumulative project would be required to assess individual and site-specific geologic conditions, which would inform construction and development of each site. All cumulative development would be subject to similar requirements to those imposed and implemented for the proposed project and would be required to adhere to applicable regulations, standards, and procedures. As such, the proposed project would result impacts that would **not be cumulatively considerable**.

6.1.7 Greenhouse Gas Emissions

Due to the global nature of the assessment of greenhouse gas (GHG) emissions and the effects of global climate change, GHG emissions analysis, by its nature, is a cumulative impact analysis. Therefore, the information and analysis provided in Section 5.7, Greenhouse Gas Emissions, to determine project-level impacts, applies here and the project's contribution to global climate change would not be cumulatively considerable.

As discussed in Section 5.7, projects that are consistent with the Climate Action Plan (CAP) as determined through the use of the City's CAP consistency review checklist would not have a cumulative GHG emissions impact. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this checklist to the extent feasible. Per Section 5.5, the proposed project would be consistent with Steps 1, 2, and 3 of the City's CAP Consistency Checklist. Therefore, the proposed project would be consistent with the City's CAP, and GHG emission impacts would be less than significant. Therefore, impacts from GHG emissions would **not be cumulatively considerable**.

6.1.8 Health and Safety

As discussed in Section 5.8, the proposed project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and a significant hazard to the public or environment would not result. Regulatory compliance and review of structures to be demolished by a qualified/certified technician would ensure exposure to toxic building materials would not occur. Compliance with the County's DEH VAP program would ensure that no people would be exposed to toxic substances, such as soil contamination from previous uses on the site, including pesticides and herbicides. Lastly, the project would not result in hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within 0.25 mile of an existing or proposed school.

Health and safety impacts are generally site specific and thus handled on a site-by-site basis. All projects identified in Table 6-1 would require the identification of existing hazardous materials on site, and would be required to comply with existing regulations related to use, transport, and disposal of hazardous materials. Similarly, all related projects would be required to analyze and properly mitigate any impacts, if impacts are identified. Therefore, impacts would **not be cumulatively considerable**.

6.1.9 Historical Resources

As discussed in Section 5.9, Historical Resources, one previously identified resource is present within the project's area of potential effect that has not been completely obscured or destroyed by development of the existing golf course. Impacts to this resource resulting from the proposed project construction would be potentially significant (Further, the presence of nine previously identified prehistoric cultural resources within the project area of potential effect suggests that there is a heightened potential that buried cultural resources could be encountered during project ground disturbance. Therefore, project construction may result in the inadvertent discovery of cultural resources and impacts would be potentially significant. Lastly, there is potential for project construction to inadvertently discover human remains, including those interred outside of formal cemeteries. Therefore, impacts would be potentially significant).

The proposed project would implement **MM-HR-1** to ensure the existing known resource present at the project site is avoided and **MM-HR-2**, which requires a monitoring program to protect unknown archaeological or human remains. There is the potential for nearby cumulative projects, especially those that would result in ground-disturbing activities that would impact intact native soils, to inadvertently discover and adversely affect historical and archaeological resources. Cumulative projects would implement appropriate mitigation measures to reduce historical resources impacts to less than significant. When considered with other foreseeable projects, cumulative impacts to historical resources would **not be cumulatively considerable**.

6.1.10 Hydrology

As discussed in Section 5.10, development of the proposed project and cumulative projects would result in an increase of impervious surfaces in the area. More specifically, other large development projects nearby would result in conversion of large pervious areas to impervious. This would potentially result in increased surface runoff, alteration of the regional drainage pattern, and flooding. However, like the proposed project, each individual project applicant would be required to hydrologically engineer the respective project sites to ensure that post-development surface runoff flows can be accommodated by the regional drainage system. For instance, although the Farm in Poway Project would result in approximately 51 acres of new impervious surfaces on site, that project would implement stormwater drainage facilities that would allow the proposed project to minimize drainage impacts to existing neighborhoods surrounding the project site (City of Poway 2020). As such, with implementation of storm drain facilities for each related project, if applicable, the proposed project would not result in a cumulative impact to hydrology. Therefore, the proposed project's contribution to a cumulative hydrology impact would **not be cumulatively considerable**.

6.1.11 Noise

Of the cumulative projects listed in Table 6-1, Pacific Village, and Park & Ride Development (Alante) are the projects located within approximately 0.25 miles of the project site. All other cumulative projects are located over 0.25 miles from the project site and thus would be at a substantial distance such that noise would attenuate and cumulative impacts would not occur.

As discussed in Section 5.11, Noise, with implementation of **MM-NOI-1**, short-term construction noise impacts would be less than significant. Further, with implementation of **MM-NOI-2** and **MM-NOI-3**, long-term operational noise impacts would be less than significant. The Pacific Village project has been approved and is currently under construction. As discussed in the mitigated negative declaration prepared for the Pacific Village project, through compliance with the City's Municipal Code, impacts to construction-related noise would be less than significant and no significant operational noise would occur (City of San Diego 2017). Lastly, the Park & Ride Development (Alante) project, which includes development of approximately 50 residential units, is currently under review. The environmental document for the Park & Ride Development (Alante) is not currently available for public review. However, it is reasonable to assume that Park & Ride Development (Alante) project would include construction noise reduction measures to reduce any potentially significant noise impacts to a level below significance. Additionally, any construction traffic from export/import haul trucks would likely be distributed among different roadways compared to the proposed project. Therefore, noise from construction traffic is not expected to overlap. Therefore, given locations of construction within the Pacific Village, and Park & Ride Development (Alante), the fact that different sensitive receptors would be potentially affected, and that all projects would be required to

implement mitigation or noise reduction features that would reduce potential impacts to less than significant, the project would not contribute to a cumulative construction noise impact, and cumulative noise impacts would be less than significant during construction.

As discussed above and in Section 5.11, the project would result in potentially significant impacts from residential mechanical equipment and sound levels associated with the outdoor recreation activities and events associated with the project. However, these impacts would be reduced to less than significant with implementation of **MM-NOI-2** and **MM-NOI-3**. It is anticipated that, if any of the nearby cumulative projects would result in operational noise impacts, appropriate mitigation would be implemented to reduce potential impacts to less than significant, similar to the proposed project. Therefore, noise impacts during operations **would not be cumulatively considerable**.

6.1.12 Paleontology

As described in Section 5.12, Paleontological Resources, regulatory compliance would preclude impacts to paleontological resources, thus impacts would be less than significant, and no mitigation is required.

The cumulative projects listed in Table 6-1 that require excavation that would exceed the City's Significance Determination Thresholds would be subject to similar requirements pertaining to state and local regulations requiring the recover and curation of paleontological resources. As such, potential significant impacts to paleontological resources resulting from future development would not rise to the level of significance. Therefore, because regulatory compliance would preclude impacts to paleontological resources under the proposed project, and all other cumulative projects, impacts to paleontological resources would **not be cumulatively considerable**.

6.1.13 Population and Housing

As discussed in Section 5.13, Population and Housing, the proposed project would introduce an estimated 3,180 people to the project site. Because the project proposes a General Plan amendment and rezone, the estimated population of 3,180 people would not have been accounted for in SANDAG's projections. Similarly, the City's current Housing Element does not anticipate any housing development at the project site in order to meet the Regional Housing Needs Allocation. Under the draft Housing Element released in March 2020, the City identifies the majority of the project site within its housing sites inventories, reflecting the closure of the golf course. Specifically, the draft Housing Element identifies approximately 1,200–1,245 potential dwelling units at the project site, consistent with the proposed project (City of San Diego 2020). It should also be noted that the project site is located within a Transit Priority Area, due to the location of a portion of it close to the Sabre Springs Transit Center. Therefore, the project would place housing in the vicinity of existing commercial and office centers. Nonetheless, the project is not accounted for in currently adopted plans or forecasts. The project would directly induce substantial unplanned population growth to the area based on the currently adopted Housing Element (City of San Diego 2013) and impacts would be potentially significant (**Impact PH-1**). The proposed project would not indirectly induce a growth in population as no extension of infrastructure is proposed beyond what is required to adequately serve the proposed project. Further, because the majority of the surrounding area is developed, the project would not otherwise result in the extension of infrastructure to an area that is currently undeveloped or underdeveloped, thereby removing barriers to growth.

Various cumulative projects listed in Table 6-1 would either directly or indirectly induce population growth. The majority of the cumulative projects listed in Table 6-1 involve residential and mixed-use development projects that may increase population growth in the surrounding area. The commercial portions of the project, such as the 24-Hour Fitness, Chick-fil-A, and other resident-serving commercial enterprises would generate a need for new employees, which, in general, has the potential to indirectly lead to population growth. However, the majority of the new employment opportunities that the project may generate are anticipated to be filled by the existing local population base, and thus the project would not contribute to new population growth due to an increase in employment opportunities. The introduction of a new population is not, in and of itself, a significant impact. As with a project-level analysis, the significance of a cumulative population impact is determined by whether the population growth resulting from the combined cumulative projects would be considered substantial. Similar to the City, the neighboring jurisdictions manage population growth and housing stock to meet their Regional Housing Needs Allocation requirements. Nonetheless, the project would directly induce substantial unplanned population growth based on the currently adopted Housing Element (City of San Diego 2013). In conjunction with other residential developments proposed in the surrounding area, the proposed project could result in cumulative impacts to population and housing. Therefore, cumulative impacts to population and housing would be **cumulatively significant and unavoidable**.

6.1.14 Public Services and Facilities

As discussed in Section 5.14, Public Services and Facilities, the proposed project would introduce 1,200 dwelling units to the project area, resulting in an increase in population base within the Carmel Mountain Ranch community and fire/police protection service area, thereby increasing the demand for fire/police protection and emergency services within the service area. However, no new or expanded facilities would be required as a result of the proposed project.

Nonetheless, the cumulative projects listed in Table 6-1 would result in additional demand of fire and police protection services, and the potential need for additional fire or police protection resources. However, all cumulative projects would be required to offset the increase in demand caused by their respective project. If a project triggers the need for new or altered police facilities, the physical impacts would be addressed within the environmental document prepared for the project, and mitigation measures would be applied as needed.

The project, as well as the cumulative projects identified in Table 6-1, would add to the cumulative demand for park and recreation facilities in the community. All residential projects that increase the demand for park and recreation needs in the City are required to provide park space and/or pay park in lieu-fees. The environmental documentation prepared for each project would analyze impacts associated with the construction of any parks within each overall development footprint.

As discussed in Section 5.14, the project site is located within the Poway Unified School District (PUSD) boundary. Thus, the project would be served by PUSD for the provision of school services. Cumulative projects on Table 6-1 that have a residential component would generate students that need to be accommodated by either PUSD or another school district in the area. The project applicant would be required to contribute development fees to PUSD. All of the cumulative projects included in Table 6-1 that would in would result in increased demand on schools would be required to pay school fees to offset the increase demand, similar to the project. As such, with contribution of required development fees by the proposed project and related projects, impacts would not be significant.

