ALVARADO SPECIFIC PLAN

Draft Program Environmental Impact Report

SCH No. 2019059095

September 2020

Prepared for:
City of La Mesa
Community Development Department
8130 Allison Avenue
La Mesa, California 91942

Prepared by:
HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, California 91942

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AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing materials
ADMRT	Air Dispersion Modeling and Risk Tool
ADT	average daily traffic
AFY	acre-feet per year
AGR	Agricultural Supply
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMSL	above mean sea level
APCD	Air Pollution Control District
APN	Accessor's Parcel Number
APS	alternative planning strategy
AQTR	Air Quality Technical Report
AQUA	Aquaculture
ASP	Alvarado Specific Plan
AST	aboveground storage tank
ATS	advanced treatment system
Basin Plan	Water Quality Control Plan for the San Diego Basin
BAT	best available technology economically achievable
BCT	best conventional pollutant control technology
BIOL	Preservation of Biological Habitats of Special Significance
BMP	best management practice
BTU	British thermal units
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CBC	California Building Code
CBSC	California Building Standards Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CEUS	Commercial End Use Survey
CFG	California Fish and Game
CFGC	California Fish and Game Commission
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CHMIRS	California Hazardous Materials Incident Reporting System
CIR	compliance inspection report
City	City of La Mesa
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COMM	Commercial and Sport Fishing
CPS-SLIC	Cleanup Program Sites Spills, Leaks, Investigation, and Cleanup
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSMP	Construction Site Monitoring Program
CWA	Clean Water Act
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
DEH	Department of Environmental Health
DMA	Drainage Management Area
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DU	dwelling unit
du/ac	dwelling units per acre
ECHO	Enforcement and Compliance History Online
Ed Data	Education Data Partnership
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EO	Executive Order
EPIC	Energy and Policy Initiatives Center
ESA	Environmental Site Assessment
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency

FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FINDS	Facility Index System/Registry System
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
g	gravity
GHG	greenhouse gas
GPA	General Plan Amendment
gpd	gallons per day
GWP	global warming potential
H_2S	hydrogen sulfide
HA	hydrologic area
HARP	Hotspots Analysis and Reporting Program
HCP	Habitat Conservation Plan
Heartland Fire	Heartland Fire and Rescue
HELIX	HELIX Environmental Planning, Inc.
HFCs	hydrofluorocarbons
HMMD	Hazardous Materials Management Division
HRA	health risk assessment
HRS	Hazard Ranking System
HSA	hydrologic subarea
HU	Hydrologic Unit
HVAC	heating, ventilation, and air conditioning
HWD	Helix Water District
I-	Interstate
IEM	Iowa Environmental Mesonet
IND	Industrial Service Supply
IPCC	Intergovernmental Panel on Climate Change
ITP	Incidental Take Permit
IWMA	Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
IWRP	Integrated Water Resources Plan
JPA	joint powers agreement
JURMP	Jurisdictional Urban Runoff Management Program
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LDC	Land Development Code
L_{EQ}	one-hour average sound level
LID	Low Impact Development
LMMC	La Mesa Municipal Code
LOP	Local Oversite Program
LOS	level of service
LUST	Leaking Underground Storage Tank

MAR	Marine Habitat
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MCL	maximum contaminant level
MEP	maximum extent practicable
MG	million gallons
mgd	million gallons per day
MHMP	Multi-Jurisdictional Hazard Mitigation Plan
MIGR	Migration of Aquatic Organisms
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MOU	Memorandum of Understanding
mph	miles per hour
MPOs	metropolitan planning organizations
MS4	Municipal Separate Storm Sewer Systems
MSCP	Multiple Species Conservation Program
MT	metric ton
MTS	Metropolitan Transit System
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWJPA	Metro Wastewater Joint Powers Authority
N_2O	nitrous oxide
NA	Native American
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NAV	Navigation
NCCP	Natural Community Conservation Planning
NED	National Elevation Dataset
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NHTSA	United States Department of Transportation's National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intention
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NSLU	noise-sensitive land use
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment

OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
PEIR	Program Environmental Impact Report
PFCs	perfluorocarbons
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
POC	point of confluence
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PROC	Industrial Process Supply
Province	Peninsular Ranges Geomorphic Province
RAQS	Regional Air Quality Strategy
RARE	Rare Threatened or Endangered Species
RASS	Residential Appliance Saturation Survey
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RCRA-SQG	Resource Conservation and Recovery Act – Small Quantity Generator
REAP	Rain Event Action Plan
REC-1	Contact Water Recreation
REC-2	Non-contact Water Recreation
RECON	RECON Environmental, Inc.
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROG	reactive organic gas
RRP Rule	Renovation, Repair and Painting Rule
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SAFE Vehicles Rule	Safer Affordable Fuel-Efficient Vehicles Rule
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 Coast Information Center
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCRAA	San Diego County Regional Airport Authority
SDG&E	San Diego Gas & Electric
SDREO	San Diego Regional Energy Office
SDWA	Safe Drinking Water Act

SEL	sound exposure level
SF	square foot / feet
SF_6	sulfur hexafluoride
SHELL	Shellfish Harvesting
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SoundPLAN	SoundPlan Essential
SPWN	Spawning, Reproduction, and/or Early Development
SQG	small quantity generator
SR	State Route
SRRE	Source Reduction and Recycling Element
SUSMP	Standard Urban Storm Water Mitigation Plan
SWEEPS	Statewide Environmental Evaluation and Planning System
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
T_C	time of concentration
TDM	transportation demand management
TIA	Transportation Impact Analysis
TMDL	Total Maximum Daily Load
TOD	transit-oriented development
TPA	Transit Priority Area
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
Urbana	Urbana Preservation & Planning, LLC
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VCP	vitrified clay pipe
VdB	decibel notation
VMT	vehicle miles traveled
VOC	volatile organic compound
WARM	Warm Freshwater Habitat
Water Authority	San Diego County Water Authority
WDR	Waste Discharge Requirement
WILD	Wildlife Habitat
WLA	waste load allocation

WQBEL	water quality-based effluent limitation
WQIP	Water Quality Improvement Plan
WRCC	Western Regional Climate Center
WRI	World Resource Institute
WSA	Water Supply Assessment
WTP	Water Treatment Plant / Wastewater Treatment Plant
WURMP	Watershed Urban Runoff Management Program
ZEV	zero emissions vehicle

EXECUTIVE SUMMARY

This Program Environmental Impact Report (PEIR) for the proposed Alvarado Specific Plan (Specific Plan) and associated discretionary actions (collectively referred to throughout this PEIR as the "project") has been prepared on behalf of the City of La Mesa (City) in compliance with the California Environmental Quality Act (CEQA) Statute and Guidelines (Public Resources Code [PRC], Section 21000 et seq. and California Code of Regulations [CCR], Title 14, Section 15000, et seq.).

The project analyzed in this PEIR is a master development plan for a phased transit-oriented development (TOD) and associated public improvements as outlined in the Specific Plan. The proposed Alvarado Specific Plan is a comprehensive planning document (i.e., specific plan) that provides the framework to guide project development within the Specific Plan area and contains site-specific development regulations that further implement the City's General Plan.

In accordance with CEQA Guidelines Section 15121, the purpose of this PEIR is to provide public agency decision-makers and members of the public with detailed information about the potential significant environmental effects of the project, possible ways to minimize its significant effects, and reasonable alternatives that would reduce or avoid any identified significant effects.

ES.1 PROPOSED PROJECT

ES.1.1 Project Location and Setting

The Specific Plan area (project site) encompasses an approximately 12-acre site along the south side of Alvarado Road generally between 70th Street on the west and Guava Avenue on the east in the western portion of the City. The project site is bound by the 70th Street Trolley Station to the west, the Green Line trolley corridor to the south, a car dealership to the east, and Alvarado Road and Interstate 8 (I-8) to the north. The site is developed and currently contains a recreational vehicle (RV) resort facility with paved access roadways, RV spaces, a clubhouse, a swimming pool, other ancillary buildings, and three billboards. Alvarado Creek traverses the property as it flows under Alvarado Road in the eastern portion of the site and continues southwesterly and westerly along the southern boundary of the western portion of the site.

Alvarado Creek enters the site at the intersection of Alvarado Road on the east and continues through the site, bisecting the property until it enters an underground storm drainage facility in the western portion of the site. Alvarado Creek is channelized as it enters into the project site from the northeast and flows through a box culvert underneath a bridge over Alvarado Road. Alvarado Creek consists of a trapezoidal channel with concrete-lined banks and a natural channel bottom aside from the concrete aprons near the Alvarado Road overcrossing and at the western end of the site. Much of the channel supports vegetation including native and non-native species at varying vegetative cover, and water regularly flows through this section of Alvarado Creek.

Three freeway-oriented billboard signs are located within the project site along the Alvarado Road frontage. One is located at the eastern boundary of the site and is a single-sided sign oriented for viewers traveling along eastbound I-8. The other two signs occur in the western portion of site and are double sided. Overhead utility lines also cross over portions of the site that connect to 15 utility poles located throughout the site.

The project site is relatively level with a slight topographical variation as it slopes downward from east to west to the degree of approximately 10 feet. Existing on-site elevations range from approximately 400 feet above mean sea level (AMSL) to 410 AMSL.

ES.1.2 Project Description

The proposed project entails a master development plan (Specific Plan) for a phased transit-oriented development and associated public improvements. The project would include four development parcels that would be constructed in two phases. Phase 1 includes the parcels (Parcels 1-3) west of the intersection of Alvarado Creek and Alvarado Road. Phase 2 includes the parcel (Parcel 4) east of the intersection of Alvarado Creek and Alvarado Road. Each parcel would be developed with a multi-family residential building with ground-floor commercial uses.

Phase 1 would feature two multi-family residential buildings built on a podium deck over multi-level parking in the central portion of the site and a smaller-scale building in the western-most parcel. Phase 2 would include one building in the eastern portion of the site similar in size and scale to the two larger buildings constructed in Phase 1. The buildings would include up to five stories of residential units and one to three levels of parking. Each building would include a mix of housing types and sizes. In total, an estimated 850 to 950 residential units would be constructed at buildout. In addition to the residential uses, the project would include ground floor, resident-serving commercial uses.

The project would also include improvements to the Alvarado Creek channel within the project site, improvements to Alvarado Road, relocation of utilities, and pedestrian connection to the 70th Street Trolley Station.

ES.2 PROJECT OBJECTIVES

The goals and objectives of the project are to:

1. Address the City's housing supply needs by providing for the development of a mix of housing types to maximize the advantages of locating new infill housing in close proximity to existing regional transportation facilities, including the adjacent 70th Street Trolley Station, connecting bus routes, and freeway access;

2. Establish a land use plan that would improve public safety in the project area by providing public improvements at current City standards for Alvarado Road, construct channel improvements to address flooding conditions from Alvarado Creek, and relocation and improvement of existing sanitary sewer system infrastructure within the Alvarado Creek Flood Channel;

3. Provide high quality student housing with a short and direct link to San Diego State University from the 70th Street Trolley Station;

4. Establish a land use plan that would transform the site with private development and public improvements that would serve as a new and positive gateway image for the community;

5. Construct and maintain a multi-modal circulation system for vehicles, bicycles, and pedestrians to enhance accessibility and support active transportation and public transit use;

6. Transform Alvarado Creek within the Specific Plan Area into an urban creek and open space feature within a planned residential community;

7. Provide an environmentally sustainable residential development through the implementation of features such as energy conservation, sustainable landscape, water conservation, and support for alternative transportation, consistent with the City's Climate Action Plan (CAP); and

8. Create a unified private development plan that is consistent with the City's General Plan and SANDAG's San Diego Forward: The Regional Plan.

ES.3 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The Notice of Preparation (NOP) was distributed on May 21, 2019 for a 30-day public review and comment period, and a public scoping meeting was held on May 29, 2019 at the La Mesa Police Station located at 8085 University Avenue, La Mesa, California 91942. CEQA-related issues of potential controversy raised in response to the NOP include concerns related to regarding traffic, aesthetics, building heights, density, construction impacts, property management, property values, and residential unit types. Verbal and written comments received during the scoping process have been taken into consideration during the preparation of this PEIR. The NOP and comment letters are included in this PEIR as Appendix A.

ES.4 ALTERNATIVES

Section 15126.6(a) of the State CEQA Guidelines requires that EIRs describe "…a reasonable range of alternatives to a project, or the location of a 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." Section 15126.6(f) of the State CEQA Guidelines further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice."

Alternatives to the proposed project are evaluated in Chapter 7, *Alternatives*, of this PEIR. The evaluations analyze the ability of each alternative to further reduce or avoid the significant environmental effects of the proposed project. Each major issue area included in the impact analysis of this PEIR has been given consideration in the alternatives analysis. This PEIR evaluates three alternatives to the project: No Project Alternative, Reduced Density Alternative, and Phase 1 Only Alternative.

ES.4.1 No Project Alternative

The No Project Alternative assumes that the project would not be adopted, no multi-family residential buildings would be constructed, and no public improvements to Alvarado Creek, Alvarado Road, or utilities would be constructed. The existing RV resort would remain as well as other existing conditions.

ES.4.2 Reduced Density Alternative

The Reduced Density Alternative would involve a similar development proposal to the project, but with a 25 percent reduction in the number of residential units. Specifically, this alternative considers the development of 712 multi-family residential units along with up to 15,000 square feet (SF) of resident-serving commercial space. The public improvements to Alvarado Creek, Alvarado Road, and

utility facilities proposed as part of the project also would occur under this alternative. Under this alternative, the development footprint and number of buildings would be the same as the project; however, buildings would include fewer floors of residential built on the podium.

ES.4.3 Phase 1 Only Alternative

The Phase 1 Only Alternative would involve a similar development proposal to the project, as only Phase 1 would be developed on the project site. Under this alternative, the portion of the site west of Alvarado Creek would be developed with three buildings that would include up to 645 multi-family residential units along with some resident-serving commercial space. The buildings would the same as those of the project in terms of size, area, number of units, design, location, etc. The total area of the commercial space would be slightly less than the 15,000 SF associated with the project since three buildings would be constructed instead of four. The public improvements to Alvarado Creek, Alvarado Road, and utility facilities proposed as part of the project also would occur under this alternative. The eastern portion of the project site would not be redeveloped, and the existing RV resort would continue to operate in this portion of the site.

ES.4.4 Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires an EIR to identify the environmentally superior alternative. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, another environmentally superior alternative must be identified. Based on a comparison of the alternatives' overall environmental impacts and their compatibility with the proposed project's goals and objectives, the Reduced Density Alternative is the environmentally superior alternative for this PEIR.

ES.5 SUMMARY OF IMPACTS

The PEIR addresses in detail potentially significant environmental impacts associated with the following issue areas:

- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Paleontological Resources
- Public Services and Facilities
- Public Utilities
- Transportation
- Visual Resources

Table ES-1, *Summary of Impacts and Proposed Mitigation*, is presented at the end of this section and summarizes the results of the environmental analysis including the potentially significant environmental impacts of the proposed project and proposed mitigation measures to reduce or avoid these impacts. Impacts and mitigation measures are organized by issue in Chapter 4, *Environmental Analysis*. Based on this analysis, implementation of the proposed project would result in potentially significant impacts associated with the following issues:

- Biological Resources (sensitive species and nesting birds, sensitive vegetation, jurisdictional waters and wetlands, and consistency with habitat conservation plans);

- Cultural and Tribal Cultural Resources (unknown archaeological and tribal cultural resources);
- Hazards and Hazardous Materials (potential release of hazardous building materials during project construction); and
- Paleontological Resources (unknown paleontological resources).

The proposed project would not result in any significant and unavoidable environmental impacts. Mitigation measures have been identified that would reduce potentially significant environmental impacts to below a level of significance.

The cumulative impact analysis determines whether the proposed project's incremental effect would be "cumulatively considerable" when viewed in connection with the effects of past, present, or probable future projects. Table ES-2, *Summary of Cumulative Impacts*, is presented at the end of this section and identifies the potentially significant cumulative impacts of the proposed project to which the proposed project may contribute and proposed mitigation measures to reduce or avoid these impacts, as discussed in detail in Chapter 5, *Cumulative Impacts*, of this PEIR.

The project would not result in potentially significant impacts with respect to Agriculture and Forestry Resources, Energy, Mineral Resources, Population and Housing, and Wildfire, as described in Section 6.1, *Effects Found Not to be Significant*, of this PEIR.