The nearest municipal library to the project is the Carmel Mountain Ranch Library, located adjacent to the project site at 12095 World Trade Drive. This local branch is part of the City library system, which allows residents to use any branch or the main library, and the Serra Cooperative Library System, which allows residents of the City and San Diego County to use public library facilities. Currently, the Carmel Mountain Ranch Library does not satisfy the General Plan's policy recommendation that every branch library be at least 15,000 square feet and thus a public services deficiency exists today. The population increase associated with the project would increase the demand for library services, thereby exacerbating the existing impact. The population increase associated with the project would increase the current need for a larger library in the Carmel Mountain Ranch community, and therefore the project would result in a potentially significant impact. The project will provide a fair share contribution toward potential future improvements to the Carmel Mountain Ranch Library to address the impact caused by the project's population increase. However, no capital improvement program exists to redevelop the library site and no fee program has been established to fund such an project. Although the project will make a fair share contribution to address the impacts caused by the associated population increase, the improvements cannot be guaranteed. Therefore, impacts to library facilities would be significant and unavoidable.

Overall, impacts associated with public services as a result of the proposed project would **be cumulatively considerable**.

6.1.15 Public Utilities

Water

Cumulative projects included in Table 6-1 would be serviced by the same water supply as the proposed project and would contribute to the cumulative demand for water supply and water infrastructure. As concluded in the Water Supply Assessment (Appendix Q) prepared for the proposed project, the total water supplies available to the Public Utilities Department during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the project in addition to the demand of existing and other planned uses. Other cumulative projects that are consistent with the land use assumptions made in the Urban Water Management Plan would have already been accounted for in demand projections. Projects that are inconsistent with the land use assumptions made in the Urban Water Management Plan would also be required to demonstrate adequate supply for development. The project would be consistent with regional water resource planning and applicable water supply regulations, and cumulative impacts to water supply would not be cumulatively considerable.

Further, related projects would be required to assess whether adequate infrastructure exists to serve the related projects, and whether additional or expanded water infrastructure would be required to be constructed in order to serve these related project. and mitigate any potential impacts to water infrastructure caused by the project. All projects would be required to construct water infrastructure improvements in order to adequately serve the projects, if necessary. Thus, as each cumulative project would be required to provide an individual assessment as to whether the project would contribute to a direct or cumulative impact to water services, and because the project would connect to existing and new public water mains adjacent to the project sit and within the surrounding roadways and would provide a fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station (as provided by **MM-UTL-1**), cumulative impacts to water supply/services would **not be cumulatively considerable**.

Wastewater

Project generated wastewater would account for 0.34 million gallons per day (336,825 gallons per day), which is only 0.02% of the remaining capacity at the Point Loma Wastewater Treatment Plant. Therefore, existing capacity at the wastewater treatment plant exists to accommodate the proposed project. Several upgrades to both private and public infrastructure would be required in order to accommodate the flows from the project; however, these upgrades have been included as part of the project and analyzed. Impacts would be less than significant as a result of the project. Cumulative projects that result in an increase in density or development over what was accounted for could further exacerbate wastewater deficiencies. However, these projects would also be required to mitigate any potential impacts caused by the project. As such, cumulative impacts to wastewater facilities would **not be cumulatively considerable**.

Solid Waste

According to the City's Significance Determination Thresholds (2016a), cumulative impacts to solid waste facilities would be significant if a project includes the construction, demolition, and/or renovation of 40,000 SF or more of building space. Projects that meet this criterion are required to prepare a project-specific WMP to address waste generated during construction and operation. A project-specific WMP was prepared for the Project (Appendix R) that identifies waste diversion measures. The measures identified in the WMP, when implemented, would ensure that potential cumulative impacts to solid waste management facilities would be below a level of significance. Similarly, cumulative projects would be required to comply with the City's Recycling Ordinance and prepare WMPs (for those that meet the 40,000-SF threshold) to show waste diversion measures.

As stated in Section 5.15, Public Utilities, in accordance with State diversion targets, a minimum of 75% of construction materials would be recycled (see Table 5.15-6). Regarding operation, all occupants shall participate in a recycling program by separating recyclable materials from other solid waste and depositing the recyclable materials in the recycling container provided for each unit. Recycling services are required by SDMC Section 66.0707. Therefore, impacts associated with solid waste would **not be cumulatively considerable**.

6.1.16 Tribal Cultural Resources

As discussed in Section 5.16, Tribal Cultural Resources, although the City as the lead agency has not identified tribal cultural resources within the area of potential effect, the area is considered sensitive for potential tribal cultural resources (i.e., cultural resources and/or subsurface deposits, cultural views/landscapes, or sacred values). Therefore, there is the potential for inadvertent discovery of resources that could be impacted by project implementation due to the existing conditions and anticipated grading activities and excavation depths proposed (**Impact TCR-1**). Implementation of **MM-TCR-1** would reduce potential impacts to unknown tribal cultural resources to below a level of significance. There is the potential for nearby cumulative projects to potentially adversely affect tribal cultural resources. Therefore, cumulative projects would implement appropriate mitigation measures to reduce tribal cultural resources impacts to less than significant. When considered with other foreseeable projects, impacts to tribal cultural resources would **not be cumulatively considerable**.

6.1.17 Visual Effects and Neighborhood Character

As discussed in Section 5.17, Visual Resources and Neighborhood Character, under California Public Resources Code, Section 21099(d)(1), aesthetic impacts resulting from the project would be less than significant. Notwithstanding, potential cumulative impacts to aesthetics are discussed below for informational purposes.

Projects contributing to a cumulative aesthetic impact include those within the project viewshed. The viewshed encompasses the geographic area within which the viewer is most likely to observe the proposed project and surrounding uses. Typically, this is delineated based on topography, as elevated vantage points, such as from scenic vistas, offer unobstructed views of expansive visible landscapes. Of the cumulative projects listed in Table 6-1, Pacific Village, 24-Hour Fitness, Park & Ride Development (Alante) are the projects located the closest to the project site. These projects are within approximately 0.25 miles of the project site and, due to their locations, they could potentially be visible from similar public viewing locations as the project, including the Sabre Springs open space area, located south of the project site.

Cumulative aesthetic impacts would occur if projects combine to result in substantial adverse impacts to the visual quality of the environment and increase sources of lighting and glare. As discussed in Section 5.17, the project would comply with the requirements of the San Diego Municipal Code for height, massing, scale, lighting, and glare requirements. Further, development of the project site would be guided by the Design Guidelines prepared for the project (Appendix B), which include additional design requirements for construction of the proposed project. Further, the project site is not located in a highly visible area and is developed on all sides with existing residential development. With implementation of existing regulations and the San Diego Municipal Code, the proposed project would not result in significant impacts related to obstruction of any vista or scenic view from a public viewing area as identified in the community plan; creation of a negative aesthetics site of project; bulk, scale, materials, or style that would be incompatible with surrounding development; substantial alteration to the existing or planned character of the area; loss of any distinctive or landmark tree(s); substantial change in the existing landform; or substantial light or glare.

The cumulative projects located closest to the project site would also be required to comply with the same development standards as the proposed project. Therefore, the proposed project would not combine with other cumulative projects or existing developments to result in significant aesthetic impacts. Under California Public Resources Code, Section 21099(d)(1), the proposed project would result in aesthetic impacts that would **not be cumulatively considerable**.

6.1.18 Water Quality

The City Significance Determination Thresholds (City of San Diego 2016) note that compliance with applicable City (and related) water quality standards is assured through required permit conditions. Adherence to the City stormwater standards is thus considered adequate to preclude surface water quality impacts, unless substantial evidence supports a fair argument that a significant impact will occur. Accordingly, conformance with the City stormwater standards would preclude potential water quality impacts from occurring. In addition, preparation of a stormwater pollution prevention plan, which would be implemented during construction, and preparation of project-specific stormwater quality management plan, which would be implemented during operation, would preclude potentially significant water quality impacts from occurring. All cumulative projects would be required to demonstrate compliance with state and local water quality regulations. If projects are not compliant,

mitigation measures would be required in order to ensure water quality impacts do not occur. Water quality impacts would **not be cumulatively considerable**.

6.1.19 Wildfire

With regard to wildfire hazards, as shown in Figure 5.19-1 and discussed in Section 5.19, Wildfire, the southern portion of the project site (Assessor's Parcel Numbers 31303132, 31304062, 31370401, and 31303128) and the southern surrounding area, as well as lands to the east across Interstate 15 are designated as a Very High Fire Hazard Severity Zone within the Local Responsibility Area (CAL FIRE 2009). One cumulative project, the Junipers, is located within or near a Very High Fire Hazard Severity Zone. However, all projects proposed within the urban/wildland interface would be required to meet minimum fire fuel modification and/or clearing requirements in addition to meeting the standards of the various fire codes in effect at the time of building permit issuance. Currently that is the 2017 Consolidated Fire Code, 2016 California Building Code, San Diego County requirements for Enhanced Building Construction, and California State Fire Marshal requirements for fire resistive construction; in addition to meeting the requirements for Brush Management specified within the San Diego Municipal Code. For projects within the City, these requirements are implemented through preparation of and compliance with a Fire Fuel Load Modeling Report and a Brush Management Plan, which is reviewed and approved by the Fire Marshal. The proposed project has prepared a Fire Fuel Load Modeling Report (Appendix D), which incorporates various project design and various site specific brush management features.

As stated in Section 5.19, Wildfire, the project proposes modified BMZ widths, which are considered appropriate alternative compliance, because the extended protective brush thinning zone around the riparian areas will create a fuel reduction buffer, reducing the potential of a ground fire transitioning into a crown fire. Additionally, providing a thinned zone and removing fire prone plant species adjacent to existing residential structures and replanting them with low maintenance, fire-resistive plant material, reduces the fire intensity and flame lengths significantly. The proposed combination of BMZs and alternative compliance measures would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties. As such, through compliance with existing regulations and similar project design features, as applicable, cumulative impacts to wildfire would **not be cumulatively considerable**.

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7 Effects Found Not to be Significant

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an environmental impact report (EIR) briefly describe potential environmental effects that were determined not to be significant and, therefore, were not discussed in detail in the EIR. Based on initial environmental review, the City of San Diego (City) determined that the proposed Trails at Carmel Mountain Ranch Project (project) would not have the potential to cause significant impacts associated with the areas discussed below.

7.1 Agricultural and Forestry Resources

The project site is a former 18-hole golf course surrounded by existing residential development. The project site is designated Park, Open Space, and Recreation in the City of San Diego's General Plan (City of San Diego 2008). Most of the parcels within the project site are zoned as Agricultural-Residential (AR-1-1). However, some of the smaller parcels (associated with the cart paths, cart tunnels, maintenance yard, and clubhouse) are zoned as Residential-Single Unit Zones (RS-1-12 and RS-1-14) or Residential-Multiple Unit Zones (RM-1-1, RM-2-5, and RM-3-7) (City of San Diego 2005). While the majority of the project site is zoned for agricultural use, it has historically been developed as a golf course and has not supported agricultural uses. Additionally, the entire project site and immediate surroundings are classified as "Urban and Built-Up Land" under the California Department of Conservation's Farmland Mapping and Monitoring Program (DOC 2018). The project site also does not contain any forest/timberland resources and is not identified for such uses. Therefore, the project would not result in an impact.

7.2 Mineral Resources

According to the California Department of Conservation's Generalized Mineral Land Classification Map of Western San Diego County, the project site is categorized as a combination of Mineral Resource Zone (MRZ) 1 and MRZ-2 (Miller 1996). The City's General Plan similarly designates the project site as a combination of MRZ-2 and MRZ-3 (City of San Diego 2008). MRZ-2 are lands where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence. MRZ-3 are areas containing mineral deposits, the significance of which cannot be evaluated from available data. Specifically, the MRZ-2 classification applies to the eastern portions of the project site and the immediate surrounding developed land. Despite the known mineral resource designation of the project site, the surrounding area has experienced increased urbanization and development with land uses (such as residential) incompatible with typical mineral extraction and processing operations. Similarly, the project site and surrounding area are historically and currently designated by the City's General Plan and zoned for uses that would preclude mineral resource operations. Additionally, as described in Section 5.1, Air Quality, grading of the project site would require import of soils. As such, the proposed project could use the potential construction grade aggregate located within the project site to the extent feasible during grading operations. Therefore, while the project would result in development of MRZ-2 lands, it would not result in the loss of mineral resources of statewide or local importance. No impact would result.

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8 Alternatives

8.1 Introduction

CEQA requires that environmental impact reports (EIRs) contain an analysis of alternatives to the project that would avoid or substantially lessen environmental impacts. Section 15126.6(a) of the CEQA Guidelines states that an EIR should “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” (14 CCR 15000 et seq.). The selection of alternatives is governed by a “rule of reason” that requires an EIR to evaluate only those alternatives necessary to permit a reasoned choice (Section 15126.6(f)). The EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons for that determination (Section 15126.6(c)). Additionally, CEQA requires discussion of a No Project Alternative to give decision makers the ability to compare impacts of approving the project with those of not approving the project (Section 15126.6(e)).

Pursuant to the CEQA Guidelines, a range of alternatives for the Trails at Carmel Mountain Ranch is considered in this EIR. These alternatives were developed in the course of project planning, environmental review, and public input. The discussion in this section provides a description of alternatives considered and an analysis of whether the alternatives meet most of the objectives of the project.

Per CEQA Guidelines, Sections 15126.6 (b) and (c), the focus of this analysis is to determine (1) whether alternatives are capable of avoiding or substantially lessening the significant environmental effects of the project, (2) the feasibility of alternatives, and (3) whether an alternative meets all or most of the basic project objectives. This chapter focuses on those alternatives that are capable of reducing or eliminating significant environmental impacts, even if they would impede the attainment of some project objectives or would be more costly. In accordance with Section 15126(f)(1) of the CEQA Guidelines, the factors that may be taken into account when addressing the feasibility of alternatives are site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site.

8.2 Project Objectives

The following are the goals and objectives of the project:

1. Provide for multi-family housing units with a range of housing types that are compatible with the adjacent established residential communities.
2. Assist the City of San Diego (City) in meeting state and local housing goals by providing opportunities for high-quality, new, market-rate and deed-restricted housing to meet the needs of current and future City residents on vacant land centrally located near existing jobs, transit, commercial, and industrial development.

3. Preserve the majority of the project site as open space, avoid areas of native vegetation or potentially suitable habitat for special-status plant species, and avoid areas of sensitive habitat including jurisdictional areas and their associated 100-foot buffers.
4. As a requirement of the City's Landscape Regulations, the project would replace dead and dying vegetation associated with the vacant and blighted golf course with drought-tolerant, native landscaping, while providing defensible space for the existing adjacent residences.
5. Create a wide-range of active and passive public recreational opportunities above and beyond what is required by City regulations.
6. Establish a multi-use trail system for pedestrians and bicyclists with connections to major amenities and adjacent neighborhoods. Establish a public system of trails and paths for community-wide use, thereby providing enhanced neighborhood connectivity.
7. Ensure new uses are compatible with the existing community by establishing 50-foot setbacks, design regulations and guidelines, best practices, and performance standards to ensure that the project is cohesive and respectful of existing properties.

8.3 Significant Impacts

As discussed throughout this EIR, implementation of the project would result in significant impacts to transportation/circulation, biological resources, historic resources, noise, population and housing, public services (libraries), public utilities, and tribal cultural resources. Impacts relative to biological resources, historic resources, noise, public utilities and tribal cultural resources would be mitigated to below a level of significance with implementation of mitigation measures identified in this EIR. Direct and cumulative impacts related to transportation/circulation, public services (libraries), and population/housing would remain significant and unavoidable. The project alternatives evaluated below were developed to address the project's significant impacts.

8.4 Alternatives Eliminated from Detailed Consideration

In accordance with CEQA Guidelines Section 15126.6(c), an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and should briefly explain the lead agency's determination. Factors that may be used to eliminate alternatives from detailed consideration in an EIR include failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental effects. The following are alternatives that have been rejected by the lead agency and do not require further analysis in this EIR.

Off-Site Location Alternative

Section 15126.6(f)(2) of the CEQA Guidelines provides that off-site alternatives should be considered if development is feasible and would avoid or substantially lessen the significant effects of the project.

Factors that need to be considered when identifying an off-site alternative includes the size of the site, its location relative to the general area, the General Plan (or other applicable planning document) land use designation, and the ability to meet the project objectives.

There are no other parcels in the general vicinity of I-15/SR-56 of comparable size, containing the Transit Priority Area (TPA) designation that could support the development of multi-family residential, with open space, and 6 miles of trails. The properties are either developed, currently processing development approvals, or are currently undergoing renovation. Additionally, redevelopment of another site would not achieve Objective 2, which has the goal of providing opportunities for high-quality, new, market-rate and deed-restricted housing to meet the needs of current and future City residents on vacant land centrally located near existing jobs, transit, commercial, and industrial development. The applicant does not have ownership of any similarly sized land in the project area. The applicant cannot reasonably acquire, control, or otherwise have access to other sites in the area that would meet the project objectives. Therefore, off-site alternatives were rejected from further consideration because they could not feasibly achieve most of the project objectives.

Single-Family Housing Alternative

A Single-Family Housing Alternative was also considered, but ultimately rejected. This alternative would result in fewer units being developed, which would reduce the project's significant and unavoidable transportation VMT-related impacts and population/housing impacts, although not to a level below significance. This alternative would also reduce the project's already less than significant impacts associated with air quality, greenhouse gas, energy, noise, and public services. However, this alternative would have a substantially larger development footprint compared to the proposed project and would result in greater impacts to biological resources, historical resources, and tribal cultural resources. This alternative could also result in impacts to environmentally sensitive lands, and would have a reduction in the amount of open space compared to the proposed project. In addition, there would be fewer deed restricted affordable housing units under this alternative.

Moreover, this alternative would be contrary to the direction provided by the City of San Diego Planning Commission, which recommended that open space be maximized as much as possible, and that smaller and more attainably priced housing opportunities be included. They also recommended that development should be clustered within a smaller area in order to minimize the development footprint.

This alternative would not achieve Objective No. 1, of providing multi-family housing units within a range or housing types that would be compatible with adjacent established residential communities. This alternative would also not achieve Objective No. 3 of preserving a majority of the project site as open space, and avoiding areas of native vegetation. In addition, this alternative would not meet Objective No. 2, aid the City in meeting state and local housing goals, to the same extent as the proposed project. For these reasons, this alternative was rejected.

8.5 Alternatives Under Consideration

This analysis focuses on alternatives capable of avoiding or substantially lessening any of the significant effects of the project, even if the alternatives would impede, to some degree, the attainment of project objectives.

Per CEQA Guidelines Section 15126.6(e)(2), "the no project analysis shall discuss the existing conditions..., as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, but based on current plans and consistent with available infrastructure and community services."

Section 15126.6(e)(3)(B) also indicates that “in certain instances, the no project alternative means ‘no build’ wherein the existing environmental setting is maintained.”

The following alternatives have been identified for analysis: No Project/No Development Alternative, Reduced Density Alternative, and Reduced Footprint Alternative.

8.6 Environmental Analysis

8.6.1 No Project/No Development Alternative

Under the No Project/No Development Alternative, the project would not be implemented and the site would remain in its current condition.

Under this alternative, none of the direct or indirect environmental impacts associated with construction and operation of the project would occur.

Project Objectives

The No Project/No Development Alternative would not meet any of the project objectives set forth in Section 8.2.

8.6.2 Reduced Density Alternative

This alternative would have the same footprint of the proposed project, but the density would be reduced. This would reduce the number of multi-family homes proposed from 1,200 to 825 (353 4-story apartments, and 472 3-story for-sale townhomes). This alternative would also reduce the estimated number of people anticipated to occupy the new development from 3,180 people to 2,186.

The same discretionary actions as would be required for the project would be required for this alternative, including a General Plan Amendment, Community Plan Amendment, Rezone, Vesting Tentative Map, and Master Planned Development Permit.

The intent of this alternative is to reduce the severity of impacts associated with population and housing, and traffic/transportation. Based on the analysis below, while this alternative would slightly reduce population and housing, and traffic/transportation impacts, they would nonetheless remain significant and unavoidable. Further, based on the analysis below, this alternative would reduce the following impacts identified as less than significant with or without mitigation under the proposed project, but would not avoid impacts: air quality, energy, greenhouse gas emissions, noise, public utilities, public services, and visual effects/neighborhood character,.

Land Use

Similar to the project, this alternative would not conflict with the environmental principles, goals, and policies contained within the General Plan or the Carmel Mountain Community Plan. This alternative would still require deviations from the zoning code associated with allowable height of structures, as well as, setback, width, depth, and frontage deviations. However, the requested deviations would not affect any other environmental issue or sensitive resource. In addition, similar to the proposed project, this alternative

would not conflict with the City's MSCP or an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, or any local policies or ordinances. Overall, impacts to land use compared to the project would be similar under this alternative.

Transportation/Circulation

Similar to the proposed project, this alternative would include multi-modal features such as an interconnected trail system available to the public, and the project is within close walking distance and biking distance of the Sabre Springs/Penasquitos Transit Station. This alternative would not result in inadequate emergency access or create hazardous design features. This alternative would also be consistent with plans, policies, and regulations related to the transportation system.

The census tracts containing the project site (170.56, 170.55, and 170.39) have a VMT per capita of 21.7, 21.4, and 23.2, respectively. These values are between 32-43% above the VMT significance threshold of 16.2. While modeling the alternative in the SANDAG model would provide the specific estimate of VMT per Capita, it can be inferred from the land use characteristics of the surrounding census tracts and their VMT rates, that it is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions. However, in comparison to the proposed project, the reduction of 375 units would reduce the number of trips added to the surrounding roadway network. Impacts would still be significant and unavoidable even with implementation of **MM-TRA-1**, however they would be reduced when compared to the project.

Air Quality and Odor

Although all construction air quality impacts were determined to be less than significant, construction emissions would be decreased when compared to the project, due to the reduction in 375 residential units. As with the project, all other criteria air pollutant emissions associated with construction of this alternative would be less than significant.

Similar to the proposed project, maximum daily overlap of construction and operation would not exceed the operational emissions threshold or the 100 pounds per day threshold of PM₁₀. Construction and operation of this alternative would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Air emissions associated with operation of this alternative would be reduced compared to the project because fewer vehicle trips would occur compared to the project. Overall, impacts to air quality would be reduced compared to the proposed project; however, all impacts would be less than significant, similar to the project.