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
AIR QUALITY				
Quality Plans: *Would the project conflict with or obstruct the implementation of the applicable air quality plan?*	Although the project would increase population density over what was considered in the Regional Air Quality Strategy (RAQS), it would result in vehicle miles traveled (VMT) per capita that would be below the region-wide average, which would overall reduce vehicular air pollutant emissions consistent with regional goals such as SANDAG's Regional Plan, Senate Bill (SB) 743, and the City's General Plan. Therefore, the project would not conflict with or obstruct implementation of the RAQS.	Less than significant	None required	Less than significant
Air Quality Standards: *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*	The project's construction and operational emissions of criteria pollutant and precursors would be below the San Diego Air Pollution Control District's screening-level thresholds. Therefore, the project would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.	Less than significant	None required	Less than significant
Sensitive Receptors: *Would the project expose sensitive receptors to substantial pollutant concentrations?*	Construction of the project would not expose sensitive receptors to substantial concentrations of toxic air contaminants (TACs), including diesel particulate matter (DPM). The project also would not result in the exposure of on-site sensitive receptors (i.e., future project residents) to substantial concentrations of DPM. Although project construction may require the demolition or renovation of existing structures constructed prior to 1979, which could result in the disturbance of asbestos containing materials (ACMs) and lead-based paint (LBP), compliance with established regulations would ensure that potential air quality impacts associated with exposure to ACMs and LBP would be less than significant.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
AIR QUALITY (cont.)				
	The proposed project would not result in a carbon monoxide (CO) hotspot or the exposure of sensitive receptors to substantial, project-generated, localized CO emissions.			
Odors: *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*	Potential construction-generated odors would be localized, temporary, intermittent, and not expected to affect a substantial number of people. The proposed project would not introduce land uses that would generate substantial odor during operations.	Less than significant	None required	Less than significant
BIOLOGICAL RESOURCES				
Sensitive Species: *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*	Potentially significant impacts to sensitive species (Cooper's hawk and other raptor species) and nesting birds could result from the proposed project.	Potentially significant	Mitigation Measure BIO-1 as identified in Section 4.2.6.1	Less than significant
Sensitive Habitats: *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?*	No permanent impacts to sensitive vegetation communities would occur. Implementation of the proposed project would result in temporary impacts to two sensitive vegetation communities, including freshwater marsh (0.04 acre) and willow woodland (0.01 acre).	Potentially significant	Mitigation Measure BIO-2 as identified in Section 4.2.6.2	Less than significant
Jurisdictional Waters and Wetlands: *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*	Implementation of the proposed project would result in permanent impacts to 0.03 acre of federal jurisdictional waters and 0.09 acre of state jurisdictional waters. Temporary impacts would occur to 0.06 acre of federal waters and 0.23 acre of state waters.	Potentially significant	Mitigation Measure BIO-3 as identified in Section 4.2.6.3	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIOLOGICAL RESOURCES (cont.)				
Wildlife Movement: *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*	Alvarado Creek functions as a local wildlife corridor. However, the portion of Alvarado Creek within and adjacent to the project site is not considered a regional wildlife corridor because although it may function for some local wildlife movement, the project site and surrounding areas are developed such that this reach of the creek does not serve as a habitat linkage to off-site wildlife corridors or large native habitat areas. Consequently, the proposed project would not substantially interfere with wildlife movement within this local wildlife corridor. No known or potential wildlife nursery sites occur on, or in the immediate vicinity, of the project site. As a result, the project would not impede the use of a native wildlife nursery site.	Less than significant	None required	Less than significant
Biological Resources Protection and Ordinances: *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*	The proposed project would not conflict with applicable goals, objectives, and policies within the General Plan Conservation and Sustainability Element or Recreation and Open Space Element. The project would minimize impacts to sensitive biological resources and Alvarado Creek would be revegetated with native riparian vegetation, which would provide for improved biological habitat and resources. New trees, ornamental landscaping, and native riparian vegetation would be planted as part of the comprehensive landscape plan for the project. New trees would be planted in accordance with the City's Tree Policy Manual, which provides a reference for existing guidelines, policies, and standards for the planting, care, preservation, maintenance, and replacement of trees. In addition, project implementation would not impact the City's habitat preserve area as identified in the La Mesa Subarea Habitat	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIOLOGICAL RESOURCES (cont.)				
	Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP). Therefore, the proposed project would not conflict with local policies or ordinances protecting biological resources.			
Habitat Conservation Plans: *Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?*	The project site is located within the boundaries of the City of La Mesa Subarea HCP/NCCP, but not within or in the vicinity of areas designated as Multi-Habitat Planning Area, Core Biological Resource Areas and Linkages, or other preserve lands as identified in the Subarea HCP/NCCP. Although the project site is located within a highly developed area of the City, there are trees throughout the site and riparian habitat along Alvarado Creek that could potentially support sensitive species (Cooper's hawk within trees and least Bell's vireo within riparian habitat) protected by the Subarea Plan.	Potentially significant	Mitigation Measure BIO-1 as identified in Section 4.2.6.1	Less than significant
CULTURAL AND TRIBAL CULTURAL RESOURCES				
Historical Resources: *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?*	The existing on-site buildings and the San Diego RV Resort do not meet the California Register of Historic Resources (CRHR) or La Mesa Historic Landmark eligibility criteria and thus, is ineligible for listing on the CRHR and ineligible for designation as a City of La Mesa Historic Landmark. Accordingly, the property does not meet the definition of an historical resource pursuant to Section 15064.5 of the CEQA Guidelines. Demolition and removal of the buildings, structures, and site features at the proposed property would not result in a substantial adverse change in the significance of a historical resource.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
CULTURAL AND TRIBAL CULTURAL RESOURCES	**(cont.)**			
Archaeological Resources: *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?*	No recorded prehistoric archaeological resources are listed on the project site or within the one-half mile radius buffer. Additionally, no prehistoric archaeological resources were observed on or near the site during the field survey. The project site, however, is located within the Alvarado Creek floodplain and consequently, there is potential that unknown prehistoric material has been buried by streambed deposits from periodic flooding of the creek. It is possible that construction-related subsurface grading and trenching activities may uncover buried unknown archaeological resources. In the event that subsurface archaeological resources are encountered during construction, such resources could potentially be damaged or destroyed, resulting in a substantial adverse change in the significance of an archaeological resource.	Potentially significant	Mitigation Measure CUL-1 as identified in Section 4.3.6.2	Less than significant
Tribal Cultural Resources: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 PRC 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*	Based on the Native American Heritage Commission Sacred Lands Files, South Coastal Information Center records search, field survey, and Native American outreach, no tribal cultural resources are known to occur in the project area. However, there is potential for unknown buried tribal cultural resources to be present given the site's location within the Alvarado Creek floodplain. Project construction could encounter unknown tribal cultural resources during subsurface grading and trenching activities that may have been buried by streambed deposits from periodic flooding of Alvarado Creek. If encountered, such resources could potentially be damaged or destroyed, resulting in a substantial adverse change in the significance of a tribal cultural resource.	Potentially significant	Mitigation Measure CUL-1 as identified in Section 4.3.6.2	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
CULTURAL AND TRIBAL CULTURAL RESOURCES	**(cont.)**			
set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				
GEOLOGY AND SOILS				
Seismic Hazards: *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?*	The project site is not underlain by a known active or potentially active fault. Therefore, the potential for ground surface rupture is considered to be low and it is unlikely that implementation of the proposed project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving ground rupture. The project site could potentially be subject to relatively high levels of ground shaking and site acceleration in the event of an earthquake on any of the major active faults in the region. Proper engineering and adherence to the California Building Code (CBC) guidelines would minimize the risk to life and property from potential ground motion at the project site. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving ground shaking. The potential for liquefaction at the project site is minimal due to the dense nature of the underlying formational materials associated with the Stadium Conglomerate. Therefore, it is unlikely that implementation of the proposed project would expose people or structures to substantial adverse effects involving liquefaction.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEOLOGY AND SOILS (cont.)				
	The project area is underlain by generally flat bedding and lacks steep slopes. The proposed project would follow the construction recommendations provided by the Geotechnical Investigation and CBC requirements, which would avoid potential slope failure and/or landslide hazards. Therefore, it is unlikely that implementation of the proposed project would expose people or structures to substantial adverse effects from seismic-induced landslides.			
Soil Erosion: *Would the project result in substantial soil erosion or the loss of topsoil?*	During project construction, erosion and sedimentation control best management practices (BMPs) would be implemented as part of the site-specific Storm Water Pollution Prevention Plan (SWPPP) developed pursuant to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and the City's Storm Water BMP Manual, which would minimize the effects of water erosion. Following construction of each phase, any remaining disturbed areas within that phase would be stabilized with landscaping to prevent erosion and topsoil loss.	Less than significant	None required	Less than significant
Unstable Soils: *Would the project be located on a geological unit or soil that is unstable as a result of the project, and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?*	The underlying formational materials (i.e., Stadium Conglomerate) would provide adequate support for the proposed structures and improvements. However, the existing artificial fill and stream deposits on the site within the first nine feet of depth are not considered suitable in their current condition to provide a stable soil base to support the proposed structures and improvements. Adherence to the recommendations contained in the Geotechnical Investigation, which will be required as project conditions of approval and incorporated into the construction contract specifications, would avoid impacts related to unstable soils.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEOLOGY AND SOILS (cont.)				
Expansive Soils: *Would the project be located on an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*	Soils at the project site are considered to have a very low to low expansion potential. Adherence to the recommendations contained in the Geotechnical Investigation, which will be required as project conditions of approval and incorporated into the construction contract specifications, would avoid impacts related to expansive soils.	Less than significant	None required	Less than significant
GREENHOUSE GAS EMISSIONS				
Generation of Greenhouse Gas (GHG) Emissions: *Would the project generate GHGs, either directly or indirectly, that may have a significant impact on the environment?*	The project's construction and operational GHG emissions would not exceed the City's GHG emissions target. Therefore, the project would not generate GHG emissions that may have a significant impact on the environment.	Less than significant	None required	Less than significant
Conflicts with GHG Reduction Plans, Policies, or Regulations: *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?*	The project's estimated GHG emissions per capita would be below the City's GHG emissions per capita reduction target selected for the Climate Action Plan (CAP). Therefore, the project would be consistent with the reduction strategies and GHG emissions per capita target and would be consistent with the CAP. The project would implement transit-oriented development near the 70th Street Trolley Station and reduce VMT per capita, consistent with SANDAG's Regional Plan. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Less than significant	None required	Less than significant
HAZARDS AND HAZARDOUS MATERIALS				
Release of Hazardous Materials: *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?* *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*	Implementation of the proposed project could result in a potentially significant hazards impact during demolition activities associated with release of ACM and/or LBP.	Potentially significant	Mitigation Measure HAZ-1 as identified in Section 4.6.6.1	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZARDS AND HAZARDOUS MATERIALS (cont.)				
Hazards to Schools: *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*	Implementation of the proposed project could result in a potentially significant hazards impact to people at nearby schools during demolition activities associated with release of ACM and/or LBP.	Potentially significant	Mitigation Measure HAZ-1 as identified in Section 4.6.6.1	Less than significant
Listed Hazardous Materials Sites: *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*	Although the project site is identified on two hazardous materials databases, neither listing represents a recognized environmental condition at the project site. Additionally, there are no off-site listed facilities that would represent a recognized environmental condition to the project site. Therefore, the project site is not located on a listed hazardous materials site compiled pursuant to Government Code Section 65962.5 that would create a significant hazard to the public or the environment.	Less than significant	None required	Less than significant
Airport Safety Hazards: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*	The project site is located within Airport Influence Area (AIA) Review Area 2 of the Montgomery-Gibbs Executive Airport but the proposed project would not include any structures that would exceed the Federal Air Regulations Part 77 height restrictions for the airspace protection area (200 feet) and thus, the project site would not be subject to safety hazards associated with Montgomery-Gibbs Executive Airport operations. Furthermore, due to the distance from the Grossmont Hospital heliport and the relatively low number of flights from this facility, the project site would not be subject to safety hazards associated with related heliport operations. Therefore, implementation of the proposed project would not result in airport safety hazards for people residing or working in the project area.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZARDS AND HAZARDOUS MATERIALS (cont.)				
Emergency Response and Evacuation Plans: *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*	Construction of the project could require temporary detours and/or lane closures that could temporarily disrupt travel along Alvarado Road for a period of time within the construction zone. Emergency access to all surrounding properties, however, would be maintained throughout the construction period. The project would provide adequate emergency access within the site. Therefore, implementation of the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than significant	None required	Less than significant
HYDROLOGY AND WATER QUALITY				
Water Quality: *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*	Based on the implementation of the project design elements, construction and post-construction BMPs, related maintenance efforts, and required conformance with City storm water standards (including the NPDES Construction General, Municipal and Groundwater permits), the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than significant	None required	Less than significant
Groundwater: *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*	Project implementation would result in an approximately 10-percent increase in impervious surfaces over the existing condition but would not substantially interfere with groundwater recharge at the site since it is currently minimal given existing drainage patterns and characteristics. It is anticipated that during construction, dewatering would be required and permit from the Regional Water Quality Control Board would be required. The project does not propose the long-term use of groundwater.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HYDROLOGY AND WATER QUALITY (cont.)				
Drainage Pattern Alteration: *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or impede or redirect flood flows?*	The proposed project would not substantially alter the existing drainage pattern of the site or area that would result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional resources of polluted runoff or impeded or redirect flood flows.	Less than significant	None required	Less than significant
Flood, Tsunami, and Seiche Zones: *Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*	The proposed improvements would fully contain the 100-year flow within the Alvarado Creek channel, with no adverse impacts to the water surface elevations upstream of the project site. Additionally, the proposed on-site storm drain system for the project has been designed with sufficient capacity to convey the 100-year storm event without causing flooding of the proposed streets and development. Due to the distance from the ocean and high elevation, the project site would not be subject to inundation by tsunami. The project site would not be subject to inundation by seiche due to the distance from local water bodies.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
HYDROLOGY AND WATER QUALITY (cont.)				
Water Quality Plans: *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*	The proposed project would implement a site-specific SWPPP pursuant to the NPDES Construction General Permit and the City's Storm Water BMP Manual and would adhere to applicable requirements outlined in the project Storm Water Quality Management Plan. The project would also comply with all storm water quality standards during construction and operation. Conformance with the Water Quality Control Plan for the San Diego Basin (Basin Plan) water quality objectives would be demonstrated through compliance with applicable regulations and implementation of construction and post-construction BMPs. Thus, the project would be consistent with the Basin Plan.	Less than significant	None required	Less than significant
LAND USE				
Community Division: *Would the project physically divide an established community?*	The project would not introduce any new roads or other linear features that would create new or exacerbate existing physical barriers. The project would improve mobility and connectivity within the project area. Consequently, the proposed project would reduce the amount of division that exists in the project area by improving walkability and bicycle opportunities within the project area and near the 70th Street Trolley Station. Therefore, implementation of the proposed project would not physically divide an established community.	Less than significant	None required	Less than significant
Consistency with Environmental Policies of Adopted Land Use Plans: *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*	The proposed project would be consistent with existing applicable local and regional land use plans, policies, and regulations, including San Diego Forward: The Regional Plan, La Mesa General Plan, La Mesa Zoning Ordinance, Climate Action Plan, Airport Land Use Compatibility Plan for Montgomery-Gibbs Executive Airport, Regional Air Quality Strategy, and the Water Quality Control Plan for the San Diego Basin. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
NOISE				
Noise Standards: *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*	During project construction, nearby properties would likely be exposed to construction noise levels that could be heard above ambient conditions; however, the exposure would be temporary and would not be considered adverse. The project would comply with all applicable noise regulations related to construction noise, minimizing potential impacts related to noise generation during construction. The project site would experience noise from vehicle traffic on I-8 and Alvarado Road, in addition to noise from trolley traffic on the adjacent trolley corridor. Such noise may exceed the applicable thresholds outlined in City's General Plan; however, the project would incorporate noise reduction design features that have been incorporated into the project design, which would reduce on-site noise levels from traffic to acceptable levels. Although the project would contribute to an increase in traffic volumes along Alvarado Road, ambient noise increases would be anticipated to be less than three dBA. Therefore, the project would not result in a substantial increase in ambient noise levels in the vicinity of the project such that noise levels at nearby noise-sensitive land uses would exceed applicable noise standards. Noise sources on the project site during project operation would not exceed the La Mesa Municipal Code noise limits at adjacent properties or result in a substantial permanent increase in existing noise levels.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
NOISE (cont.)				
Vibration: *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*	Project residents would not be exposed to excessive groundborne vibration or noise levels from the trolley corridor that would exceed applicable Federal Transit Administration (FTA) vibration thresholds. The project would not generate excessive groundborne vibration or groundborne noise levels during construction that would exceed applicable FTA vibration thresholds at nearby vibration-sensitive land uses.	Less than significant	None required	Less than significant
Airport Noise: *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*	The project site is not located within the 60 dBA Community Noise Equivalent Level (CNEL) noise contour of the nearest airports, specifically Gillespie Field, Montgomery-Gibbs Executive Airport, or MCAS Miramar. Additionally, the nearest heliport, located at Grossmont Hospital, includes five to ten flights every month, which is not enough to generate noise levels above 60 CNEL at the project site. Therefore, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels generated by airports.	Less than significant	None required	Less than significant
PALEONTOLOGICAL RESOURCES				
Paleontological Resources: *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*	Geological formations within the project site include a shallow layer of fill, stream deposits, and the Stadium Conglomerate Formation. While there is no potential for paleontological resources to exist within the fill material, the stream deposits have a low to moderate potential for resources and the Stadium Conglomerate Formation is assigned a high paleontological resource sensitivity rating. Thus, ground disturbing activities associated with construction of the project have the potential to uncover and potentially damage or destroy paleontological resources.	Potentially significant	Mitigation Measure PAL-1 as identified in Section 4.10.6	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
PUBLIC FACILITIES AND SERVICES				
Public Facilities: *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:* • *fire protection;* • *police protection;* • *schools;* • *parks; or* • *other public facilities?*	The project would increase the demand for public facilities and services, such as fire protection, police protection, schools, parks, and other public facilities. Heartland Fire and the La Mesa Police Department have the capacity and capability to provide service to the project. Additionally, the three schools designated to serve the project are not operating at full capacity. Further, the project would be subject to school facilities fees, which would serve as mitigation to any project-related impacts to school facilities. Similarly, the project would submit park development fees to minimize impacts related to parks. Implementation of the project would not cause a substantial change or increased demand for additional library services, and the additional project residents would not substantially increase the demand for other public facilities within the City (such as the community center, recreation center, municipal pool, baseball field, and Adult Enrichment Center) such that new or expanded facilities would be required as a result of the project. Implementation of the project therefore would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities.	Less than significant	None required	Less than significant
Deterioration of Existing Neighborhood Parks and Recreational Facilities: *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*	The project would increase the demand for use of existing public parks and recreational facilities in the project area, which could potentially result in physical deterioration of such facilities. However, the project would be required to pay a parkland improvement fee pursuant to Municipal Code Section 9.20.040 and 9.20.050. With payment of a parkland improvement fee, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
PUBLIC FACILITIES AND SERVICES (cont.)				
Construction or Expansion of Recreational Facilities: *Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?*	The project would include on-site recreational amenities for project residents. The environmental effects resulting from implementation of the proposed on-site recreational amenities are evaluated in this PEIR and where potential adverse physical effects could occur, mitigation is identified that would reduce impacts to below a level of significance. The project would contribute to the existing citywide need for additional park and recreational facilities but would require payment of a parkland improvement fee pursuant to Municipal Code Section 9.20.040 and 9.20.050 to offset the impact of new development on the City's existing facilities and infrastructure. Payment of a parkland improvement fee would not result in physical effects on the environment.	Less than significant	No additional measures required	Less than significant
PUBLIC UTILITIES				
Utilities: *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*	The project would not result in the need for new or expanded water facilities. The project proposes some sewer line relocations and improvements within and adjacent to the project site; however, the improvements would not result in environmental effects aside from those outlined in this PEIR. Further, based on the estimated project flows combined with both existing flows and subsequent developments, the existing and proposed sewer systems would have capacity to serve the project, and the project would not substantially contribute to, or exacerbate existing downstream sewer system capacity impacts. The project would involve the construction of new storm water drainage facilities within the project site; however, the proposed facilities would connect to the existing municipal storm drain system, the capacity of which would not be adversely affected by the project.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
PUBLIC UTILITIES (cont.)				
	The project would involve the relocation of the existing overhead power lines and telecommunications utility lines to underground. Relocation of such utilities would not result in environmental effects aside from those outlined in this PEIR. Additionally, the existing electric power distribution system and telecommunications distribution system would have adequate capacity to serve the project. Further, the project would connect to existing gas lines and would not adversely affect the capacity of the existing gas distribution system.			
Water Supply: *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*	The project is consistent with the water demands assumptions included in the regional water resource planning documents of Helix Water District (HWD), San Diego County Water Authority (Water Authority), and The Metropolitan Water District of Southern California (MWD). Current and future water supplies, as well as the actions necessary to develop these supplies, have been identified in the water resources planning documents of HWD, Water Authority, and MWD to serve the projected demands of the Specific Plan area, in addition to the existing and planned future water demands of HWD.	Less than significant	None required	Less than significant
Wastewater: *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*	The project would increase wastewater generation at the site. However, the project's increase would represent less than one percent of the remaining capacity at the project's wastewater treatment provider, the Point Loma Wastewater Treatment Plant (WTP). Therefore, the Point Loma WTP has adequate capacity to serve the project's projected demand in addition to its existing commitments.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
PUBLIC UTILITIES (cont.)				
Solid Waste Management: *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?* *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*	The project would divert a minimum of 75 percent of waste during project construction and operation, thereby adhering to the requirements in Title 14.27 of the City's Municipal Code and Assembly Bill (AB) 341. The project would also provide areas for storage and collection of recyclables and yard waste in accordance with 2019 Title 24 Part 11 California Green Building Standards Code (CALGreen) Standards. Following such standards would ensure that the project would also comply with Title 7.22 of the City's Municipal Code and AB 939. The project site would be serviced by EDCO, which would have sufficient landfill capacity to accommodate project waste for at least the next 15 years. Therefore, the project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. It would also comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Less than significant	None required	Less than significant
TRANSPORTATION				
Transportation Plans: *Would the project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*	The proposed project would be consistent with applicable transportation plans, including San Diego Froward: The Regional Plan, the Circulation Element of the General Plan, and the City of La Mesa Bicycle Facilities and Alternative Transportation Plan. Therefore, the project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
TRANSPORTATION (cont.)				
Vehicle Miles Traveled: *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*	The project is located within one half mile of an existing major transit stop, specifically the 70th Street Trolley Station, and is therefore presumed to have a less than significant impact on VMT per the Office of Planning and Research Technical Advisory screening thresholds. Although not required per the VMT screening threshold for proximity to transit, a VMT analysis was conducted for the project to determine whether it would exceed VMT thresholds. According to the VMT analysis prepared for the project, the VMT per capita resulting from the proposed project is 88 percent of the regional average, exceeding the 85 percent threshold for residential projects. However, the project would implement VMT reduction features including construction of a transit-oriented development and provision of pedestrian and bicycle facility improvements, which would reduce the project's VMT per capita to approximately 81 percent of the regionwide VMT per capita, meeting the 85 percent threshold. Therefore, the project would not conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).	Less than significant	None required	Less than significant
Transportation Design Hazards: *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	There would be no hazardous design features or incompatible uses introduced as a result of the project. The proposed shared-use path would be constructed as a Class I facility, which would provide a buffered facility dedicated for bicyclists and pedestrians. Roadway improvements would conform with applicable federal, State, and City design criteria which contain provisions to minimize transportation hazards. Further, the proposed uses are not anticipated to generate the types of traffic that would be incompatible with the existing transportation network. Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
TRANSPORTATION (cont.)				
Emergency Access: *Would the project result in inadequate emergency access?*	Emergency access to all surrounding properties would be maintained throughout the construction period, ensuring adequate emergency access during construction. The project would construct improvements to Alvarado Road, which would improve emergency access to the project site and surrounding areas. Within the project site, access for emergency vehicles would be provided along the proposed perimeter road, and fire lanes would be provided on site to accommodate emergency response vehicles such that Alvarado Road would not be obstructed for public safety vehicle movement as well as local traffic both to the east and west in the event of an emergency. Therefore, the project would not result in inadequate emergency access.	Less than significant	None required	Less than significant
VISUAL RESOURCES				
Scenic Vistas: *Would the project have a substantial effect on a scenic vista?*	No scenic vistas or panoramic views identified by the City's General Plan are located within the project vicinity, and the project site is not visible from any of them except for Mount Helix. However, the project would not adversely affect views from Mount Helix due to the distance from this scenic vista. The project site is also not located within the Scenic Preservation Overlay Zone, Hillside Overlay Zone, or other identified visually sensitive areas. Additionally, the project site does not contain any features that would be part of a scenic vista, nor does it provide any expansive views of notable regional landforms. Further, the limited views of Cowles Mountain from the project site would be maintained.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
VISUAL RESOURCES (cont.)				
Scenic Resources: *Would the project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?*	The project site is not visible from an officially designated state scenic highway, and therefore would not substantially damage scenic resources within a designated state scenic highway. The project would result in the loss of 155 Mexican fan palms that are identified as a scenic resource, specifically a landmark in the City's General Plan. However, the trees are not a unique or distinctive landmark, as palm trees are common in the region. Additionally, the project would create a scenic resource through the enhancement and restoration of Alvarado Creek as it traverses through the project site. Overall, project implementation would not substantially damage scenic resources or protected views and scenic resources within a state scenic highway.	Less than significant	None required	Less than significant
Visual Character and Quality: *Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point)? If the project is in an urbanized area, conflict with an applicable zoning and other regulations governing scenic quality.*	The project would not result in a substantial change to existing landforms. The proposed development would be consistent with the development patterns in the surrounding area, and would not introduce a new land use or new type of building form that does not currently exist in the immediate area. Although the project would be at a greater scale than surrounding development, the design and configuration of buildings and landscaping would reduce massing effects. The project site is located in an urbanized area that is identified as suitable for redevelopment with higher development intensities. Additionally, the visual quality from public viewpoints would be increased based on the added visual interest and increased visual unity, vividness, and intactness. Further, the project would be consistent with applicable scenic quality goals, objectives, and policies. For these reasons, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.	Less than significant	None required	Less than significant

Table ES-1 (cont.)
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Significance Before Mitigation	Mitigation	Significance After Mitigation
VISUAL RESOURCES (cont.)				
Light and Glare: *Would the project create new source of substantial light and glare, which would adversely affect day and nighttime views in the area?*	The net increase in nighttime lighting resulting from the project would not be considered substantial on a citywide or regional scale due to the urbanized nature of the site and surrounding area. Additionally, exterior lighting would adhere to the design guidelines in the proposed Specific Plan, and the project would not include large expanses of reflective material or surfaces such as glass or metal. Therefore, the proposed project would not result in a significant impact related to new sources of light and glare that would adversely affect day or nighttime views on the area.	Less than significant	None required	Less than significant

Table ES-2
SUMMARY OF CUMULATIVE IMPACTS

Environmental Issue	Geographic Scope of Cumulative Analysis	Significance of Cumulative Impact	Project Contribution
Air Quality	San Diego Air Basin	Less than significant	Not cumulatively considerable
Biological Resources	La Mesa Subarea Habitat Conservation Plan/Natural Community Conservation Plan study area	Less than significant with Mitigation Measures BIO-1, BIO-2, and BIO-3	Not cumulatively considerable
Cultural and Tribal Cultural Resources	City of La Mesa and immediately surrounding lands; San Diego region	Less than significant with Mitigation Measure CUL-1	Not cumulatively considerable
Geology and Soils	City of La Mesa and immediately surrounding lands	Less than significant	Not cumulatively considerable
Greenhouse Gas Emissions	Global	Less than significant	Not cumulatively considerable
Hazards and Hazardous Materials	Project site and adjacent properties (hazardous materials); AIA of Montgomery-Gibbs Executive Airport (airport safety hazards); City of La Mesa and immediately surrounding areas (emergency response and evacuation plans)	Less than significant	Not cumulatively considerable
Hydrology and Water Quality	San Diego Hydrologic Unit	Less than significant	Not cumulatively considerable
Land Use	City of La Mesa	Less than significant	Not cumulatively considerable
Noise	Area immediately surrounding the project site and roadways that would be used by resident vehicles	Less than significant	Not cumulatively considerable
Paleontological Resources	Coastal plain of San Diego County	Less than significant with Mitigation Measure PAL-1	Not cumulatively considerable
Public Facilities and Services	City of La Mesa and immediately surrounding areas	Less than significant	Not cumulatively considerable
Public Utilities	La Mesa region	Less than significant	Not cumulatively considerable
Transportation	City of La Mesa and immediate surrounding areas	Less than significant	Not cumulatively considerable
Visual Resources	Viewshed of the proposed project	Less than significant	Not cumulatively considerable

1.0 INTRODUCTION

This Program Environmental Impact Report (PEIR) for the proposed Alvarado Specific Plan (Specific Plan) and associated discretionary actions (collectively referred to throughout this PEIR as the "project") has been prepared on behalf of the City of La Mesa (City) in compliance with the California Environmental Quality Act (CEQA) Statute and Guidelines (Public Resources Code [PRC], Section 21000 et seq. and California Code of Regulations [CCR], Title 14, Section 15000, et seq.).

This section provides a brief description of the project scope; the purpose, type, and intended uses of the PEIR; the Lead, Responsible, and Trustee Agencies; the scope and content of the PEIR; an explanation of how the PEIR is organized; and an overview of the PEIR process. This PEIR contains an analysis of the project described in detail in Chapter 3.0, *Project Description*.

1.1 PROJECT SCOPE

The project analyzed in this PEIR is a master development plan for a phased transit-oriented development (TOD) and associated public improvements as outlined in the Specific Plan. The proposed Alvarado Specific Plan is a comprehensive planning document (i.e., specific plan) that provides the framework to guide project development within the Specific Plan area and contains site-specific development regulations that further implement the City's General Plan. A *specific plan* is a land use planning and regulatory tool authorized by the State to local governments as a means to implement the broad goals and policies of the local General Plan. A specific plan provides the link between the implementing policies of a General Plan and the more precise development plans for a defined area. A specific plan may cover a general set of objectives and broad policy issues within a community or subarea, or it can be tailored to a development plan for a defined neighborhood or site. The proposed Specific Plan covers the latter, in that it addresses a phased development plan on a specific property.

The Specific Plan area (project site) encompasses an approximately 12-acre site along the south side of Alvarado Road generally between 70th Street on the west and Guava Avenue on the east in the western portion of the City. The project site is bound by the 70th Street Trolley Station to the west, the Green Line trolley corridor to the south, a car dealership to the east, and Alvarado Road and Interstate 8 (I-8) to the north. The site is developed and currently contains a recreational vehicle (RV) resort facility with paved access roadways, RV spaces, a clubhouse, a swimming pool, other ancillary buildings, and three billboards. Alvarado Creek traverses the property as it flows under Alvarado Road in the eastern portion of the site and continues southwesterly and westerly along the southern boundary of the western portion of the site. Figure 1-1, *Regional Location*, depicts the general location of the project site within the region, and Figure 1-2, *Project Location*, shows the boundary of the project site and vicinity.

In addition to adoption of the Specific Plan, the project also includes a rezone to establish an Alvarado Specific Plan Overlay Zone and a Development Agreement to memorialize the project entitlements and the provisions for construction of proposed public improvements.

1.2 PURPOSE OF THE PROGRAM EIR

In accordance with CEQA Guidelines Section 15121, the purpose of this PEIR is to provide public agency decision-makers and members of the public with detailed information about the potential significant environmental effects of the project, possible ways to minimize its significant effects, and reasonable

alternatives that would reduce or avoid any identified significant effects. This PEIR is informational in nature and is intended for use by decision-makers, Responsible or Trustee Agencies as defined under CEQA, other interested agencies or jurisdictions, and the general public. The PEIR includes mitigation measures which, when implemented, would lessen project impacts and provide the City, the Lead Agency as defined in Article 4 of the CEQA Guidelines (Sections 15050 through 15051), with ways to substantially lessen or avoid significant effects of the project on the environment, whenever feasible.

1.3 TYPE OF EIR

This document is a PEIR, as defined in CEQA Guidelines Section 15168. A PEIR is prepared for a series of actions that are characterized as one large project and are related either:

1. Geographically;
2. Logical parts in the chain of contemplated actions;
3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or
4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Because the proposed project is comprised of a series of planned actions within the same project site and under the same regulatory process with similar environmental effects and mitigation strategies, a PEIR is appropriate.

1.4 INTENDED USES OF THE PEIR

As the proposed project entails a phased master development plan, full project implementation would require subsequent approval of development proposals for each parcel within the Specific Plan area (referred to as “later activity” in this PEIR) to carry out the land use plan and demonstrate compliance with policies presented in the Specific Plan. That is, development on each of the four parcels within the Specific Plan area and related site improvements would require review and approval of a Site Development Plan to implement the Specific Plan. Later activities within the Specific Plan area would be evaluated for compliance with Specific Plan regulations and guidelines.

In accordance with CEQA Guidelines Section 15168, a PEIR may serve as the Environmental Impact Report (EIR) for later activities or implementing actions associated with the project to the extent it contemplates and adequately analyzes the potential environmental impacts of those later activities. If, in examining later actions for development within the Specific Plan area, the City finds no new effects could occur or no new mitigation measures would be required other than those identified and/or required in this PEIR, the City can approve the activity as being within the scope covered by this PEIR and no new environmental documentation would be required.