Biological Resources

No biological resource impacts would be reduced with this alternative. This alternative would still be required to implement **MM-BIO-1** to reduce indirect impacts to special-status wildlife species to below a level of significance. Similar to the proposed project, this alternative would comply with the City's Biology Guidelines by avoiding all sensitive biological resources and through the establishment of wetland buffers around each City wetland (a full discussion of the wetland buffers is provided in Section 4 of the BTR). In addition, since the project site is not within or adjacent to designated MHPA lands, the alternative would not conflict with the City's environmentally sensitive land regulations. All other direct and indirect impacts associated with biological resources would be less than significant. Impacts would be the same as the proposed project as a result of this alternative.

Energy

Similar to the proposed project, this alternative would increase petroleum use during operation as a result of employees and customers commuting to the site and vendor trucks, the use would be a small fraction of the statewide and countywide use and, due to efficiency increases, would diminish over time. Petroleum consumption associated with construction and operation of this alternative would not be inefficient or wasteful and would be slightly reduced compared to the proposed project due to a reduction in development.

Because the proposed project, and this alternative would comply with Title 24, Part 6 and Part 11, it would be consistent with the City's General Plan Conservation Element policies pertaining to energy use, and would implement the required components identified within Step 2 and Step 3 of the City's CAP Checklist, no conflict with existing energy standards and regulations would occur. Therefore, similar to the proposed project, energy impacts would be less than significant; albeit reduced in comparison.

Geologic Conditions

This alternative would be constructed on the same project site, with the same underlying geotechnical conditions. Therefore, similar to the proposed project, with implementation of the recommendations and appropriate building design measures consistent with the IBC/CBD, the risk of potential effects from geologic hazards would be reduced to an acceptable level of risk. Similarly, based on implementation of appropriate erosion and sediment control BMPs as part of, and in conformance with, an approved SWPPP and related City and NPDES requirements, associated potential erosion and sedimentation impacts from implementation of this alternative would be less than significant. Impacts would be the same as the proposed project.

Greenhouse Gases

Under this alternative, construction and operational GHG emissions would be reduced because less building square footage would be developed, and less traffic would be generated. However, similar to the proposed project, this alternative would be consistent with the City's CAP. This alternative would not conflict with the City's CAP or any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. However, overall, construction and operational GHG emissions would be reduced compared to the proposed project.

Health and Safety

This alternative would have the same potential risks associated with health and safety as the proposed project. The project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and a significant hazard to the public or environment would not result. Regulatory compliance and review of structures to be demolished by a qualified/certified technician would ensure exposure to toxic building materials would not occur. Compliance with the County's DEH VAP program would ensure that no people would be exposed to toxic substances, such as soil contamination from previous uses on the site, including pesticides and herbicides. Lastly, the project would not result in hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within 0.25 mile of an existing or proposed school.

This alternative would not result in airport safety hazards for people residing or working in the project area. In addition, regulatory compliance required as part of the project's condition of approval would

ensure potential impacts associated with the presence of pesticides would be less than significant, similar to the project. Impacts associated with health and safety would be the same as the proposed project.

Historical Resources

As this alternative would have the same project footprint, the Reduced Density Alternative would result in the same onsite historical resources impacts. . Like the project, this alternative would be required to implement **MM-HR-1** and **MM-HR-2** to ensure that impacts are reduced to a level below significance.

Hydrology

Similar to the proposed project, this alternative would increase the quantity of runoff on site, proposed storm drains would be sized to accommodate the post-project peak-flow conditions during final engineering. Further, small on-site redirection of flows would not alter general drainage patterns as on-site storm drain systems ultimately discharge to the same location downstream of the project. As such, this alternative would not result in increased runoff or have an adverse effect on drainage patterns, similar to the proposed project. Hydrology impacts associated with this alternative would be the same compared to the proposed project.

Noise

Noise associated with project construction under this alternative would be reduced compared to the project because less square footage would be developed. A similar array of construction activities would result, but construction activities would be less intensive. As with the project, noise associated with construction activities have the potential to exceed the City's 12-hour average noise standard of 75 dBA, and construction noise impacts would be reduced with implementation of **MM-NOI-1**, which would still be required under this alternative.

Regarding operation, similar to the proposed project, assuming an attenuation rate of 6 dB per doubling of distance and shielding that would break the line of site to the outdoor HVAC equipment, the noise level at the nearest receiving property line would be approximately 44.5 dBA during continuous operation, exceeding the San Diego Municipal Code residential noise level standard of 40 dBA between 10:00 p.m. and 7:00 a.m., resulting in an impact that would be reduced with implementation of **MM-NOI-2**.

Lastly, similar to the proposed project, sound levels associated with the outdoor recreation activities and events would have the potential to exceed San Diego Municipal Code non-transportation noise standards, and implementation of **MM-NOI-3** would be required. Therefore, although construction noise would be slightly reduced under this alternative due to the reduction in units, potential impacts would still occur and mitigation would still be required. Nonetheless, since the number residential units would be reduced compared to the proposed project, the level of noise during construction and under an operational scenario would be reduced compared to the proposed project.

Paleontological Resources

This alternative would not eliminate impacts to potential on-site paleontological resources, as the same footprint would be disturbed as the proposed project. Similar to the proposed project, because grading exceeds the CEQA Significance Determination Thresholds, the project is subject to the grading ordinance (San Diego Municipal Code Section 142.0151) and the requirement for paleontological monitoring, which

would be made a condition of approval. In accordance with Appendix P of the City's Land Development Manual, regulatory compliance would preclude impacts to paleontological resources; thus, impacts would be less than significant, similar to the proposed project.

Population and Housing

Compared to the proposed project, which would generate 3,180 people, this alternative would result in the generation of 2,186 people. Despite the alternative's consistency with the City's General Plan goals and policies and the Draft Housing Element's identification of development potential on site, the alternative is nonetheless not accounted for in currently adopted plans or forecasts. Thus, similar to the proposed project, this alternative would directly induce substantial unplanned population growth to the area based on the currently adopted Housing Element (City of San Diego 2013). Impacts would be slightly reduced with the reduction in units and population, but not to a level below significance. Impacts would be significant and unavoidable.

Public Services and Facilities

This alternative would result in less units being developed, and would generate less people, which would reduce the impact to fire and police services, schools, and libraries. Less calls would be generated for emergency or medical service in the future, and less students would attend surrounding schools. Although impacts to public services from the proposed project would be less than significant, the severity of impacts would be slightly reduced under this alternative.

Public Utilities

This alternative would reduce the demand on water supply, reduce the amount of wastewater generated, and reduce the amount of solid waste generated. Similar to the proposed project, landscaping would include California native drought-tolerant plant palette that is predominately consistent with the established Community Plan palette. Overall, impacts associated with utilities would be reduced under this alternative.

Tribal Cultural Resources

Similar to the project, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Impacts would be considered significant and similar to the proposed project, **MM-TCR-1** would be implemented to reduce impacts to a level below significance. Since this alternative would have the same footprint as the proposed project, impacts and mitigation measures would be the same.

Visual Effect and Neighborhood Character

Visual impacts would be similar to the proposed project, although the number of 4-story buildings would be reduced compared to the project. This alternative would also be considered an infill residential project within a transit priority area, so aesthetic impacts cannot be considered a significant impact under California Public Resources Code Section 21099. Further, because this alternative would not be located in a highly visible location, and through compliance with the Design Guidelines and the San Diego Municipal Code, the project would not result in bulk, scale, materials, or style which would be incompatible with surrounding development. Lastly, this alternative would not result in a significant impacts related to substantial alteration to the existing or planned character of the area such as could occur with the construction of a

subdivision in a previously undeveloped area. Visual impacts would be slightly reduced with the reduction in 4-story buildings, although overall, less than significant similar to the proposed project.

Water Quality

This alternative would be required to comply with the NPDES permit program similar to the proposed project. Under the NPDES permit program, BMPs are mandated for construction sites in which grading would be greater than 1 acre, through preparation of SWPPPs in order to reduce the occurrence of pollutants in surface water. Temporary construction BMPs would typically include street sweeping, waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, and proper handling and storage of hazardous materials. Typical erosion and sediment control BMPs include silt fences, fiber rolls, gravel bags, temporary desilting basins, velocity check dams, temporary ditches or swales, stormwater inlet protection, and soil stabilization measures. Implementation of these state-mandated measures, and implementation of the required SWPPP for this alternative, would ensure that short-term impacts from construction-related activities would not violate any water quality standards or WDRs and not further contribute to water quality impacts identified in the CWA Section 303(d) List of Water Quality Limited Segments.

Similar to the project, specific site design, source control, and treatment control BMPs, Low Impact Development practices, and project design measures would be implemented to ensure proposed water quality would not degrade further beyond existing conditions. Moreover, drainage flow volumes would remain the same as under existing conditions or would decrease following project implementation. Therefore, runoff from the project site would not adversely affect surface waters, water quality, or discharge pollutants to an already impaired water body under this alternative. Impacts would be the same under this alternative.

Wildfire

Similar to the proposed project, post-development BMZs in conjunction with proper long-term maintenance would substantially lower fire behavior intensity during peak weather conditions. This would provide the existing adjacent residential structures and proposed structures on site with the ability to survive a vegetation fire on the project site with little intervention of firefighting forces.

The proposed combination of BMZs and alternative compliance measures would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties. In addition, all habitable structures would be equipped with automatic alarm and sprinkler systems and would have fire resistance construction per Chapter 7A of the CBC. The City's Landscape and Fire Review staff have reviewed the Brush Management Plan and concluded that it adequately addresses the fire safety potentially affecting the project site. Lastly, the identified project features have been designed in accordance with the City's Landscape Regulations. This alternative would comply with state and City standards associated with fire hazards and prevention and impacts would be less than significant, similar to the proposed project. Therefore, impacts associated with wildfire would be the same as the proposed project.

Impact Summary

The Reduced Density Alternative would reduce the severity of the project's significant and unavoidable impacts associated with transportation/traffic and population/housing. However, these impacts would

remain significant and unavoidable under this alternative, and this alternative would therefore not avoid any of the project's significant impacts.

The following issue areas that would be less than significant with or without mitigation under the proposed project, would be slightly reduced under the Reduced Density Alternative: air quality, energy, greenhouse gas emissions, noise, public utilities, public services and facilities, and visual effects and neighborhood character.

The following issue areas that would be less than significant with or without mitigation under the proposed project, would be the same under the Reduced Density Alternative: land use, biological resources, geologic conditions, historical resources, health and safety, hydrology, paleontological resources, tribal cultural resources, water quality, and wildfire.

None of the impacts associated with this alternative would be greater than those of the proposed project.

Project Objectives

The Reduced Development Alternative would not meet all of the project objectives to the same extent as the proposed project. By reducing the number of units, the project would not provide multi-family units with a range of housing types (Objective No. 1) to the same extent as the project. Further, by reducing the number of residences within Units 5 and 6, which are the closest to the MTS Sabre Springs Transit Station, there would be less people located within walking distance. The purpose of objective No. 2 is to provide multi-family housing to meet the needs of current and future City residents on vacant land located near transit, and in particular in a Transit Priority Area. By removing some development within the locations closest units to the MTS Sabre Springs Transit Station, this objective would not be fully realized under this alternative.