Furthermore, this PEIR is also specifically intended to implement the intent of CEQA Guidelines Section 15182, which provides a CEQA exemption for certain residential, commercial, and mixed-use projects that are consistent with a specific plan for which an EIR has been prepared. Later activities or

implementation actions may be able to rely on this exemption if it meets the following criteria pursuant to CEQA Guidelines Section 15182(b) and (c):

- The later activity is a residential or mixed-use project, or has a floor area ratio of at least 0.75 on commercially zoned property;
- The later activity is located within a Transit Priority Area (TPA);
- The later activity is consistent with a specific plan for which an EIR was certified; and
- The later activity is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board has accepted the determination that the sustainable communities strategy or an alternative planning strategy would achieve the applicable greenhouse gas emissions reduction targets.

The City will conduct a consistency review or other equivalent analysis for each later activity to determine if that later activity would meet the criteria for this CEQA exemption. If the analysis finds that the later activity meets these criteria, the City must further determine if any of the events specified in CEQA Guidelines Section 15162 would occur with respect to that later activity, including:

- Substantial changes are proposed in the project which will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete shows any of the following:
    - The project will have one or more significant effects not discussed in the EIR;
    - Significant effects previously examined will be substantially more severe than shown in the EIR;
    - Mitigation measures or alternatives previously found to not be feasible would be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternative; or
    - Mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Further environmental review would be conducted only if any of these conditions would occur as a result of the implementation of the later activity associated with the proposed project. If additional environmental analysis is required, it can be streamlined by tiering from this PEIR pursuant to CEQA Guidelines Sections 15152, 15153, 15162, 15163, 15164, and 15168 (e.g., through preparation of a Mitigated Negative Declaration, Addendum, or Supplemental or Subsequent EIR).

1.5 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

1.5.1 Lead Agency

The City is the Lead Agency for the project pursuant to CEQA Guidelines Sections 15050 and 15051. The Lead Agency, as defined by CEQA Guidelines Section 15367, is the public agency that has the principal responsibility for carrying out or approving a project. The City conducted a preliminary review of the project and determined that a PEIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City.

1.5.2 Responsible and Trustee Agencies

State law requires that EIRs be reviewed by Responsible and Trustee Agencies. Responsible Agencies, as defined by CEQA Guidelines Section 15381, are public agencies that may have discretionary approval authority for a project. Trustee Agencies are defined in CEQA Guidelines Section 15386 as state agencies that have 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 proposed project may require subsequent actions and/or consultation from Responsible or Trustee Agencies. A brief description of some of the primary Responsible or Trustee Agencies that may have an interest in the project is provided below.

1.5.2.1 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) has jurisdiction over development in or affecting the navigable waters of the United States, pursuant to two federal laws: the Rivers and Harbors Act of 1889 and the Clean Water Act (CWA), as amended. A “navigable water” is generally defined by a blue line as plotted on a United States Geological Survey (USGS) quadrangle map. Projects that include potential dredge or fill impacts to waters of the United States are subject to Section 404 of the CWA. Impacts to waters of the United States (defined as direct fill or indirect effects of fill) greater than one-half acre require an individual permit. All permits issued by the USACE are subject to consultation and/or review by the U.S. Fish and Wildlife Service (USFWS) and the U.S. Environmental Protection Agency (USEPA).

1.5.2.2 U.S. Fish and Wildlife Service

Acting under the federal Endangered Species Act (FESA), the USFWS is responsible for ensuring that any action authorized, funded, or carried out by a federal agency (such as the USACE) is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Accordingly, the USFWS will provide input to the USACE as part of the CWA Section 404 process.

1.5.2.3 California Department of Fish and Wildlife

The California Department of Fish Wildlife (CDFW) has the authority to reach an agreement with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, pursuant

to Section 1600 et seq. of the California Fish and Game Code. The CDFW generally evaluates information gathered during the preparation of the environmental documentation and attempts to satisfy their permit concerns in these documents. Where state listed threatened or endangered species not covered by the City's Multiple Species Conservation Program (MSCP) Subarea Plan occur on a project site, the CDFW would be responsible for the issuance of a Memorandum of Understanding (MOU) to ensure the conservation, enhancement, protection, and restoration of state listed threatened or endangered species and their habitats.

1.5.2.4 San Diego Regional Water Quality Control Board

The San Diego Regional Water Quality Control Board (RWQCB) regulates water quality through the CWA Section 401 certification process and oversees the National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0109266. The RWQCB is responsible for permitting, compliance, and other activities to reduce pollutants in municipal, construction, and industrial storm water runoff, including overseeing the development and implementation of Water Quality Improvement Plans (WQIPs) as required by the Regional Municipal Separate Storm Sewer System (MS4) Permit for the San Diego region, which includes the City, as well as ensuring that all other MS4 permit requirements are met.

1.5.2.5 San Diego Metropolitan Transit System

The Specific Plan area is adjacent to the Green Line trolley corridor owned by the San Diego Metropolitan System (MTS). The project includes improvements to the Alvarado Creek channel and utilities that would encroach into adjacent property owned by MTS.

1.5.2.6 City of San Diego

A portion of the Alvarado Creek channel to the south of the Specific Plan area is located in the City of San Diego. The project includes improvements to the Alvarado Creek channel and utilities that would extend into the City of San Diego.

1.5.2.7 California Department of Transportation

I-8 is located immediately north of the Specific Plan area. The California Department of Transportation (Caltrans) manages and maintains the right-of-way associated with I-8. The project includes improvements to the Alvarado Creek channel and utilities that would extend into the Caltrans right-of-way.

1.6 SCOPE AND CONTENT OF THE PEIR

The scope of analysis for this PEIR was determined by the City as a result of initial project review, as well as consideration of comments received in response to the Notice of Preparation (NOP) circulated on May 21, 2019, and a scoping meeting held on May 29, 2019 at the La Mesa Police Station located at 8085 University Avenue, La Mesa, California 91942. The PEIR addresses in detail potentially significant environmental impacts associated with the following issue areas:

- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Paleontological Resources
- Public Services and Facilities
- Public Utilities
- Transportation
- Visual Resources

The project would not result in potentially significant impacts with respect to Agriculture and Forestry Resources, Energy, Mineral Resources, Population and Housing, and Wildfire as described in Section 6.1, *Effects Found Not to be Significant*, of this PEIR.

The NOP and scoping meeting notice, scoping meeting sign-in sheet, and comment letters received in response to the NOP are contained in Appendix A of this PEIR. Verbal and written comments received during the scoping process have been taken into consideration during the preparation of this PEIR. 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 PEIR are those that existed at the time the NOP was circulated as described in Chapter 2.0, *Environmental Setting*.

The PEIR includes mandatory contents of EIRs as required pursuant to CEQA Guidelines Sections 15120 through 15132. A cumulative impacts analysis is presented for each specific environmental issue area in Chapter 5.0, *Cumulative Impacts*. Chapter 6.0*, Other Mandatory Discussion Areas*, discusses potential growth-inducing impacts, effects found not to be significant, and unavoidable significant environmental impacts/significant irreversible environmental changes. Chapter 7.0, *Alternatives*, includes a discussion of alternatives that could avoid or reduce potentially significant environmental effects associated with implementation of the project.

1.7 ORGANIZATION OF THE PEIR

As stated above, the content and format of this PEIR 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 have been included in the appendices to this PEIR.

This PEIR has been organized in the following manner:

- **Executive Summary** (CEQA Guidelines Section 15123) provides a summary of the PEIR analysis, a brief description of the project, and alternatives that would reduce or avoid significant impacts; and includes a summary table identifying significant impacts, proposed mitigation measures, and the significance of the impact after mitigation. A discussion of areas of controversy known to the City, including those issues identified by other agencies and the public is also provided.

- **Chapter 1.0, Introduction,** provides a brief description of the project and an overview of the purpose and intended uses of the PEIR, as well as its scope, content, and format. It also provides a discussion of the CEQA environmental review process, including public involvement.

- **Chapter 2.0, Environmental Setting** (CEQA Guidelines Section 15125), provides a description of the project's regional and local setting, as well as existing physical characteristics within the

Specific Plan area. The setting discussion also includes background information of the project site and identifies the relevant planning documents and existing land use designations for the Specific Plan area.

- **Chapter 3.0, Project Description** (CEQA Guidelines Section 15124), provides a detailed description of the proposed project, including project objectives, development components, building characteristics, public improvements, landscape plan, and grading and construction phasing for the project. In addition, a discussion of discretionary actions required for project implementation is included in this chapter.

- **Chapter 4.0, Environmental Analysis** (CEQA Guidelines Section 15126), constitutes the main body of the PEIR and includes the detailed impact analyses for each environmental issue identified in the NOP as potentially resulting in significant environmental impacts (refer to Section 1.6 above). For each environmental issue, Chapter 4.0 includes a discussion of existing conditions, the regulatory framework, the thresholds identified for the determination of significant impact, and an evaluation of the impacts associated with implementation of the project. Where the impact analysis demonstrates the potential for the project to result in a significant impact on the environment, mitigation measures are provided that would avoid or reduce the significant impact. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is provided.

- **Chapter 5.0, Cumulative Impacts** (CEQA Guidelines Section 15130), provides a detailed discussion of the proposed project's cumulative impacts. Per CEQA Guidelines Section 15065(a)(3), a project's impacts are "cumulatively considerable" when the incremental effects of an individual project are considerable when viewed in connection with the effect of past projects, the effects of other current projects, and the effects of other recently approved or pending projects in the area.

- **Chapter 6.0, Other Mandatory Discussion Areas,** includes a discussion of the effects found not to be significant, growth inducement, and unavoidable significant impacts/significant irreversible changes.

    - **Effects Found Not to Be Significant** identifies the issues determined in the initial scoping and environmental review process to be not significant for the project, and briefly summarizes the basis for these determinations. For the proposed project, it was determined that environmental issues associated with agriculture and forestry resources, energy, mineral resources, population and housing, and wildfire would not be significant.

    - **Growth Inducement** (CEQA Guidelines Section 15126.2(e)) evaluates the potential influence the project may have on economic or population growth or the construction of additional housing within the Specific Plan area, as well as in the region, either directly or indirectly.

    - **Unavoidable Significant Impacts/Significant Irreversible Environmental Changes** (CEQA Guidelines Sections 15126.2(c) and 15126.2(d)) provides a summary of the significant unavoidable impacts of the proposed project as detailed in Chapter 4.0. This chapter also describes the potentially significant irreversible changes that may be expected and

addresses the use of nonrenewable resources and energy use anticipated during implementation of the proposed project.

- **Chapter 7.0, Alternatives** (CEQA Guidelines Section 15126.6), provides a description and evaluation of alternatives to the proposed project. This section addresses the mandatory "no project" alternative, as well as development alternatives that would potentially reduce or avoid the proposed project's significant impacts.

- **Chapter 8.0, References Cited,** lists the reference materials cited in the PEIR.

- **Chapter 9.0, Individuals Consulted/List of Preparers** (CEQA Guidelines Section 15129), identifies the individuals contacted during preparation of the PEIR and lists the individuals who contributed to the PEIR.

1.8 ENVIRONMENTAL REVIEW PROCESS

1.8.1 Draft PEIR

The Draft PEIR and related technical studies are available for review by the public and public agencies for 45 days 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 or mitigated" (State CEQA Guidelines Section 15204). The public review period will be from September 9, 2020 to October 26, 2020.

Comments on the Draft PEIR can be mailed to:

Kirt Coury
Project Planner, Community Development Department
City of La Mesa
8130 Allison Avenue
La Mesa, California 91942

Or provided via email to alvaradosp@cityoflamesa.us.

The PEIR and all supporting technical studies and documents are available for review at the City of La Mesa, Community Development Department, 8130 Allison Avenue, La Mesa, 91942, as well as at the La Mesa Branch Library at 8074 Allison Avenue, La Mesa, 91942. An electronic copy of the PEIR and the technical analyses are posted on the City's website at: https://www.cityoflamesa.us/1639/Alvarado-Specific-Plan.

1.8.2 Final PEIR

Following the end of the public review period, the City, as lead agency, will provide written responses to comments received on the Draft PEIR per CEQA Guidelines Section 15088. Comments and responses will be considered in the review of the PEIR. Responses to the comments received during public review, a Mitigation Monitoring and Reporting Program (MMRP), Findings of Fact, and (if required) a Statement of Overriding Considerations for impacts identified in the PEIR as significant and unavoidable will be prepared and compiled as part of the PEIR finalization process. The culmination of this process is a

public hearing where the City Council will determine whether to certify the Final PEIR, which includes the MMRP, Findings of Fact, and Statement of Overriding Considerations (if required), as being complete and in compliance with CEQA. Subsequent to certification of the PEIR, agencies with permitting authority over all or portions of the project may use the PEIR to evaluate environmental effects of the project, as they pertain to the approval or denial of applicable permits.

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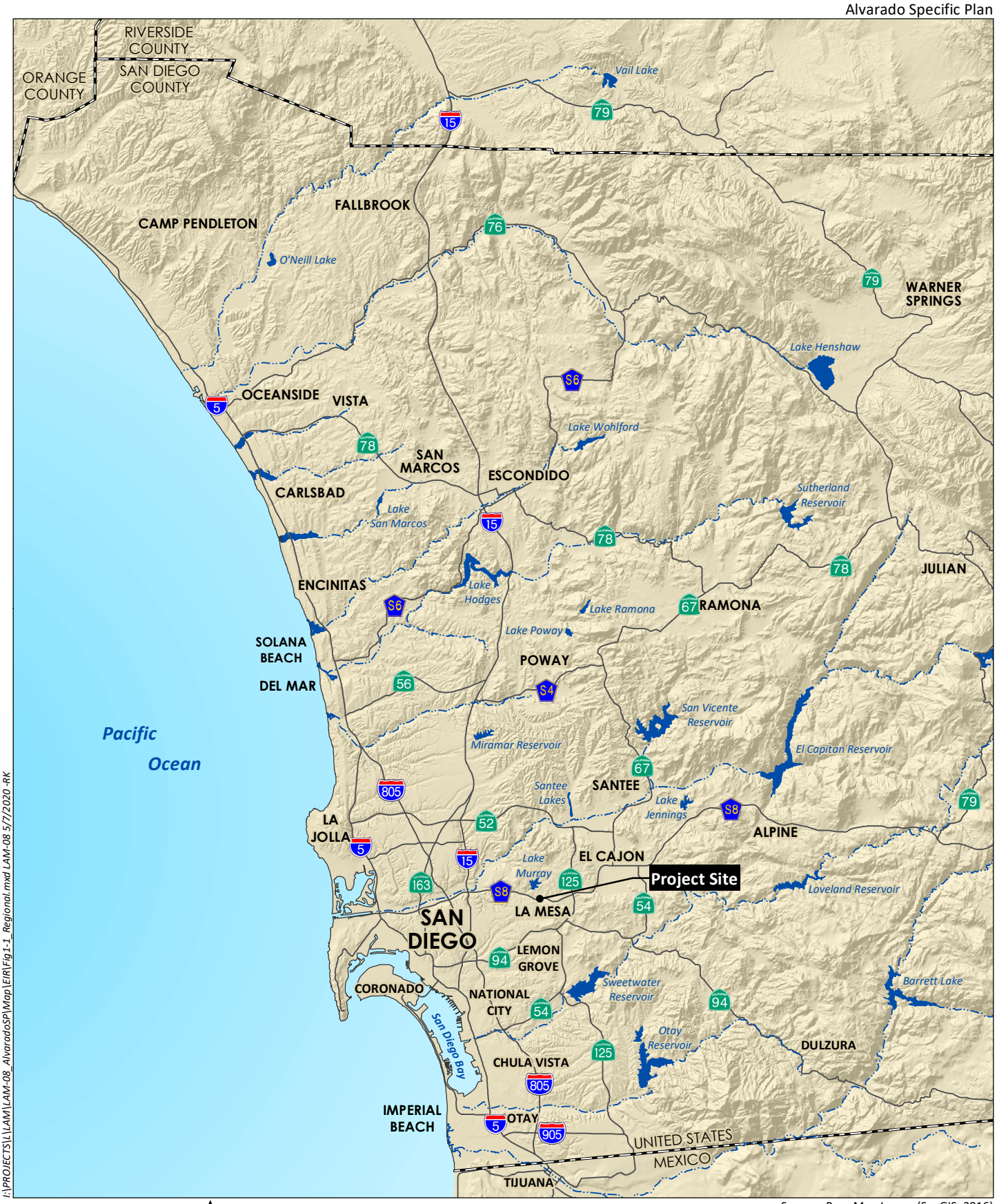

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Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1-1

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0 600 Feet

Source: Aerial (SanGIS, 2017)

HELIX Environmental Planning

Site Location

Figure 1-2

2.0 ENVIRONMENTAL SETTING

This chapter provides a description of existing site conditions for the project. The existing setting addresses the project site and provides an overview of the local and regional environmental setting pursuant to CEQA Guidelines Section 15152.