8.6.3 Reduced Footprint Alternative

The Reduced Footprint Alternative would result in the elimination of development on Units 1 and 2, and increase density on Unit 9. This would remove 66 dwelling units from Unit 1 and 87 dwelling units from Unit 2. These dwelling units would then be added to Unit 9, which would increase the number of dwelling units on Unit 9 from 300 to 453. The alternative would have 1,200 total residential units, similar to the proposed project. In order to accommodate an additional 153 dwelling units on Unit 9, buildings would have to be 4 to 6 stories in height (48 to 68 feet tall). The height deviation request would need to be increased in comparison to the proposed project. The project is requesting a height deviation of up to 48 feet while the Reduced Footprint Alternative would request a height deviation of up to 68 feet in order to accommodate in the increase in dwelling units on Unit 9.

The same discretionary actions as required for the project would also be required for this alternative, including a General Plan Amendment, Community Plan Amendment, Rezone, Vesting Tentative Map, and Master Planned Development Permit.

The intent of this alternative is to reduce the amount of land disturbance than what would occur under the project. Less land contouring would be necessary to construct the building pads, driveways, retaining walls, and on-site drainage facilities, and thus, this alternative would reduce, impacts to historical resources, paleontological resources, and tribal cultural resources. However, notably, impacts to these resources were already less than significant under the proposed project. This alternative would

not reduce the project's significant and unavoidable impacts associated with transportation/traffic and population/housing.

Land Use

Similar to the project, this alternative would not conflict with the environmental principles, goals, and policies contained within the General Plan or the Carmel Mountain Community Plan. This alternative would still require deviations from the zoning code associated with allowable height of structures, as well as, setback, width, depth, and frontage deviations. Height deviations requested as a result of this alternative would be greater than those requested as part of the proposed project. This alternative would be designed to include 4 to 6 story residential buildings on Unit 9, which would require a height deviation of up to 68 feet. However, the requested deviations would not affect any other environmental issue or sensitive resource. In addition, similar to the proposed project, this alternative would not conflict with the City's MSCP or an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, or any local policies or ordinances. Overall, impacts to land use compared to the project would be similar under this alternative.

Transportation/Circulation

Similar to the proposed project, this alternative would include multi-modal features such as an interconnected trail system available to the public, and the project is within close walking distance and biking distance of the Sabre Springs/Penasquitos Transit Station. This alternative would not result in inadequate emergency access or create hazardous design features. This alternative would also be consistent with plans, policies, and regulations related to the transportation system.

Further, the census tracts containing the project site (170.56, 170.55, and 170.39) have a VMT per capita of 21.7, 21.4, and 23.2, respectively. These values are between 32-43% above the VMT significance threshold of 16.2. While modeling the alternative in the SANDAG model would provide the specific estimate of VMT per Capita, it can be inferred from the land use characteristics of the surrounding census tracts and their VMT rates, that it is unlikely the project would generate VMT per capita of 15% below the regional average, even with TDM reductions. The same number of vehicles would be generated by this alternative and impacts would remain significant and unavoidable even with implementation of **MM-TRA-1**.

Air Quality and Odor

Construction air quality impacts were determined to be less than significant as part of the proposed project, and since the number of residential units would remain the same under this alternative, construction impacts would be the same. As with the project, all other criteria air pollutant emissions associated with construction of this alternative would be less than significant.

Similar to the proposed project maximum daily overlap of construction and operation would not exceed the operational emissions threshold or the 100 pounds per day threshold of PM₁₀. Construction and operation of this alternative would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Air emissions associated with operation of this alternative would not be reduced compared to the project because the same number of vehicle trips would occur compared to the project. Overall, impacts to air quality would remain the same when compared to the project; and all impacts would be less than significant, similar to the project.

Biological Resources

This alternative would have a slightly reduced footprint with the elimination of development in Units 1 and 2; however, no direct or indirect biological resource impacts would be reduced with this alternative. This alternative would still be required to implement **MM-BIO-1** to reduce indirect impacts to special-status wildlife species to below a level of significance. Similar to the project, this alternative would avoid all sensitive biological resources and would also establish wetland buffers around wetland areas... All other direct and indirect impacts associated with biological resources would be less than significant. Impacts would be the same as the proposed project as a result of this alternative.

Energy

Similar to the proposed project, this alternative would increase petroleum use during operation as a result of employees and customers commuting to the site and vendor trucks, the use would be a small fraction of the statewide and countywide use and, due to efficiency increases, would diminish over time. Petroleum consumption associated with construction and operation of this alternative would not be inefficient or wasteful and would be slightly reduced compared to the proposed project due to a reduction in development.

Because the proposed project, and this alternative would comply with Title 24, Part 6 and Part 11, it would be consistent with the City's General Plan Conservation Element policies pertaining to energy use, and would implement the required components identified within Step 2 and Step 3 of the City's CAP Checklist, no conflict with existing energy standards and regulations would occur. Therefore, similar to the proposed project, energy impacts would be less than significant; and no reduction would occur, since the same number of units would be constructed.

Geologic Conditions

This alternative would be constructed on the same project site, with the same underlying geotechnical conditions. Therefore, similar to the proposed project, with implementation of the recommendations and appropriate building design measures consistent with the IBC/CBD, the risk of potential effects from geologic hazards would be reduced to an acceptable level of risk. Similarly, based on implementation of appropriate erosion and sediment control BMPs as part of, and in conformance with, an approved SWPPP and related City and NPDES requirements, associated potential erosion and sedimentation impacts from implementation of this alternative would be less than significant. Impacts would be the same as the proposed project.

Greenhouse Gases

Under this alternative, construction and operational GHG emissions would be the same, because the same building square footage would be developed, and the same amount of traffic would be generated. Similar to the proposed project, this alternative would be consistent with the City's CAP. This alternative would not conflict with the City's CAP or any applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Construction and operational GHG emissions would be the same compared to the proposed project.

Health and Safety

This alternative would have the same potential risks associated with health and safety as the proposed project. The project site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and a significant hazard to the public or environment would not result. Regulatory compliance and review of structures to be demolished by a qualified/certified technician would ensure exposure to toxic building materials would not occur. Compliance with the County's DEH VAP program would ensure that no people would be exposed to toxic substances, such as soil contamination from previous uses on the site, including pesticides and herbicides. Lastly, the project would not result in hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within 0.25 mile of an existing or proposed school.

This alternative would not result in airport safety hazards for people residing or working in the project area. In addition, regulatory compliance required as part of the project's condition of approval would ensure potential impacts associated with the presence of pesticides would be less than significant, similar to the project. Impacts associated with health and safety would be the same as the proposed project.

Historical Resources

This alternative would have a slightly reduced impact compared to the proposed project with the removal of development on Units 1 and 2. Impacts to on-site historical resources would be slightly reduced compared to the project, although mitigation would still be required. This alternative would be required to implement **MM-HR-1** and **MM-HR-2** to ensure that impacts are reduced to a level below significance. Impacts to historical resources would be slightly reduced compared to the proposed project.

Hydrology

Similar to the proposed project, this alternative would increase the quantity of runoff on site, proposed storm drains would be sized to accommodate the post-project peak-flow conditions during final engineering. Further, small on-site redirection of flows would not alter general drainage patterns as on-site storm drain systems ultimately discharge to the same location downstream of the project. As such, this alternative would not result in increased runoff or have an adverse effect on drainage patterns, similar to the proposed project. Hydrology impacts associated with this alternative would be the same compared to the project.

Noise

As shown in 5.11-12, the outdoor activity areas identified on the tentative map meet the "compatible" or "conditionally compatible" use thresholds for existing and future traffic noise levels, without accounting for noise level reductions provided by intervening elements in the vicinity, with the exception of Unit 5.

Based on the modeled traffic noise level from I-15, Unit 5 would be incompatible with the multi-family land use thresholds, not accounting for shielding provided by the existing earthen berm to the north of the site or the developments buildings. The earthen berm to the north would limit the exposure of the outdoor activity area to traffic noise being generated north of the proposed project and would likely provide a reduction of 2 to 3 dB from the calculated levels. Intervening buildings associated with the development would largely break line of sight to the outdoor activity area, resulting in a noise level reduction of 3 to 5 dB. Therefore, traffic noise levels at the common use outdoor activity area associated with Unit 5 are calculated to range from approximately 62 to 65 dB. Therefore, a multi-family use designed in accordance with the tentative map would be consistent with the conditionally acceptable threshold of the City of San Diego Land Use Compatibility Guidelines.

A similar array of construction activities would result, compared to the proposed project. As with the project, noise associated with construction activities have the potential to exceed the City's 12-hour average noise standard of 75 dBA, and construction noise impacts would be reduced with implementation of **MM-NOI-1**, which would still be required under this alternative.

Regarding operation, similar to the proposed project, assuming an attenuation rate of 6 dB per doubling of distance and shielding that would break the line of site to the outdoor HVAC equipment, the noise level at the nearest receiving property line would be approximately 44.5 dBA during continuous operation, exceeding the San Diego Municipal Code residential noise level standard of 40 dBA between 10:00 p.m. and 7:00 a.m., resulting in an impact that would be reduced with implementation of **MM-NOI-2**.

Lastly, similar to the proposed project, sound levels associated with the outdoor recreation activities and events would have the potential to exceed San Diego Municipal Code non-transportation noise standards, and implementation of **MM-NOI-3** would be required. Therefore, potential impacts would occur and mitigation would be required. Potential noise impacts would be the same compared to the project.

Paleontological Resources

This alternative would have a slightly reduced footprint compared to the project, with the elimination of development on Units 1 and 2, and therefore would slightly reduce, but not eliminate impacts to potential on-site paleontological resources. Similar to the proposed project, because grading exceeds the CEQA Significance Determination Thresholds, the project is subject to the grading ordinance (San Diego Municipal Code Section 142.0151) and the requirement for paleontological monitoring, which would be made a condition of approval. In accordance with Appendix P of the City's Land Development Manual, regulatory compliance would preclude impacts to paleontological resources; thus, impacts would be less than significant, similar to the proposed albeit slightly reduced due to the reduced footprint.

Population and Housing

The Reduced Footprint Alternative would also generate 3,180 residents like the project. Despite the alternative's consistency with the City's General Plan goals and policies and the Draft Housing Element's identification of development potential on site, the alternative is nonetheless not accounted for in currently adopted plans or forecasts. Thus, similar to the proposed project, this alternative would directly induce substantial unplanned population growth to the area based on the currently adopted Housing Element (City of San Diego 2013). Thus, impacts would be the same under this alternative, significant and unavoidable.

Public Services and Facilities

This alternative would result in the same number of units being developed, and would generate the same amount of people, which would result in a similar impact to fire and police services, schools, parks, and libraries. The same amount of calls would be generated for emergency or medical service in the future, and the same number of students would attend surrounding schools. Impacts to public services as a result of the proposed project would be less than significant, as would impacts under this alternative. Impacts would be the same.