2.1 PROJECT LOCATION

The City of La Mesa (City) encompasses approximately nine square miles within the central portion of San Diego County and is situated approximately 14 miles inland from the Pacific Ocean. The City is bordered by the City of San Diego to the north and west, the City of Lemon Grove to the south, the City of El Cajon to the northeast, and unincorporated areas of San Diego County to the southeast. Two freeways transect the City: the I-8 alignment extends east/west and the State Route (SR) 125 alignment extends north/south. SR 94 extends in an east/west alignment and forms the southern boundary of the City. Two trolley corridors also traverse the City, including the MTS Green Line and Orange Line. The population of La Mesa is estimated at 61,261 people (San Diego Association of Governments [SANDAG] 2019c).

The project is located on an approximately 12-acre site along the south side of Alvarado Road generally between 70th Street on the west and Guava Avenue on the east in the City. The project site is bound by the 70th Street Trolley Station to the west, the Green Line trolley corridor to the south, a car dealership to the east, and Alvarado Road and I-8 to the north. The site is developed and currently contains a RV resort facility with paved access roadways, RV spaces, a clubhouse, a swimming pool, other ancillary buildings, and three billboards. Alvarado Creek traverses the property as it flows under Alvarado Road in the eastern portion of the site and continues southwesterly and westerly along the southern boundary of the western portion of the site. Refer to Figures 1-1 and 1-2 for regional and site location of the project.

2.2 EXISTING SITE CONDITIONS

2.2.1 Site History

The project site remained undeveloped until 1954 when a mobile home park was constructed by Chris Cosgrove, a pioneer builder and developer in San Diego County. The mobile home park, called the La Mesan, initially included 118 spaces on approximately eight acres, and was expanded to include 49 additional spaces over approximately four acres in subsequent years. By 1958, the property included 167 spaces on approximately 12 acres and was later expanded to 181 spaces. By 1990, the mobile home park was converted into an RV resort and all of the mobile homes were removed. The site has contained RV resort uses since 1990.

2.2.2 Existing Uses and Development

The project site comprises six parcels (Assessor's Parcel Numbers [APNs] 469-021-20 through 25) that encompass a total area of approximately 12 acres. All six parcels are developed and currently occupied by the San Diego RV Resort. The RV Resort contains 174 full-hookup RV spaces and serves a combination of short-term and extended stay visitors. The site is developed with a combination of paved surfaces and ornamental landscaping, including a stand of approximately 155 Mexican Fan Palm trees that are

scattered throughout the project site. These trees are informally grouped, and most have reached a relatively uniform height of approximately 80 feet. Numerous RVs are parked within the paved areas and are grouped together along internal roadways. A combination of wrought iron and a wooden plank fence separate the site's boundary from Alvarado Road. Low shrubs and street landscaping provide further separation between the site and the roadway. On-site structures include two one-story laundry/ bathroom buildings and a two-story office/apartment complex comprised of four buildings. All six existing buildings were constructed between 1954 and 1959.

Alvarado Creek enters the site at the intersection of Alvarado Road on the east and continues through the site, bisecting the property until it enters an underground storm drainage facility in the western portion of the site. Alvarado Creek is channelized as it enters into the project site from the northeast and flows through a box culvert underneath a bridge over Alvarado Road. Alvarado Creek consists of a trapezoidal channel with concrete-lined banks and a natural channel bottom aside from the concrete aprons near the Alvarado Road overcrossing and at the western end of the site. Much of the channel supports vegetation including native and non-native species at varying vegetative cover, and water regularly flows through this section of Alvarado Creek.

Three freeway-oriented billboard signs are located within the project site along the Alvarado Road frontage. One is located at the eastern boundary of the site and is a single-sided sign oriented for viewers traveling along eastbound I-8. The other two signs occur in the western portion of site and are double sided. Overhead utility lines also cross over portions of the site that connect to 15 utility poles located throughout the site.

2.2.3 Landform, Vegetation, Hydrological, and Geological Conditions

The project site is relatively level with a slight topographical variation as it slopes downward from east to west to the degree of approximately 10 feet. Existing on-site elevations range from approximately 400 feet above mean sea level (AMSL) to 410 AMSL.

The project site supports five vegetation communities or land use types, including freshwater marsh, willow woodland, disturbed land, urban/developed land, and concrete channel. Freshwater marsh occurs along Alvarado Creek and is dominated by broad-leaved cattail (*Typha latifolia*), southern bulrush (*Scirpus californica*), and Olney's three-square bulrush (*Schoenoplectus americanus*). Willow woodland occurs along Alvarado Creek on the southwestern portion of the site and comprises patches of trees and saplings of black willow, red willow, and shrubs of mule fat (*Baccharis salicifolia*). The disturbed habitat occurs on a slope below a concrete wall associated with the MTS Green Line Trolley down to Alvarado Creek and along the eastern bank of the creek and supports a cover of ivy (*Hedera helix*), olive tree (*Olea europa*), fennel (*Foeniculum vulagre*), and non-native grasses. The majority of the site consists of an urban/developed land characterized by the RV resort with ornamental vegetation consisting of maintained non-native landscaped areas. The concrete channel includes portions of Alvarado Creek at the box culvert crossing at Alvarado Road, the box culvert inlet near the trolley station at the west end of the project site, and portions of the northern bank of the creek.

Much of the project site is located within the mapped 100-year floodplain and floodway associated with Alvarado Creek. The site is underlain by a thin layer of fill soils that is, in turn, underlain by cobble conglomerate formational materials of the Stadium Conglomerate. Stream deposits underlie the fill soils in the southern portion of the site.

2.3 SURROUNDING LAND USES

The project site is surrounded by Alvarado Road and I-8 to the north, the double-track Green Line Trolley corridor to the south, a car dealership and motel to the east, and the 70th Street Trolley Station to the west of the site.

Other surrounding uses include residential neighborhoods composed of single-family homes and multi-story apartment complexes north of I-8 and south of the Green Line Trolley corridor. A motel (Motel 6) and the commercial fleet sales and service departments of the car dealership are located to the east. West of the trolley station is an automobile repair business in a single-story warehouse-type building and a two-story, multi-tenant office building. Grossmont Center is located approximately 1.25 miles to the northeast and Lake Murray is located approximately 0.75 mile to the north.

2.4 PLANNING CONTEXT

The following plans contain policies, goals, and objectives that are applicable to the proposed project. A detailed discussion of these plans is provided in Section 4.8, *Land Use*.

2.4.1 San Diego Forward: The Regional Plan

San Diego Forward: The Regional Plan (Regional Plan; SANDAG 2015) is an update of the Regional Comprehensive Plan (RCP) for the San Diego Region and the 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS), combined into one document. The Regional Plan provides a blueprint for San Diego's regional transportation system to effectively serve existing and projected workers and residents within the San Diego region. In addition to long-term projections, the Regional Plan includes an SCS, in compliance with Senate Bill (SB) 375. The SCS aims to create sustainable, mixed-use communities conducive to public transit, walking, and biking by focusing future growth in the previously developed, western portion of the region along the major existing transit and transportation corridors. The purpose of the SCS is to help the San Diego region meet the greenhouse gas (GHG) emissions reductions set by the California Air Resources Board (CARB). The Regional Plan has a horizon year of 2050, and projects regional growth and the construction of transportation projects over this time period. The project site and vicinity are identified as being in a Smart Growth Area and Potential Transit Priority Area (TPA).

On February 22, 2019, the SANDAG Board of Directors approved an action plan to develop a new vision for the 2021 Regional Plan that would transform the way people and goods move throughout the region. Development of the 2021 Regional Plan, including the associated projects, programs, and policies, is underway and going through the planning process. While work progresses to develop this new vision, SANDAG prepared and adopted a 2019 Federal Regional Transportation Plan (2019 Federal RTP; SANDAG 2019b) that complies with federal requirements for the development of regional transportation plans, retains air quality conformity approval from the U.S. Department of Transportation, and preserves funding for the region's transportation investments. The 2019 Federal RTP builds on The 2015 Regional Plan with updated project costs and revenues and a new regional growth forecast.

2.4.2 City of La Mesa General Plan

The adopted La Mesa General Plan (City 2012a) is a long-term planning document that guides growth and development in La Mesa by establishing goals, policies, and objectives that reflect the City's vision for the future. The General Plan is required to include a Land Use and Urban Design Element, which designates the proposed general location and distribution of land uses for housing, business, industry, open space, education, public buildings and grounds, and other public and private uses of land. Other elements of the General Plan include Circulation, Conservation and Sustainability, Recreation and Open Space, Historic Preservation, Noise, Safety, Public Services and Facilities, Health and Wellness, and Housing.

The project site has a current General Plan land use designation of Regional Serving Commercial. The Land Use and Urban Design Element of the General Plan describes this designation as follows:

> Regional Serving Commercial. This land use designation is assigned to those areas of the City which are suitable for more intense urban activities, such as high-volume retail sales, and other sales and services which are expected to draw local and regional customers. Areas designated Regional Commercial are served by convenient freeway access and public transportation. Grossmont Center, Fletcher Parkway and Alvarado Road are examples of areas where the designation is applied. Examples of uses intended in the Regional Commercial designation include retail shopping centers, large office complexes and uses providing services to the traveling public such as restaurants, service stations, hotels, and motels. Entertainment uses such as movie theaters and nightclubs may be conditionally permitted. Within larger areas of the City, which have been designated Regional Serving Commercial; there may be areas which are suitable for mixed-use or high-density residential developments. The appropriate mix of uses permitted within these areas will be determined on a case-by-case review or by the amendment or adoption of a specific plan which will also establish the appropriate residential density.

2.4.3 Zoning

The existing zone classification for the project site is Light Industrial and Commercial Service - Flood Overlay Zone – Urban Design Overlay Zone. The Light Industrial and Commercial Service zone (CM) is applied in areas that are generally removed from residential uses such as along Alvarado Road. The CM zone is intended to include heavy commercial activity and light industrial services.

The Floodway Overlay Zone (Overlay Zone F) is intended for application in those areas of the City within floodways or water courses in which flood control structures and facilities are either required or planned to be installed or improved. The construction of buildings and structures within areas in Overlay Zone F are prohibited until adequate flood protection facilities are constructed or guaranteed to be constructed and temporary alternate arrangements are made to protect persons and property.

New development and major renovations or remodeling of property within the Urban Design Overlay Zone (Overlay Zone D) are subject to the requirements of the Urban Design Program and approval by the Design Review Board and City Council. This overlay zone is used to supplement the required land use regulations that are reviewed under the standard provisions of the Zoning Ordinance. Projects developed within Overlay Zone D are evaluated on their compliance with both the unique design criteria that pertain to the visually sensitive areas and the general development guidelines established by the

Urban Design Program. The proposed Specific Plan however would include site-specific design recommendations and criteria for development within the project site that would supersede those required by the Urban Design Program.

The project proposes to create a new overlay zone, the Alvarado Specific Plan Overlay Zone, that would establish development regulations for the site.

2.4.4 Regional Air Quality Strategy

The San Diego Air Pollution Control District (SDAPCD) and SANDAG are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the San Diego Air Basin (SDAB). The San Diego County Regional Air Quality Strategy (RAQS) was most recently updated in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for ozone. The SDAPCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the Federal Clean Air Act (CAA) for areas that are out of attainment of air quality standards. The SIP, approved by the USEPA in 1996, includes the SDAPCD's plans and control measures for attaining the ozone national standard. The SIP is also updated on a triennial basis.

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, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls**.** The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin**.** The SIP also includes rules and regulations that have been adopted by the SDAPCD to control emissions from stationary sources**.** These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the national air quality standard for ozone.

2.4.5 Water Quality Control Plan for the San Diego Basin

The Water Quality Control Plan for the San Diego Basin (Basin Plan), adopted by the San Diego RWQCB in 1994 (updated in 2016), is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets 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; (3) describes implementation programs to protect the beneficial uses of all waters in the region; and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan (RWQCB 1994).

2.4.6 Airport Land Use Compatibility Plans

The Airport Land Use Commission (ALUC) is an agency that is required by state law to exist in counties in which there is a commercial and/or a general aviation airport. The purpose of the ALUC is to protect public health, safety, and welfare by ensuring the orderly development of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses. The ALUC is responsible for preparation of the Airport Land Use Compatibility Plans (ALUCPs) for each airport in the region. ALUCPs establish land use compatibility policies and development criteria for

new development to protect the airports from incompatible land uses. The policies and criteria contained in applicable ALUCPs are addressed in the City of La Mesa's General Plan (Land Use and Urban Design Element).

The site is within the Airport Influence Area (AIA) and Federal Aviation Administration (FAA) Part 77 Noticing Area for Montgomery-Gibbs Executive Airport. The AIA is defined as "the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission" (San Diego County Regional Airport Authority [SDCRAA] 2010b). The AIA for Montgomery-Gibbs Executive Airport serves as the planning boundary for the ALUCP and is divided into two review areas: (1) Review Area 1 includes the noise contours, safety zones, airspace protection surfaces, and overflight areas; and (2) Review Area 2 comprises the airspace protection surfaces and overflight areas. The project site is located within Review Area 2 for the airport.

3.0 PROJECT DESCRIPTION

This chapter of the EIR provides a statement of the project goals and objectives, explains the relation of the proposed Specific Plan to the General Plan, describes the specific characteristics of the project, outlines project development standards and design guidelines, discusses project phasing and construction, identifies the discretionary actions required to implement the project, and summarizes administration and implementation of the proposed Specific Plan. This chapter has been prepared pursuant to Section 15124 of the State CEQA Guidelines.

3.1 PROJECT GOALS AND OBJECTIVES

The goals and objectives of the project are to:

1. Address the City's housing supply needs by providing for the development of a mix of housing types to maximize the advantages of locating new infill housing in close proximity to existing regional transportation facilities, including the adjacent 70th Street Trolley Station, connecting bus routes, and freeway access;

2. Establish a land use plan that would improve public safety in the project area by providing public improvements at current City standards for Alvarado Road, construct channel improvements to address flooding conditions from Alvarado Creek, and relocation and improvement of existing sanitary sewer system infrastructure within the Alvarado Creek Flood Channel;

3. Provide high quality student housing with a short and direct link to San Diego State University from the 70th Street Trolley Station;

4. Establish a land use plan that would transform the site with private development and public improvements that would serve as a new and positive gateway image for the community;

5. Construct and maintain a multi-modal circulation system for vehicles, bicycles, and pedestrians to enhance accessibility and support active transportation and public transit use;

6. Transform Alvarado Creek within the Specific Plan Area into an urban creek and open space feature within a planned residential community;

7. Provide an environmentally sustainable residential development through the implementation of features such as energy conservation, sustainable landscape, water conservation, and support for alternative transportation, consistent with the City's Climate Action Plan (CAP); and

8. Create a unified private development plan that is consistent with the City's General Plan and SANDAG's San Diego Forward: The Regional Plan.

3.2 RELATIONSHIP TO THE GENERAL PLAN

The Alvarado Specific Plan is a land use planning and regulatory tool that provides the framework to implement the broad goals and policies of the General Plan within the Specific Plan area. The Specific Plan establishes the land use and development standards for future development projects and public improvements in the Specific Plan area. The proposed Specific Plan includes general provisions and

procedures, permitted land uses, site development plans for private and public improvements, development standards and design guidelines, circulation and mobility plans, public utilities, and infrastructure. The Specific Plan is consistent with the City's long-term vision and policies that encourage higher intensity infill development near existing transit facilities with new housing opportunities, connecting housing with employment, preserving existing neighborhoods, improving public safety, and developing financing mechanisms for needed infrastructure. Specific General Plan policies are referenced within the Specific Plan as to how the proposed land use and development plans are consistent with the goals and policies of the General Plan.

This EIR provides an analysis and evaluation of environmental issues associated the proposed Specific Plan and its implementation, as described in greater detail in this chapter. A comprehensive analysis of the proposed project's consistency with applicable plans and policies is contained in Section 4.8, *Land Use*.

3.3 PROJECT CHARACTERISTICS

3.3.1 Development Summary

The proposed project entails a master development plan (Specific Plan) for a phased TOD and associated public improvements. The project would include four development parcels that would be constructed in two phases. Phase 1 includes the parcels (Parcels 1-3) west of the intersection of Alvarado Creek and Alvarado Road. Phase 2 includes the parcel (Parcel 4) east of the intersection of Alvarado Creek and Alvarado Road. Each parcel would be developed with a multi-family residential building with ground-floor commercial uses.

Phase 1 would feature two multi-family residential buildings built on a podium deck over multi-level parking in the central portion of the site and a smaller-scale building in the western-most parcel. Phase 2 would include one building in the eastern portion of the site similar in size and scale to the two larger buildings constructed in Phase 1. The buildings would include up to five stories of residential units and one to three levels of parking. Each building would include a mix of housing types and sizes. In total, an estimated 850 to 950 residential units would be constructed at buildout. In addition to the residential uses, the project would include ground floor, resident-serving commercial uses. Figure 3-1, *Site Plan*, depicts a conceptual site plan of the proposed project at buildout.

3.3.2 Project Components

3.3.2.1 Multi-family Residential Uses

The primary land use of the Alvarado Specific Plan consists of multi-family residential development. The project would develop four multi-family residential buildings, conceptually shown in Figure 3-1. As described above, the project would construct three residential structures (Buildings 2, 3, and 4) with similar construction type and size consisting of multi-level parking structures with residential units built on a podium level above the parking. A smaller-scale building (Building 1) with a similar construction type is proposed on the smaller and narrower western-most parcel (Parcel 1). Each building would be up to five levels of residential use constructed on a podium deck with parking underneath. The maximum building height would be 85 feet above grade. The proposed buildings would be wood-frame construction and the parking garages would be concrete.

Building 1 would include five levels of residential use atop a one-level parking garage with the potential for an attached café or similar use. Building 1 would include a total of 60 apartments comprising a mix of studio, one-bedroom, and two-bedroom units. A patio area would be located above the café and sky decks would be provided at the western and eastern ends of the top floor. Figure 3-2, *Building 1 Cross-section*, illustrates a cross-section of Building 1.

Buildings 2, 3, and 4 would include five levels of residential use atop a three-level parking garage with an attached leasing office for each building. Each building would include a mix of studio, one-bedroom, and two-bedroom units. Liner units (i.e., units with direct access to the interior creek side area via a front stoop concept) would be provided on the outside edge of the buildings that front Alvarado Creek. These three buildings would be similar in scale and appearance. Buildings 3 and 4 would each include 305 apartment units. Building 2 would include either 280 apartments or 187 student housing units (in association with San Diego State University). Figure 3-3, *Building 2 Cross-section*, and Figure 3-4, *Buildings 3 and 4 Cross-section*, illustrate cross-sections of Buildings 2, 3, and 4.

A summary of proposed multi-family residential development pursuant to the Specific Plan is provided in Table 3-1, *Multi-family Residential Development Summary*. The number of residential units within each building is estimated and could vary based on the final mix of unit type and size; however, the total number would be a maximum of 950.

Table 3-1
MULTI-FAMILY RESIDENTIAL DEVELOPMENT SUMMARY

Parcel/Building	Land Use	Unit Mix	Estimated Unit Count
Phase 1			
1	Multi-family residential	Studio/1 BR	60
2	Option A – Student Housing	Student units	187
	Option B – Multi-family residential	Studio/1 BR/2 BR	280
3	Multi-family residential	Studio/1 BR/2 BR	305
Phase 2			
4	Multi-family residential	Studio/1 BR/2 BR	305
		TOTAL Option A	**857**
		TOTAL Option B	**950**

BR = bedroom

As shown in Table 3-1, the Specific Plan allows for a variation to the multi-family residential unit mix for Building 2 with a student-housing concept as an option. Based on market demand, this development option could serve as an important off-campus housing opportunity to help meet the community's college and university student housing demands.

3.3.2.2 Commercial Uses

Each proposed building would potentially include space for pedestrian-oriented, resident-serving commercial uses, such as cafés or other small retail establishments. Such uses would be secondary uses to the residential component and provided to serve residents of the project. Within Building 1, an area that could accommodate a café or similar use is proposed in the northeastern portion of the building at the street level. Commercial spaces within Buildings 2, 3, and 4 could be provided at the ground level or

podium level. For analytical purposes in this EIR, a maximum total of 15,000 square feet of commercial uses distributed throughout the site is assumed at project buildout.

3.3.2.3 Building Design

The land use and development standards in the proposed Specific Plan outline a "form-based" regulatory concept for the proposed buildings on each of the development parcels. The residential structures would include a range of dwelling unit types and sizes distributed within an allowable building envelope prescribed by the development standards set forth in the Specific Plan. The form-based development standards include a maximum building height of 85 feet (to the top of roof sheathing) with an additional 12 feet for roof appurtenances.

While no specific architectural styles or treatments for the proposed buildings are prescribed at the Specific Plan level, architectural design guidelines contained in the Specific Plan call for the proposed buildings to have a coordinated and unifying overall architectural style or theme yet express an individual character with varying forms, features, and materials. Other architectural design guidelines include:

- Incorporation of strong forms and architectural elements at the primary project entrances to the interior streets to establish a visual gateway to the City;
- Use of architectural design forms, features, and variation in materials to provide visual interest in the building façades along Alvarado Road;
- Incorporation of architecturally coordinated building materials and landscaping along the Alvarado Road frontages with exposed parking garage levels;
- Application of architectural screening of rooftop mechanical equipment; and
- Provision of architectural interest with forms, massing, fenestration, and balconies and viewing locations within interior elevations viewed from the podium deck open space areas and elevations fronting on to the interior private street pathways.

The architecture and building design depicted in the Specific Plan and in this EIR are preliminary and subject to site-specific design recommendations and criteria contained in the proposed Specific Plan. The illustrations are provided as examples to represent the potential appearance of the planned multi-family residential projects but are not intended as exhibits for the final project architecture and design.

3.3.2.4 Noise Reduction Design Features

The proposed buildings would include noise reduction features that would be incorporated into the design of the project. These noise reduction design features were identified in the project specific noise analysis to achieve consistency with the City's noise compatibility standards (RECON 2018b). Identified design features include incorporation of sound-attenuating architectural treatments on exterior walls along the northern, western, eastern, and western half of southern façades of Building 1; the northern façade of Building 2; the northern and northeastern façade of Building 3; and the northern and northwestern façade of Building 4. These walls would include components such as windows, doors, finishes (e.g., stucco, wood siding), and/or wall assemblies (i.e., framing) with architectural treatments that would achieve a composite sound transmission class rating of 35.

Additionally, the project would incorporate sound walls into the design at various locations to reduce exterior noise levels at outdoor use areas. The sound walls would consist of solid masonry, acrylic glass, or a combination thereof and at varying heights.

3.3.2.5 Alvarado Creek Improvements

Improvements are proposed to the Alvarado Creek channel that traverses the site to control flood and storm water flows within the channel, as well as to enhance the creek as an open space amenity and natural feature. Most sections of the existing trapezoidal concrete-lined banks along the channel would be removed and replaced with retaining walls to increase the width of the channel bottom. Retaining walls of various heights would be installed along the entire northern bank, and a portion of the southern bank, adjacent to proposed Building 4. The remaining on-site portion of the south bank would remain but would be stabilized with riprap or vegetation. The improved creek would accommodate 100-year storm events to resolve the existing flooding conditions that occur on the project site during high storm events. Figure 3-5, *Alvarado Creek Flood Channel Improvements*, shows a plan view and various cross-sections of proposed improvements. Refer also to Figure 3-4 for an illustrative cross-section of the enhanced channel.

Alvarado Creek would also be enhanced (i.e., removal of non-native plants and debris) and restored with riparian vegetation, including broad-leaved cattail, Olney's three-square bulrush, and southern bulrush. The enhanced creek would function as a major open space feature of the project. Figure 3-6, *Alvarado Creek Restoration*, shows the areas along the creek that would be restored with native riparian vegetation.

3.3.2.6 Public Improvements

In addition to the Alvarado Creek channel improvements described above, other public improvements would be implemented as part of the project, including Alvarado Road frontage improvements, overhead utility relocations, and sewer improvements. These proposed public improvements are shown in Figure 3-7, *Proposed Public Improvements*.

Alvarado Road Improvements

Frontage road improvements to Alvarado Road would include a shared pedestrian/bicycle path, curb and gutter, streetlights, street trees, an on-street parking lane, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station. The project would dedicate 1.5 feet of road right-of-way along the project frontage to provide a 31.5-foot-wide road right-of-way west of the Alvarado Creek overcrossing that would include two 11-foot-wide vehicular travel lanes, a 7-foot-wide parking lane, a 2-foot-wide curb/shoulder on the north side, and a 0.5-foot-wide curb on the south side. A 16-foot-wide public access easement would be provided along the south side of the Alvarado Road frontage to provide for a 4-foot-wide landscape parkway and a 12-foot-wide shared pedestrian/bicycle path.

East of the Alvarado Creek overcrossing, the improved roadway would include a 45-foot-wide right-of-way with two 11-foot-wide vehicular travel lanes, a 7-foot-wide parking lane, a 2-foot-wide curb/ shoulder on the north side, a 0.5-foot-wide curb on the south side, a 4-foot-wide landscape parkway, and 10 feet of the 12-foot-wide shared pedestrian/bicycle path. The remaining two feet of the shared path outside of the right-of-way would be placed in a public access easement.

Additionally, a 15-foot-wide prefabricated pedestrian bridge would be constructed over Alvarado Creek where it crosses under Alvarado Road within the road right-of-way. The pedestrian bridge would connect to the proposed sidewalk on both sides of the creek and provide a pedestrian linkage between the eastern and western portions of the site that are bisected by the creek. At the western end of the project site, a public connection to the adjacent 70th Street Trolley Station would be provided as part of the new sidewalk along Alvarado Road.

Refer to Figure 3-7 for the location of proposed road improvements and a typical cross-section. An illustrative plan of the proposed roadway improvements is provided in Figure 3-8, *Alvarado Road Improvements*.

Overhead Utility Relocations

The existing communications and 12-kilovolt power lines that extend across the site would be relocated underground. These lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a generally north-south alignment. The portion of the overhead utility lines that cross the site would be relocated underground in the western end of the site. Refer to Figure 3-7 for the location of these overhead utilities to be relocated.

Sewer System Improvements

Sewer system improvements are also proposed, including relocating an existing sewer trunk line within Alvarado Creek out of the channel and under the proposed internal access road, raising and capping an existing manhole, removal of portions of existing on-site sewer lines, and construction of new on-site sewer lines. Refer to Figure 3-7 for the location of proposed sewer improvements.

3.3.2.7 Recreation and Public Spaces

The proposed buildings would include interior project amenity facilities and active outdoor spaces on the podium deck levels. Building amenities are anticipated to include clubhouses, pools, and gymnasiums, as well as patios, balconies, and sky decks. Outdoor recreation areas would include a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas (e.g., seating and/or interpretive signage at Alvarado Creek overlook areas). The pedestrian promenade would be located along the interior of the project site and much of it would be adjacent to the enhanced Alvarado Creek.

3.3.2.8 Landscape and Hardscape Treatments

A comprehensive landscaping plan would be implemented as the site is developed. Landscape and/or hardscape treatments would be provided generally in four areas, including the Alvarado Road streetscape, interior roadways, podium decks, and stormwater basins, as shown in Figure 3-9, *Landscape Plan Concept*.

Landscape treatments planned for the Alvarado Road street frontage include street trees with mixed heights and species to create a vertical edge separating the roadway from the new sidewalk. The streetscape plan also includes a series of bulb-outs in the parking lane to add both depth and height to help reinforce the tree line street edge and provide some screening for above-grade parking levels facing the street. In addition, a planting area would be provided between the sidewalk and the parking

structures to provide additional landscape screening of the parking structures. The existing retaining wall along the north side of Alvarado Road would be planted with vines.

The interior roadways would include sections of enhanced paving treatment and a series of viewing areas at the creek side. These linear pathways would include a variety of trees, low shrubs, and plant materials that would complement the Alvarado Creek restoration.

Podium deck courtyards would be planted with trees and smaller plant materials in raised planters to define functional outdoor spaces. There would also be a substantial planting zone to include screening trees and shrubs as part of Building 2 and patio areas for Building 3 in the approximately 50 feet that separates Building 2 and 3 at the podium deck level.

Biofiltration basins are proposed throughout the site to filter and convey on-site runoff flows. These basins would be planted with grasses and plants, with trees, shrubs, and groundcovers around the basin edges.

As described in Section 3.3.2.4, portions of the Alvarado Creek channel within the project site would also be restored by removing non-native species and planting native riparian vegetation.

3.3.2.9 Signage

The three existing billboards on the project site would remain in their current location upon development of the proposed project. The project would also include entry monument signage at the site access points. The specifics of these signs are not known at the Specific Plan level, but a Comprehensive Sign Program would be implemented to define the sign design standards for the overall project at the time a Site Development Plan is approved for Phase 1 in conformance with the provisions of City of La Mesa Municipal Code (LMMC) Section 15.10.040(c), Special Sign Regulations. For the purposes of analysis, project monument signs are evaluated per the sign regulations for freestanding monument signs in accordance with LMMC Section 15.10.040(d)(2), which allow a maximum height of 8 feet and a maximum sign area of 50 square feet per sign face.

3.3.2.10 Lighting

The project would include lighting elements to provide safety and to accent project focal points. Streetlights would be installed along the Alvarado Road frontage as part of the proposed public improvements. Lighting within the site would be provided along the internal access roads, pedestrian promenade, and pathways; within recreation areas and public outdoor spaces; on buildings, and at the project entry monument signs. Proposed lights would be as low level as possible, timed as appropriate, directed downward, and shielded to minimize spillover onto adjacent properties. Accent lighting would be directed away from Alvarado Creek.

3.3.3 On-site Circulation/Access

Access to the project site and proposed on-site circulation are shown in Figure 3-10, *On-site Circulation Plan*.

3.3.3.1 Vehicular Circulation

Vehicular access to the project site would be provided from Alvarado Road via three unsignalized access points. A fourth access point would be provided but would only be used for emergencies. The primary access points would connect to an internal ring road system comprising two separate access roads: one that would loop around Buildings 2 and 3, and another that would loop around Building 4. Vehicles entering the site at the three primary access points would drive along the interior road for a relatively short distance and then turn into the parking structures. The loop road would be gated at the parking structure entrances and vehicle access beyond the parking structure entrances would be restricted to emergency vehicles, service vehicles, special deliveries, and move-in functions. The gated portion of the internal roadways would function as a pedestrian promenade, as discussed further in Section 3.3.3.2. Figure 3-11, *On-site Street Concept*, provides an illustrative view of the proposed internal loop roads.

3.3.3.2 Pedestrian Circulation

Pedestrian circulation would be provided throughout the site by a network of pathways, plazas, and public spaces. The project would provide pedestrian circulation improvements along the Alvarado Road frontage consisting of a 12-foot-wide shared use pedestrian/bicycle path along the south side of the roadway within a public use easement. This path would provide on-street pedestrian facilities where none currently exist and would connect to the on-site roadways and the existing sidewalk to the east. Additionally, a public pedestrian connection to the adjacent 70th Street Trolley would be provided at the west end of the project site. Figure 3-12, *Shared Pedestrian/Bicycle Path*, provides a plan view and cross-section of this proposed facility.

The primary on-site pedestrian facilities would include pedestrian promenades along substantial portions of the internal loop roads. The promenades would extend between the vehicular gates at the parking structure entrances and around the outer perimeter of Buildings 2, 3, and 4 oriented toward the enhanced Alvarado Creek. These promenades would be 20- to 26-feet wide and would feature decorative paving, landscaping, and seating/viewing areas. Refer to Figure 3-11 for details of the pedestrian promenades.

3.3.3.3 Bicycle Circulation

Bicycle access to the project site would be provided via the proposed shared pedestrian/bicycle facility described above and shown in Figure 3-12. This facility would connect to the on-site roadways and planned future bicycle facilities along Alvarado Road east and west of the project site. The public connection to the adjacent 70th Street Trolley Station would also accommodate bicycles. Furthermore, the project would provide bicycle storage facilities to promote bicycling.

3.3.4 Utilities

Utility services would be provided through construction of pipelines/extensions from existing utility infrastructure on the site and within surrounding roadways. Water extensions from an existing pipeline within Alvarado Road would be constructed to accommodate the project. Sewer pipelines would be extended from the existing Alvarado Trunk Sewer line in Alvarado Road and along portions of the proposed internal loop roads before connecting to existing lines to the south.

Site drainage would be collected in a proposed private, on-site storm drain system consisting of detention basins, grass-lined swales, catch basins, and storm drains that would be directed to Alvarado Creek.

3.4 DEVELOPMENT STANDARDS AND DESIGN GUIDELINES

The Specific Plan establishes development standards and design guidelines to be used for the basis of design for the development projects that implement the private and public improvement plans described within the Specific Plan. These development standards and design guidelines would supersede those traditionally associated with the underlying zone classification for new development within the Specific Plan area. To accomplish this, an Alvarado Specific Plan Overlay Zone would be established to apply to the entire Specific Plan area.