Public Utilities

This alternative would have the same less than significant impact with mitigation (**MM-UTL-1**) on water supply, would result in the same amount of wastewater generated, and the same amount of solid waste

would be generated. Similar to the proposed project, landscaping would include California native drought-tolerant plant palette that is predominately consistent with the established Community Plan palette. Overall, impacts associated with utilities would be the same under this alternative.

Tribal Cultural Resources

This alternative would have a slightly reduced footprint compared to the project, with the elimination of development on Units 1 and 2, and therefore would slightly reduce, but not eliminate impacts to potential on-site tribal cultural resources. Similar to the project, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Impacts would be considered significant, similar to the project, and **MM-TCR-1** would be implemented to reduce impacts to a level below significance. Impacts would be slightly reduced under this alternative.

Visual Effect and Neighborhood Character

Although no development is proposed in Units 1 or 2 under this alternative, the height of buildings in Unit 9 would be approximately 20 feet taller compared to the proposed project. However, visual impacts would be similar to the proposed project. This alternative would also be considered an infill residential project within a transit priority area, so aesthetic impacts cannot be considered a significant impact under California Public Resources Code Section 21099. Further, because this alternative would not be located in a highly visible location, and through compliance with the Design Guidelines and the San Diego Municipal Code, the project would not result in bulk, scale, materials, or style which would be incompatible with surrounding development. Lastly, this alternative would not result in a significant impact related to substantial alteration to the existing or planned character of the area such as could occur with the construction of a subdivision in a previously undeveloped area. Overall, visual impacts would be slightly increased with the inclusion of 6-story buildings.

Water Quality

This alternative would be required to comply with the NPDES permit program similar to the proposed project. Under the NPDES permit program, BMPs are mandated for construction sites in which grading would be greater than 1 acre, through preparation of SWPPPs in order to reduce the occurrence of pollutants in surface water. Temporary construction BMPs would typically include street sweeping, waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials, and proper handling and storage of hazardous materials. Typical erosion and sediment control BMPs include silt fences, fiber rolls, gravel bags, temporary desilting basins, velocity check dams, temporary ditches or swales, stormwater inlet protection, and soil stabilization measures. Implementation of these state-mandated measures, and implementation of the required SWPPP for this alternative, would ensure that short-term impacts from construction-related activities would not violate any water quality standards or WDRs and not further contribute to water quality impacts identified in the CWA Section 303(d) List of Water Quality Limited Segments.

Similar to the project, specific site design, source control, and treatment control BMPs, Low Impact Development practices, and project design measures would be implemented to ensure proposed water quality would not degrade further beyond existing conditions. Moreover, drainage flow volumes would remain the same as under existing conditions or would decrease following project implementation. Therefore, runoff from the project site would not adversely affect surface waters, water quality, or

discharge pollutants to an already impaired water body under this alternative. Impacts would be the same under this alternative.

Wildfire

Similar to the proposed project, post-development BMZs in conjunction with proper long-term maintenance would substantially lower fire behavior intensity during peak weather conditions. This would provide the existing adjacent residential structures and proposed structures on site with the ability to survive a vegetation fire on the project site with little intervention of firefighting forces.

The proposed combination of BMZs and alternative compliance measures would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties. In addition, all habitable structures would be equipped with automatic alarm and sprinkler systems and would have fire resistance construction per Chapter 7A of the CBC. The City's Landscape and Fire Review staff have reviewed the Brush Management Plan and concluded that it adequately addresses the fire safety potentially affecting the project site. Lastly, the identified project features have been designed in accordance with the City's Landscape Regulations. This alternative would comply with state and City standards associated with fire hazards and prevention and impacts would be less than significant, similar to the proposed project.

Therefore, impacts associated with wildfire would be the same as the proposed project, even with removal of residences on Units 1 and 2.

Impact Summary

The Reduced Footprint Alternative would not reduce or avoid the project's significant and unavoidable impacts to traffic/transportation and population/housing.

The following issue areas that would be less than significant with or without mitigation under the proposed project, would be slightly reduced under the Reduced Footprint Alternative: historical resources, paleontological resources, and tribal cultural resources.

The following issue areas that would be less than significant with or without mitigation under the proposed project, would be the same under the Reduced Footprint Alternative: land use, transportation/circulation, air quality, energy, geologic conditions, greenhouse gas, health and safety, hydrology, noise, population and housing, public services and facilities, public utilities, water quality, and wildfire.

In comparison to the proposed project, the following less than significant impact would increased under the Reduced Footprint Alternative: visual effects and neighborhood character. Visual effects/neighborhood character impacts would be increased compared to the proposed project with the inclusion of 6-story buildings, which are not proposed as part of the project. However, due to the project's location being within a Transit Priority Area, impacts to this resource would remain less than significant.

Project Objectives

The Reduced Footprint Alternative would meet all of the project objectives.

8.7 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. The context of an environmentally superior alternative is based on consideration of several factors, including the proposed project's objectives and the ability to fulfill the goals while reducing potential impacts to the environment.

As shown in Table 8-1, the No Project/No Development Alternative would have the fewest impacts. Under this alternative, however, none of the project objectives would be met. As previously identified, 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." Thus, the environmentally superior alternative, as identified in the analysis above, would be the Reduced Density Alternative.

However, this alternative would not avoid any of the project's significant and unavoidable impacts to traffic/transportation and population/housing. The following issue areas that would be less than significant with or without mitigation under the proposed project, would be slightly reduced under the Reduced Density Alternative: air quality, energy, greenhouse gas emissions, noise, transportation/circulation, public utilities, public services and facilities, population and housing, and visual effects and neighborhood character. In addition, this alternative would meet most of the project objectives.

Table 8-1 summarizes the potential impacts of the alternatives evaluated as compared to the potential impacts of the project.

Table 8-1. Summary of Impacts for Each Alternative

Environmental Issue	Project	No Project / No Development Alternative	Reduced Density Alternative	Reduced Footprint Alternative
Land Use	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Transportation/ Circulation	Significant and Unavoidable	Impacts Avoided	Reduced, but remain Significant and Unavoidable	Similar Impacts
Air Quality and Odor	Less than Significant	Impacts Avoided	Reduced	Similar Impacts
Biological Resources	Less than Significant with Mitigation	Impacts Avoided	Similar Impacts	Similar Impacts
Energy	Less than Significant	Impacts Avoided	Reduced	Similar Impacts
Geologic Conditions	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Greenhouse Gases	Less than Significant	Impacts Avoided	Reduced	Similar Impacts
Health and Safety	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Historical Resources	Less than Significant with Mitigation	Impacts Avoided	Similar Impacts	Reduced
Hydrology	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Noise	Less than Significant with Mitigation	Impacts Avoided	Reduced	Similar Impacts
Paleontological Resources	Less than Significant	Impacts Avoided	Similar Impacts	Reduced
Population and Housing	Significant and Unavoidable	Impacts Avoided	Reduced, but remain Significant and Unavoidable	Similar Impacts
Public Services and Facilities	Significant and Unavoidable	Impacts Avoided	Reduced, but remain Significant and Unavoidable	Similar Impacts
Public Utilities	Less than Significant with Mitigation	Impacts Avoided	Reduced	Similar Impacts

Table 8-1. Summary of Impacts for Each Alternative

Environmental Issue	Project	No Project / No Development Alternative	Reduced Density Alternative	Reduced Footprint Alternative
Tribal Cultural Resources	Less than Significant with Mitigation	Impacts Avoided	Similar Impacts	Reduced
Visual Effect and Neighborhood Character	Less than Significant	Impacts Avoided	Reduced	Increased Impacts
Water Quality	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Wildfire	Less than Significant	Impacts Avoided	Similar Impacts	Similar Impacts
Meets Most of the Basic Project Objectives?	Yes	No	Yes (not to the same extent as the proposed project)	Yes (not to the same extent as the proposed project)

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9 Mandatory Discussion Areas

This section addresses significant environmental impacts that cannot be avoided if the proposed Trails at Carmel Mountain Ranch Project (project) is implemented, significant irreversible environmental changes that would be involved should the project be implemented, and the growth-inducing impact of the project.

9.1 Significant Environmental Effects that Cannot be Avoided if the Project is Implemented

Section 15126.2(b) of the California Environmental Quality Act (CEQA) Guidelines requires an environmental impact report (EIR) to identify significant environmental effects that cannot be avoided if a project is implemented (14 CCR 15000 et seq.). As discussed in Chapter 5, Environmental Analysis, of this EIR, implementation of the project would result in significant impacts related to the following issue areas: biological resources, transportation, historical resources, noise, population and housing, public services (libraries), public utilities, and tribal cultural resources. Incorporation of mitigation measures would reduce the project's significant impacts to less than significant, except for transportation, population and housing, and public services (libraries) which would remain significant and unmitigated.

9.2 Significant Irreversible Environmental Changes Caused by the Project

CEQA Guidelines Section 15126.2(c) requires the evaluation of significant irreversible environmental changes that would occur should a project be implemented, as follows:

- (1) Primary impacts, such as the use of nonrenewable resources (ie., biological habitat, agricultural land, mineral deposits, water bodies, energy resources, and cultural resources);
- (2) secondary impacts, such as road improvements, which provide access to previously inaccessible areas; and (3) environmental accidents potentially associated with the project.

Furthermore, Section 15126.2(c) of the CEQA Guidelines states that irretrievable commitments of resources should be evaluated to ensure that current consumption of such resources is justified. Implementation of the project would not result in significant irreversible impacts to agricultural land, mineral resources, water bodies, historical resources, paleontological resources, or tribal cultural resources.

The project site consists of a former golf course that is no longer active (except for the existing clubhouse) and is surrounded by existing residential development. The project site is designated Park, Open Space, and Recreation in the City of San Diego's General Plan (City of San Diego 2008), and Private Recreation-Golf Course under the Carmel Mountain Ranch Community Plan (City of San Diego 1999). The project site does not contain agricultural or forestry resources, as the project site and immediate surroundings are classified as Urban and Built-Up Land under the California Department of Conservation's Farmland Mapping and Monitoring Program (DOC 2020). No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is present on site. Although mineral resource deposits (MRZ-2) underlie portions of the project site (City of San Diego 2008; Miller 1996), the area surrounding the project site has experienced increased urbanization and development with land uses (such as residential) incompatible with typical mineral

extraction and processing operations. Additionally, the project site and surrounding area are historically and currently designated by the City's General Plan and zoned for uses that would preclude mineral resource operations; therefore, the loss of renewable mineral resources is not considered significant at a project-specific level.

Although the proposed project would require the spanning of approximately 0.001 acres of an unvegetated channel through the installation of an arch culvert, the structure and function of this channel would not be altered. Thus, no significant irreversible impacts to water bodies would occur.

The proposed project would require the commitment of energy and non-renewable resources, such as electricity, fossil fuels, natural gas, construction materials (e.g., concrete, asphalt, sand and gravel, steel, petrochemicals, and lumber), potable water, and labor during construction. New development within the project site would be required to comply with the California Energy Code (Title 24) and California Green Building Standards Code. The proposed project features a number of sustainable elements (e.g., rooftop photovoltaic solar panels, energy-efficient lighting and appliances, cool roofs, energy-efficient windows) to minimize its consumption of energy and non-renewable resources (see Section 5.7, Greenhouse Gases and Section 5.5, Energy, for further details). However, use of these resources on any level would have an incremental effect regionally and would, therefore, result in long-term irretrievable losses of non-renewable resources, such as fuel and energy.