The development standards utilize a “form-based” approach, which establish overall building envelopes, distribution of uses, and other factors that describe the individual multi-family residential buildings and the site improvements. This approach allows for some design flexibility in terms of residential unit mix/types and/or architectural design during the Site Development Plan and Design Review process while still being deemed consistent with the Specific Plan. Key form-based development standards that define the building envelopes include maximum building heights of 85 feet above grade, a maximum of five floors of residential above the parking levels, and compliance with minimum floodway elevations.

The design guidelines contained in the Specific Plan pertain to site design and architectural design and address broad guidance for landscaping, interior streets, lighting, signage, architectural style, project entrances, building façade variation, and parking structure and rooftop mechanical equipment screening.

3.5 DEMOLITION, GRADING, AND CONSTRUCTION PHASING

Project construction would require demolition and removal of existing on-site buildings, pavement, and other developed features to clear the site. Grading would be conducted on approximately 90 percent of the project site and would occur either in two phases or all at the same time. Although it is anticipated that the proposed project would be constructed in two phases, grading of the entire project site may occur during the first phase with the development of the second phase improvements occurring later. Project grading would require approximately 46,000 cubic yards (cy) of cut and 16,100 cy of fill, resulting in the export of 29,900 cy of earth material. The average fill depth would be approximately two feet with a maximum depth of approximately eight feet. The average cut depth would be approximately three feet and a maximum of 11 feet (within the channel). The site is relatively flat and does not contain any steep slopes. Existing landforms and topographic conditions would essentially remain the same upon project development. The preliminary grading plan is shown on Figure 3-13, *Conceptual Grading Plan*.

Project phasing would be dependent on market conditions. The entire project could be developed at one time, or construction could occur in two phases. Under the phased scenario, Phase 1 would include development of Parcels 1, 2, and 3, which encompasses the portion of the site west of where Alvarado Creek bisects the site. Phase 1 would include construction of Buildings 1, 2, and 3, as well as the proposed major public improvements associated with the Alvarado Road, Alvarado Creek, and utilities. Construction would begin with demolition/clearing of this portion of the site followed by grading activities and building pad preparation. Following utilities installation/relocation and construction of the

public improvements, Buildings 1, 2, and/or 3 would be constructed in any order or combination. The portion of the existing RV resort on Parcel 4 (portion of the site east of where Alvarado Creek bisects the site) could remain operational as an interim use until Phase 2 is developed. Phase 2 would include development of Parcel 4, which would include Building 4. The construction sequence of Phase 2 would be similar to Phase 1.

Construction traffic control plans would be prepared to identify truck haul routes, the hours of construction activity, work zones, staging areas, provision of people on the street to direct traffic as applicable, avoidance of travel during peak hours to the extent feasible, and other traffic controls as necessary. Construction equipment would enter and exit the site from Alvarado Avenue.

The project would comply with applicable San Diego SDAPCD rules intended to reduce air pollution during construction, including dust control measures through implementation of Rule 55; use of a construction fleet equipped with diesel catalytic converters, diesel oxidation catalysts, and/or diesel particulate filters; and use of CARB/USEPA Engine Certification Tier 4, or equivalent methods approved by CARB.

3.6 DISCRETIONARY ACTIONS

This EIR is intended to provide documentation pursuant to CEQA to cover all local, regional, and state permits and/or approvals which may be needed to implement the project. The anticipated discretionary approvals are identified in Table 3-2, *Anticipated Discretionary Actions*, below. This list is not meant to be exhaustive or final; other approvals may be identified during the implementation process.

Table 3-2
ANTICIPATED DISCRETIONARY ACTIONS

Action/Approval/Permit	Agency
Certification of PEIR	City of La Mesa
Adoption of the Alvarado Specific Plan	City of La Mesa
Amendment to the Zoning Ordinance to establish an Alvarado Specific Plan Overlay Zone	City of La Mesa
Development Agreement	City of La Mesa
Site Development Plans	City of La Mesa
Design Review	City of La Mesa
Demolition Permits	City of La Mesa
Grading Permits	City of La Mesa
Building Permits	City of La Mesa
Encroachment Permits	MTS, Caltrans
Clean Water Action Section 404 Permit	USACE
Clean Water Act Section 401 Water Quality Certification	RWQCB
Fish and Game Code Section 1602 Streambed Alteration Agreement	CDFW
NPDES Construction Activities Storm Water General Permit	RWQCB
Conditional Letter of Map Revision/Letter of Map Revision	Federal Emergency Management Agency

3.7 SPECIFIC PLAN ADMINISTRATION AND IMPLEMENTATION

The proposed Specific Plan is subject to the procedures and standards established for specific plans by California Government Code Sections 65450 through 65457, which defines both the content of the plan and the methods by which the plan must be locally adopted. The Alvarado Specific Plan has been developed as a means of implementing the General Plan within the Specific Plan area. It establishes the land use and development standards for development projects and public improvements in the Specific Plan area. The Specific Plan discusses general provisions and procedures, permitted land uses, site development plans for private and public improvements, development standards and design guidelines, circulation and mobility plans, public utilities, and infrastructure. It also addresses potential phased development within the Specific Plan area and required coordination with other public agencies with regulatory authority over development and resources within the Specific Plan area. Development projects within the Alvarado Specific Plan area must be consistent with the policies and procedures established by the Alvarado Specific Plan.

Modifications, adjustments, or changes to the Specific Plan may be necessary during the implementation process to address unforeseen conditions or events affecting the planned development within the Specific Plan area. Proposed minor modifications to the Specific Plan would be addressed administratively without the requirement for a formal Specific Plan Amendment Application and public hearing before the Planning Commission. The Community Development Director would have the authority to determine if the minor modification request should be approved, approved with conditions, or denied. The Community Development Director may refer the request for a minor modification to the Planning Commission or the City Council for review. The Community Director's determination for a minor modification may be appealed to the Planning Commission. Proposed changes to the Specific Plan that are determined to be more substantive than an interpretation or minor modification would require a formal application and procedures for a Specific Plan Amendment with review by the Planning Commission and City Council. Amendments to the Specific Plan must be found to be consistent with the General Plan.

Upon adoption of the Alvarado Specific Plan, planned development projects within the Specific Plan area would be subject to the City's Site Development Plan and Design Review process, as well as permit/ approval processes of any applicable Responsible or Trustee Agencies (refer to Table 3-2). As part of this entitlement process, site improvement and development plans for the multi-family residential projects defined in the Specific Plan would require findings of consistency with the Alvarado Specific Plan.

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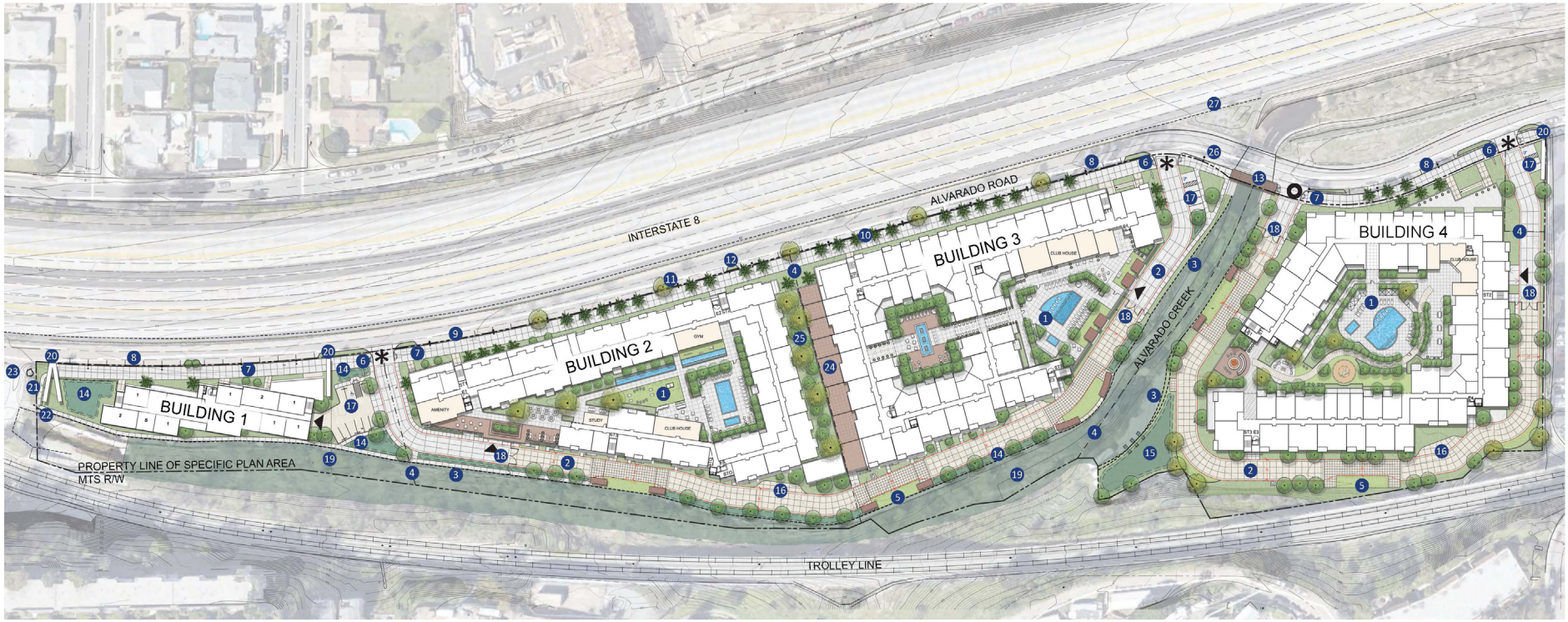
LEGEND

1. Outdoor courtyard at podium level
2. Decorative paving in pedestrian promenade 20'-0"-26'-0" wide / Emergency Vehicular Access (EVA)
3. Retaining wall at creek edge
4. Parcel division
5. Social node with shade element and turf area
6. Proposed entry monument
7. 16'-0" wide pedestrian sidewalk / shared bike lane (4'-0" tree grate, 12'-0" shared path)
8. Parallel parking
9. Pick up & drop off zone
10. Palm trees in 5x8 tree grates
11. Accent street trees
12. Existing power pole to remain
13. Prefabricated pedestrian bridge
14. Bio-filtration basin, Typ.
15. Rain event bio-filtration basin
16. Loading zone
17. Future resident parking
18. Vehicular and pedestrian gate
19. Existing creek / flood channel
20. Existing billboards to remain
21. Public connection to MTS Trolley Station
22. Private connection to MTS Trolley Station
23. MTS Trolley Station
24. Building 3 private residential patios
25. Building 2 landscape corridor between buildings
26. Pole lights
27. Retaining wall at interstate

◀ Parking structure entry points

✱ Primary vehicle entry points

○ Secondary vehicle entry points



Source: Schmidt 2020

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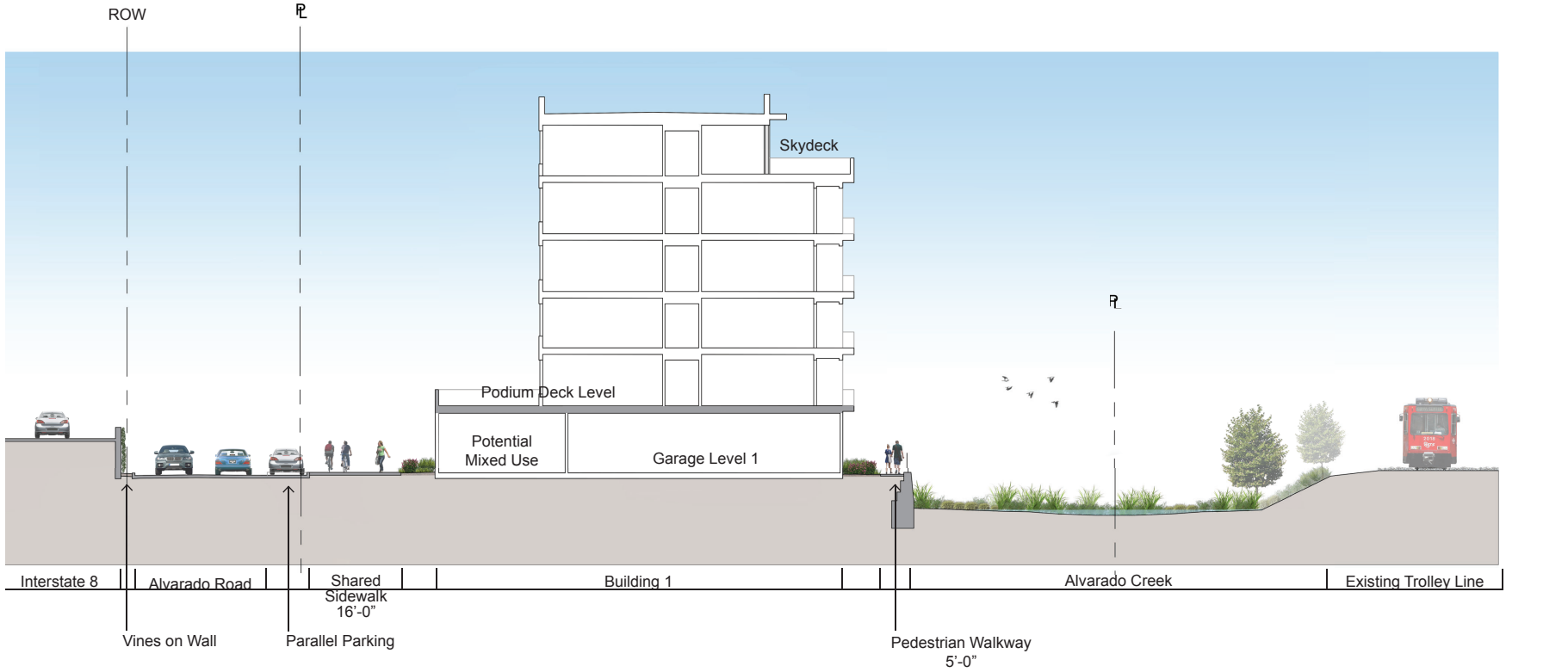
HELIX Environmental Planning

Site Plan

Figure 3-1

Key Map

N.T.S.