While no existing native vegetation communities or special-status species would be removed or impacted as part of this project, approximately 70.88 acres of developed land/disturbed habitat would be directly impacted. Indirect impacts to special-status plants and vegetation communities may result primarily from adverse "edge effects" associated with construction activities, which can include dust, the introduction of invasive plant species, temporary access impacts, and increased human presence, which could disrupt plant and vegetation vitality in the short term. Wildlife may be indirectly impacted in the short-term by construction-related noise and other adverse edge effects, such as the introduction of invasive and pest species. Short-term construction-related noise can result in the disruption of foraging, nesting, and reproductive activities of breeding birds, resulting in significant impacts. Although irreversible, these impacts would be mitigated to a less-than-significant level by **Mitigation Measure (MM) BIO-1**, as outlined in Section 5.4, Biological Resources.

Implementation of the proposed project has the potential to disturb currently unknown sensitive subsurface deposits, historical resources, and tribal cultural resources and such impacts would be irreversible. These impacts, however, would be mitigated to below a level of significance as described in Section 5.7, Historical Resources, and Section 5.16, Tribal Cultural Resources, and recovery would occur during the construction monitoring process.

Paleontological resources could be disturbed but would be collected and recorded in compliance with existing regulations. Impacts to paleontological resources would result in a significant irreversible change to a non-renewable resource. However, compliance with the Appendix P to the City's Land Development Manual and the City's grading ordinance (San Diego Municipal Code Section 142.0151) would preclude any significant impacts to paleontological resources, as described in Section 5.12, Paleontological Resources.

Implementation of the proposed project has the potential to result in health and safety impacts due to demolition and construction activities, which could expose people or workers to hazardous building materials and hazardous contaminants within soil. However, impacts would be less than significant as described in Section 5.8, Health and Safety.

The project would not involve a roadway or highway improvement that would provide access to previously inaccessible areas. The proposed project's circulation system is designed to interconnect with the existing adjacent public street system and discourage cut-through automobile traffic. Therefore, the proposed project would not result in significant irreversible environmental changes.

9.3 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines mandates that the growth-inducing impact of a project be discussed (14 CCR 15000 et seq.). This guideline states that the growth-inducing analysis is intended to address the potential for the project to "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment," and to "encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively" through extension or expansion of existing services, utilities, or infrastructure. This second issue involves the potential for the project to induce further growth through the expansion or extension of existing services, utilities, or infrastructure. The CEQA Guidelines further state, "it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

The City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2016) state that a project would have a significant impact related to growth inducement if it would:

1. Induce substantial population growth in an area.
2. Substantially alter the planned location, distribution, density, or growth rate of the population of an area.
3. Include extensions of roads or other infrastructure not assumed in the community plan or adopted Capital Improvement Project list, when such infrastructure exceeds the needs of the project and could accommodate future development.

Short-Term Growth Inducement

During project construction, demand for various construction trade skills and labor would increase. It is anticipated that this demand would be met predominantly by the local labor force, and would not require importation of a substantial number of workers or cause an increased demand for temporary or permanent local housing. Further, construction of the project is expected to take approximately 34 months. Since construction would be short term and temporary, it would not lead to an increase in employment on site that would stimulate the need for additional housing or services. Accordingly, no associated substantial short-term growth-inducing effects would result.

Long-Term Growth Inducement

Per the CEQA Guidelines, growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment. The project proposes to construct 1,200 multi-family homes and a mix of open space and recreational uses on a former golf course within the Carmel Mountain Ranch Community Plan Area. Specifically, residential land uses would compose approximately 52.9 acres and would range in density from 13 to 37 dwelling units per acre. Open space uses would be composed of approximately 111.0 acres, which includes approximately 6 miles of publicly accessible trails and 7.9 acres of publicly accessible parkland; 78.1 acres of open space; and 25.0 acres of buffer area. In addition, the project proposes a 12,000-square-foot pad for future development of a community art gallery/studio located near the existing Carmel Mountain Ranch library.

As discussed in Section 5.1, Land Use, the project site is designated as Park, Open Space, and Recreation in the City of San Diego's General Plan (City of San Diego 2008) and Private Recreation-Golf Course under the Carmel Mountain Ranch Community Plan (City of San Diego 1999). The majority of the project site is zoned as AR-1-1, with smaller portions zoned as RS-1-12, RS-1-14, RM-1-1, RM-2-5, and RM-3-7. The project would require General Plan and Community Plan amendments as well as a rezone to allow for the proposed residential development on site.

As discussed in Section 5.13, Population and Housing, the proposed project would directly induce growth through the development of residential land uses within a former golf course, which would introduce new residents to the area. The proposed project's service population is based on San Diego Association of Government's (SANDAG) Series 13 Regional Growth Forecast, which estimates an average household size of 2.65 persons per household (SANDAG 2013). Utilizing SANDAG's persons per household coefficient, the proposed project would introduce an estimated 3,180 people to the area. Because the project proposes a General Plan amendment and rezone, the estimated population of 3,180 people would not have been accounted for in SANDAG's population projections for the Carmel Mountain Ranch Community Plan Area. While some amount of residential dwelling units would be permitted under existing zoning, the potential number of allowed units would be minimal in comparison to the 1,200 proposed dwelling units. Thus, the proposed project would introduce a population beyond what is planned for the project site. Further, construction of the proposed project would generate an economic stimulus from the use of building materials, the sales of residential units, and the introduction of new consumer demand in the area.

Regarding infrastructure, the properties surrounding the project site consist of residential development that is served by existing public service and utility infrastructure. As discussed in Section 5.15, Public Utilities, the proposed project would use existing utility connections that serve the surrounding community to accommodate the internal utility infrastructure needs of the development. No major new infrastructure facilities are required specifically to accommodate the proposed project. No existing capacity deficiencies were identified for water, wastewater, or storm drain facilities that would serve the project. Furthermore, the project would not generate sewage flow or stormwater that would exceed the capacity already planned for the sewer line or storm drain. In addition, the internal roadway network proposed to be constructed within the project site would connect to the existing roadway network surrounding the project site. Since the project site is surrounded by existing development, and would connect to existing utility infrastructure, implementation of the proposed project would not remove a barrier to economic or population growth through the construction or connection of new public utility infrastructure.

Thus, although the proposed project would not remove a barrier to growth, it would foster economic and population growth through the construction of additional housing in an area that has not been previously designated for residential development. Therefore, the proposed project would be considered growth inducing.

10 Mitigation Monitoring and Reporting Program

California Environmental Quality Act (CEQA), Section 21081.6, requires that a mitigation monitoring and reporting program (MMRP) be established upon certification of an Environmental Impact Report. It stipulates that “the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation” (California Public Resources Code, Section 21000 et seq.).

This MMRP has been developed in compliance with Section 21081.6 of CEQA and identifies (1) project design features to reduce the potential for environmental effects; (2) mitigation measures to be implemented prior to, during, and after construction of the Trails at Carmel Mt. Ranch (Project); (3) the individual/agency responsible for that implementation; and (4) criteria for completion or monitoring of the specific measures.

10.1 General

A. GENERAL REQUIREMENTS—PART I – Plan Check Phase (prior to permit issuance)

1. Prior to the issuance of a Notice To Proceed (NTP) for a subdivision, or any construction permits, such as Demolition, Grading or Building, or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD), (plans, specification, details, etc.) to ensure the MMRP requirements are incorporated into the design.
2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, **“ENVIRONMENTAL/MITIGATION REQUIREMENTS.”**
3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website: <http://www.sandiego.gov/development-services/industry/standtemp.shtml>.
4. The **TITLE INDEX SHEET** must also show on which pages the “Environmental/Mitigation Requirements” notes are provided.
5. **SURETY AND COST RECOVERY** – The Development Services Director or City Manager may require appropriate surety instruments or bonds from private Permit Holders to ensure the long-term performance or implementation of required mitigation measures or programs. The City is authorized to recover its cost to offset the salary, overhead, and expenses for City personnel and programs to monitor qualifying projects.

B. GENERAL REQUIREMENTS—Part II – Post-Plan Check (after permit issuance/prior to start of construction)

1. **PRE-CONSTRUCTION MEETING IS REQUIRED TEN (10) WORKING DAYS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.** The PERMIT HOLDER/OWNER is responsible to arrange and perform this meeting by contacting the CITY RESIDENT ENGINEER (RE) of the Field Engineering Division and City staff from MITIGATION MONITORING COORDINATION (MMC). Attendees must also include the Permit holder's Representative(s), Job Site Superintendent, and the following consultants:

Qualified Acoustician, Archaeologists(s), Native American Monitor(s), and Biologist(s)

NOTE: Failure of all responsible Permit Holder’s representatives and consultants to attend shall require an additional meeting with all parties present.

CONTACT INFORMATION:

- a. The PRIMARY POINT OF CONTACT is the **RE** at the **Field Engineering Division – 858.627.3200**
 - b. For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call **RE and MMC** at **858.627.3360**
2. **MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) Number 652519 and/or Environmental Document Number 652519, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD’s Environmental Designee (MMC) and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e., to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc.).

NOTE: Permit Holder’s Representatives must alert RE and MMC if there are any discrepancies in the plans or notes, or any changes due to field conditions. All conflicts must be approved by RE and MMC BEFORE the work is performed.

3. **OTHER AGENCY REQUIREMENTS:** Evidence of compliance with all other agency requirements or permits shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency:
 - *Regional Water Quality Control Board: National Pollutant Discharge Elimination System General Construction Permit*
4. **MONITORING EXHIBITS** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11"x17" reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline’s work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.

NOTE: Surety and Cost Recovery – When deemed necessary by the Development Services Director or City Manager, additional surety instruments or bonds from the private Permit Holder may be required to ensure the long-term performance or implementation of required mitigation measures or programs. The City is authorized to recover its cost to offset the salary, overhead, and expenses for City personnel and programs to monitor qualifying projects.

5. **OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner’s representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

Table 10-1. Document Submittal/Inspection Checklist

Issue Area	Document Submittal	Associated Inspection/Approvals/Notes
General	Consultant Qualification Letters	Prior to Preconstruction Meeting

Table 10-1. Document Submittal/Inspection Checklist

Issue Area	Document Submittal	Associated Inspection/Approvals/Notes
General	Consultant Construction Monitoring Exhibits	Prior to or at Preconstruction Meeting
Biology	Biologist Limit of Work Verification	Limit of Work Inspection
Paleontology	Paleontology Reports	Paleontology Site Observation
Archaeology	Archaeology Reports	Archaeology/Historic Site Observation
Noise	Acoustical Reports	Noise Mitigation
Traffic	Traffic Reports	Traffic Features Site Observation
Tribal Cultural Resources	Native Plant Palette, Interpretative Signage Plan, Street Sign Plan, and Archaeology Reports	Native Plant Palette, Interpretative Signage Plan, Street Sign Plan, Archaeology Reports
Waste Management	Waste Management Reports	Waste Management Inspections
Bond Release	Request for Bond Release Letter	Final MMRP Inspections Prior to Bond Release Letter

10.2 Specific MMRP Issue Area Conditions/Requirements

10.2.1 Transportation/Circulation

As shown, the residential component of the project has a significant VMT transportation impact. The project will utilize participation in the Complete Communities, Mobility Choices program for mitigation for Impact TRA-1. The City of San Diego's Complete Communities, Mobility Choices Program requires VMT reducing amenities or payment of an in-lieu fee depending on a project's location. Compliance with the Mobility Choices Program can be used as mitigation for a significant VMT transportation impact. The City prepared an EIR for the Mobility Choices Program and disclosed that even with implementation of the regulations there would still be significant and unavoidable VMT impacts. Projects that utilize the Mobility Choice Program to provide mitigation for VMT transportation impacts are able to tier from the City's EIR, which was certified on November 9, 2020 by the City Council.

The Mobility Choices Program allows a project that has a significant impact to use compliance with the regulation as full, and compliance with the Program along with other available mitigations can be determined to be mitigation "to the extent feasible" for a significant and unavoidable transportation VMT impact. The requirements of the Mobility Choices Program are based on where a project is located in the City. The City is divided into four mobility zones. If a project is in mobility zones 1, 2, or 3 then the project is required to include VMT reducing amenities on or adjacent to the project site. If a project is located in mobility zone 4, the project is required to pay an in-lieu fee that would be used to construct VMT reducing infrastructure in mobility zones 1, 2, or 3. Based on the Mobility Choices Program map, a portion of the project is located in mobility zone 2, and a portion is in mobility zone 4.

MM-TRA-1: Since the regulations define mobility zone 2 as any premises located either partially or entirely in a Transit Priority Area, VMT reduction guidelines for mobility zone 2 were applied to the entire project. The project will include VMT reduction measures totaling at least 5 points in accordance with *Land Development Manual, Appendix T* as mitigation.

The project includes several features that qualify for points per Appendix T. Table 5.2-2 describes the specific measures and demonstrates that the project meets the required 5 points. These VMT reducing measures will be identified on the detailed site plans for each Unit as they move forward after the tentative map process, and will be called out on the overall project site plan for the discretionary process.

Table 5.2-2. The Trails VMT Reduction Measures

VMT Reduction Measures	Location within the Project	Points for Measure
<i>Appendix T Measure 12. Providing on-site bicycle repair station.</i>	On-site bicycle repair stations will be located within Unit 9, Unit 10, and Unit 16.	4.5 (1.5 x 3 stations)
<i>Appendix T Measure 16. Providing short-term bicycle parking spaces that are available to the public, at least 10% beyond the minimum requirements.</i>	Each Unit will provide short-term bicycle parking 10% beyond the minimum requirements for public use. For the entire Project, approximately 600 short term bicycle parking spaces are required for residents; therefore, approximately 60 additional bicycle parking spaces will be dispersed throughout the Project Units for public use.	1.5
Total Points		6

Source: Fehr & Peers

10.2.2 Biological Resources

MM-BIO-1 Biological Resources (Protection During Construction)

I. Prior to Construction

- A. Biologist Verification:** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2018), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.
- B. Preconstruction Meeting:** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

- C. Biological Documents:** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, Multiple Species Conservation Program (MSCP), Environmentally Sensitive Lands Ordinance (ESL), project permit conditions; California Environmental Quality Act (CEQA); endangered species acts (ESAs); and/or other local, state or federal requirements.
- D. BCME:** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.
- E. Avian Protection Requirements:** To avoid any direct impacts to the least Bell's vireo, Cooper Hawk, and yellow warbler, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The survey area shall cover the limits of disturbance and 300 feet from the area of disturbance. The applicant shall submit the results of the pre-construction survey to City DSD for review and approval prior to initiating any construction activities. If nesting least Bell's vireo, Cooper Hawk, and yellow warbler are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of the least Bell's vireo, Cooper Hawk, and yellow warbler or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.
- F. Resource Delineation:** Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including least Bell's vireo, Cooper Hawk, and yellow warbler) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
- G. Education:** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for

removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

- A. Monitoring:** All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSV). The CSV shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.
- B. Subsequent Resource Identification:** The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc). If active nests of the least Bell's vireo, Cooper Hawk, and yellow warbler or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

- A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

10.2.3 Historical Resources

MM-HR-1 Avoidance of Known Cultural Resources: Prior to beginning any construction related activity on-site associated with Phase 3 (Units 3, 4, 5, and 7), Owner/Permittee shall implement the conditions as detailed in MM-HR-2 Historical Resources (Construction Monitoring).

MM-HR-2 Construction Monitoring:

The following monitoring program shall be implemented to protect unknown archaeological or tribal cultural resources that may be encountered during construction and/or maintenance-related activities.

I. Prior to Permit Issuance

A Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification

1. The applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction**A. Verification of Records Search**

1. The PI shall provide verification to MMC that a site-specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4 mile radius.

B. PI Shall Attend Preconstruction (Precon) Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
 - b. The AME shall be based on the results of a site-specific records search as well as information regarding existing known soil conditions (native or formation).

3. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor(s) Shall be Present During Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.
2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSV). The CSV's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

- C. If Human Remains ARE determined to be Native American
 - 1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the Medical Examiner can make this call.
 - 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
 - 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
 - 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
 - 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN
 - c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.

V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries:

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSV and submit to MMC via fax by 8AM of the next business day:
 - b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV - Discovery of

Human Remains. Discovery of human remains shall always be treated as a significant discovery.

c. Potentially Significant Discoveries:

If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.

d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of construction

1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.

2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

A. Preparation and Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.

a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.

b. Recording Sites with State of California Department of Parks and Recreation

The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.

3. The PI shall submit revised Draft Monitoring Report to MMC for approval.

4. MMC shall provide written verification to the PI of the approved report.

5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
3. The cost for curation is the responsibility of the property owner.

C. Curation of artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

10.2.4 Noise

MM-NOI-1 Construction Noise Reduction Techniques. Prior to issuance of demolition, grading, or building permits, Mitigation Monitoring Coordination shall verify that construction activity occurring as a result of proposed project implementation within 175 feet of noise-sensitive receivers includes noise-reduction measures to ensure construction activities do not exceed the 75 dBA CNEL and comply with City of San Diego Noise Standards (San Diego Municipal Code Section 59.5.0401, Sound Level Limits, and Section 59.5.0404, Construction Noise), as follows:

- A. Construction operations and related activities associated with the proposed project shall be performed during daytime hours, as outlined within the San Diego Municipal Code, between 7:00 a.m. and 7:00 p.m., with the exception of the days and holidays identified in the Municipal Code.
- B. Construction equipment and vehicles shall be fitted with efficient, well-maintained mufflers that reduce equipment noise emission levels at the project site. Internal

combustion powered equipment shall be equipped with properly operating noise suppression devices (e.g., mufflers, silencers, wraps) that meet or exceed manufacturer specifications. Mufflers and noise suppressors shall be properly maintained and tuned to ensure proper fit, function and minimization of noise.

- C. Portable and stationary site support equipment (such as generators, compressors, rock crushers, and cement mixers) shall be located as far as possible from nearby noise-sensitive receptors.
- D. Impact tools shall have the working area/impact area shrouded or shielded, with intake and exhaust ports on power equipment muffled or suppressed. This may necessitate the use of temporary or portable, application specific noise shields or barriers if construction noise levels exceed the San Diego Municipal Code property line sound level threshold.
- E. Construction equipment shall not be idled for extended periods (e.g., 15 minutes or longer) of time in the immediate vicinity (i.e., within 25 feet) of noise-sensitive receptors.
- F. A disturbance coordinator shall be designated by the general contractor, which will post contact information in a conspicuous location near the entrance of the project construction site, prior to start of any construction activities so that it is clearly visible to nearby receivers most likely to be disturbed. The coordinator shall manage complaints resulting from the construction noise, by instituting modifications to the construction operations, construction equipment or work plan to ensure compliance with the San Diego Municipal Code standards, where complaints are valid and substantive. Recurring disturbances shall be evaluated by a qualified acoustical consultant retained by the project proponent to ensure compliance with applicable standards.

MM-NOI-2 Mechanical Equipment Noise Reduction Measures. Prior to issuance of building permit, Mitigation Monitoring Coordination shall verify that mechanical noise levels are minimized to meet applicable City of San Diego (City) noise thresholds through equipment selection, project-site design, and construction of localized barriers or parapets. Selection of mechanical equipment shall consider radiated outdoor sound pressure levels and efficiency as the primary criteria. Outdoor residential mechanical equipment shall be located so that line-of-site from the equipment to the adjacent noise-sensitive receiving property line is blocked by intervening building elements or structures. Should the selection and placement of mechanical equipment that inherently complies with the City's criteria not be possible, localized noise barriers for equipment located at grade, or rooftop parapets, shall be constructed around the heating, ventilation, and air-conditioning equipment so that line-of-site from the noise source to the property line of the adjacent noise-sensitive receptors is blocked. To ensure compliance with the San Diego Municipal Code, efficacy of the mechanical equipment location or intervening barrier shall be demonstrated through a noise analysis performed by a qualified acoustical consultant that shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.

MM-NOI-3 Outdoor/Recreational and Gathering Space Noise Reduction Measures. Prior to issuance of a building permit, Mitigation Monitoring Coordination shall verify that sound levels associated with outdoor recreation activities and community events through application of project-site design and limitations on event capacity, allowable equipment, and operational hours (i.e., 7:00 a.m. to 7:00 p.m.) are minimized to meet applicable City of San Diego (City) noise thresholds. Proposed recreational activity areas shall be located in a

manner to minimize noise exposure at surrounding noise-sensitive receptors. Use of recreational areas adjacent to noise-sensitive receptors shall be limited to daytime hours (7:00 a.m. to 7:00 p.m.), with the exception of temporary use permits granted by the City Manager. Community events using areas of the property immediately adjacent to noise-sensitive receptors shall be limited to daytime and evening hours (7:00 a.m. to 10:00 p.m.). The use of outdoor amplified sound systems shall be prohibited unless a detailed noise evaluation demonstrates such systems would be in compliance with San Diego Municipal Code. To ensure compliance with the San Diego Municipal Code, further noise analysis shall be performed for proposed recreational outdoor activity areas and community event venues by a qualified acoustical consultant with appropriate specifications provided for sound controls to meet applicable code requirements; the detailed noise analysis and controls shall be submitted to the satisfaction of the City Development Services Department prior to the issuance of building permits for the project.

10.2.5 Tribal Cultural Resources

MM-TCR-1 Prior to issuance of any construction permits, such as Demolition, Grading or Building, or beginning any construction related activity on-site, Owner/Permittee shall implement the conditions as detailed in MM-HR-2 Historical Resources (Construction Monitoring).

10.2.6 Public Utilities

MM-UTL-1: A fair-share contribution for the reconfiguration/retrofit of the Carmel Mountain High Water Pump Station would be required prior to the issuance of the first building permit for Unit 9.

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12 Individuals and Agencies Consulted

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Mark Storm, Acoustician
Matthew DeCarlo, Archeologist
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Angela Pham, Historical Resources Specialist
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LDR Geology – Kreg Mills

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LDR Planning – Joseph Stanco

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City of Poway**Poway Unified School District**