Source: Schmidt 2020

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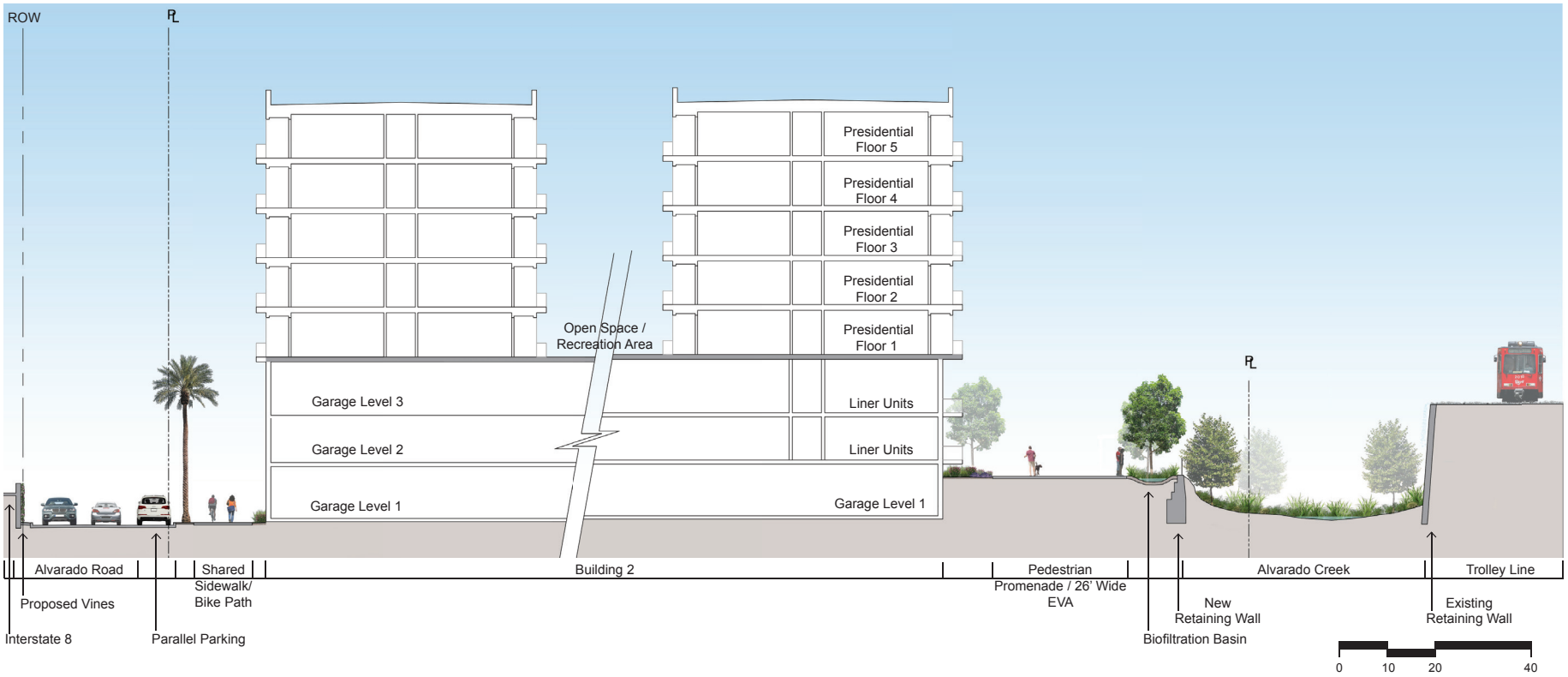
HELIX Environmental Planning

Building 1 Cross-section

Figure 3-2



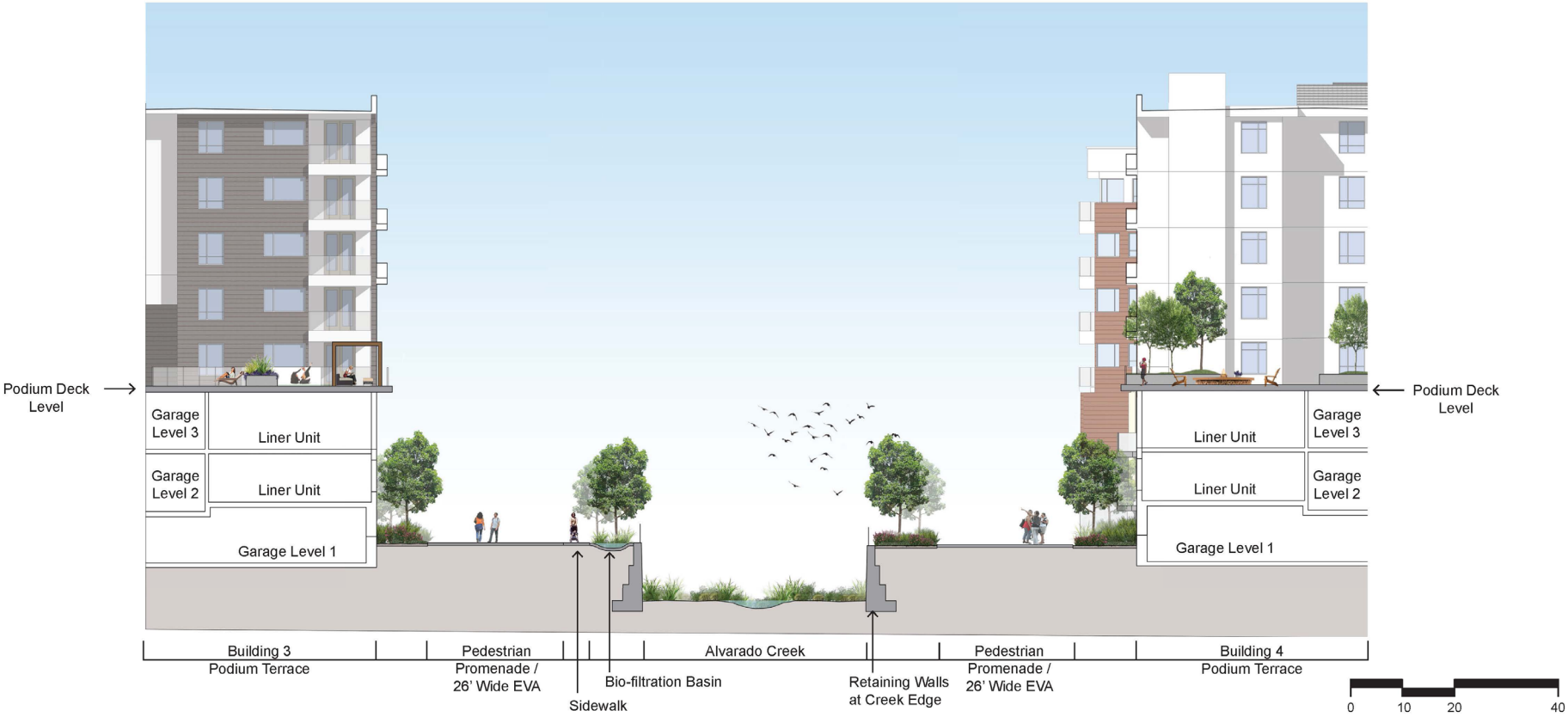
Source: Schmidt 2020

HELIX Environmental Planning

Building 2 Cross-section

Figure 3-3

Key Map N.T.S.



Source: Schmidt 2020

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HELIX Environmental Planning

Building 3 and 4 Cross-section

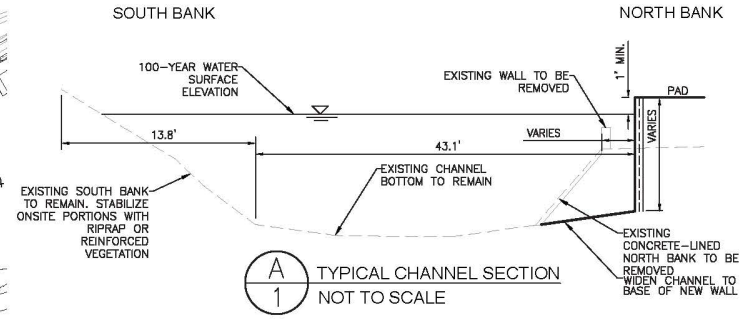
Figure 3-4

LEGEND

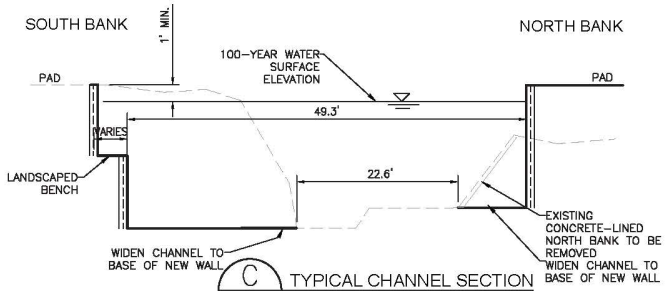
PROPOSED CHANNEL RETAINING WALL

CREEK RESTORATION AND MAINTENANCE AREA

PROPOSED CREEK IMPROVEMENTS



A/1 TYPICAL CHANNEL SECTION
NOT TO SCALE



C/1 TYPICAL CHANNEL SECTION
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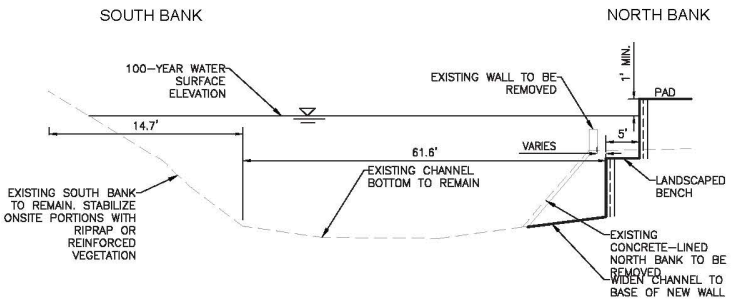

B/1 TYPICAL CHANNEL SECTION
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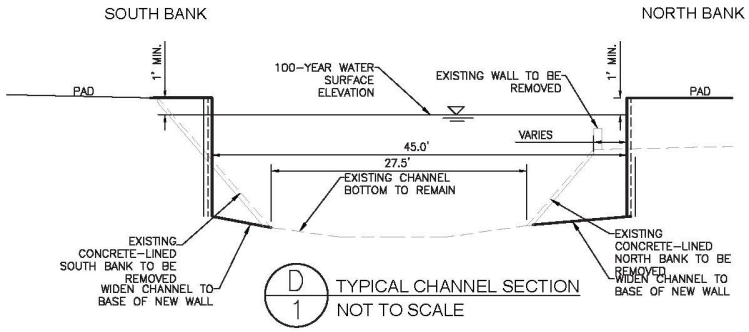

D/1 TYPICAL CHANNEL SECTION
NOT TO SCALE

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Source: Schmidt 2020

HELIX Environmental Planning

Alvarado Creek Flood Channel Improvements

Figure 3-5

TYPES OF MITIGATION

- Establishment
- Re-vegetation

CREEK RE-VEGETATION PLANTING SUCH AS:

Botanical Name	Common Name
Schoenoplectus americanus	Olney's Three-Square Bulrush
Schoenoplectus californicus	Southern Bulrush
Typha latifolia	Broad-Leaved Cattail

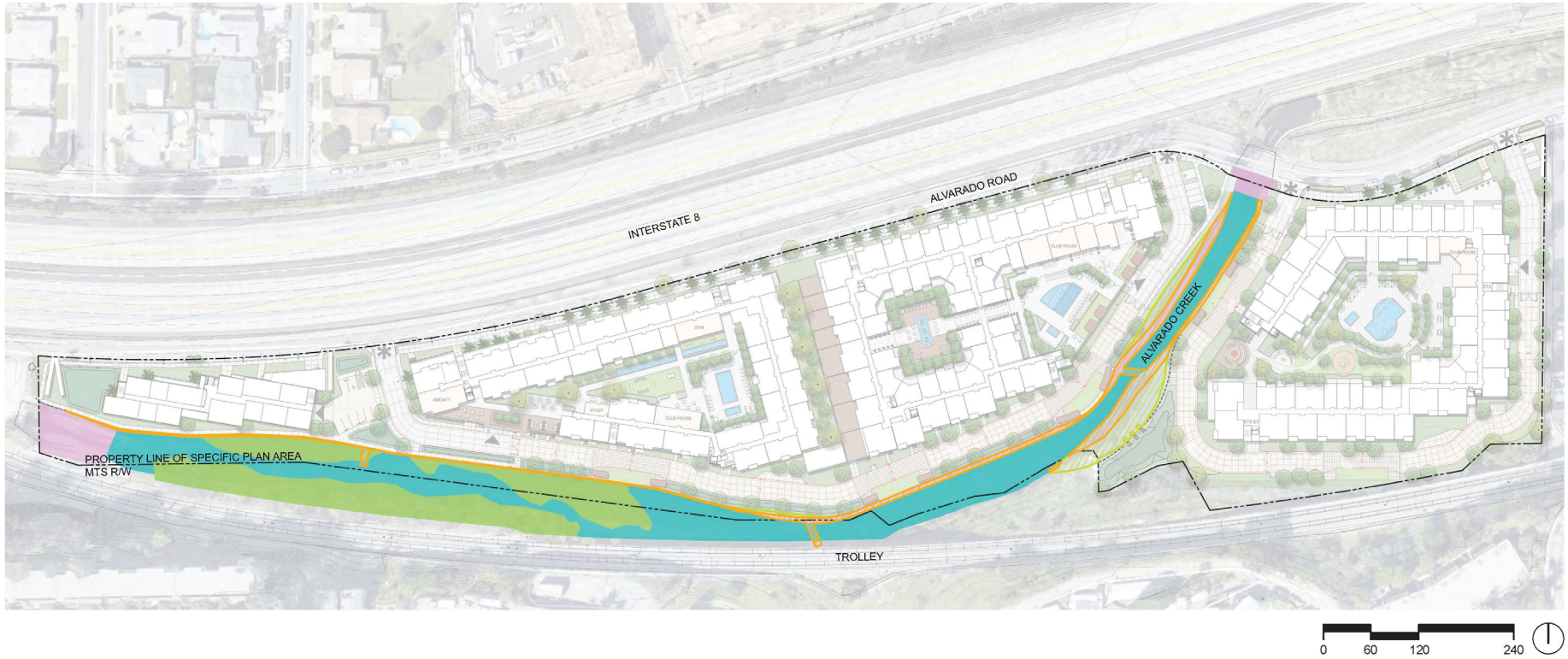
VEGETATION COMMUNITY AND LAND COVER

- Freshwater Marsh
- Willow Woodland
- Concrete Channel

NOTES

- Project Boundary

Periodic maintenance activities involving the removal of non-native plant species would occur in those portions of Alvarado Creek within the project boundary and outside of the mitigation areas for the project. While no supplemental planting is anticipated due to the low number of non-native species individuals, if infestations and subsequent removal of non-native species affects an area of more than 0.10 acre, then supplemental planting would occur to this area of the creek using the same species planted in the mitigation areas.

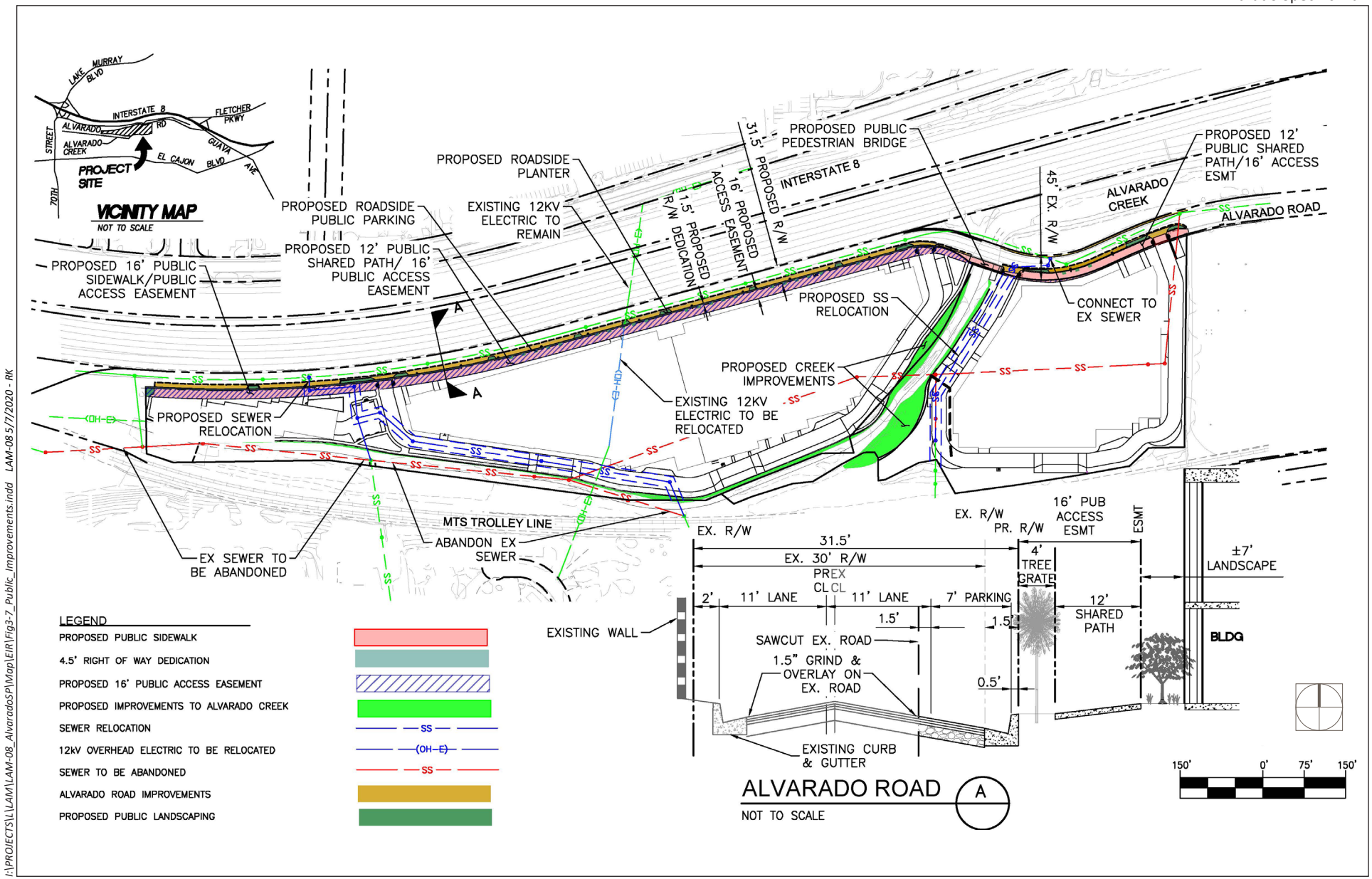


Source: Schmidt 2020

HELIX Environmental Planning

Alvarado Creek Flood Channel Restoration

Figure 3-6



Source: Schmidt 2020

HELIX Environmental Planning

Proposed Public Improvements

Figure 3-7

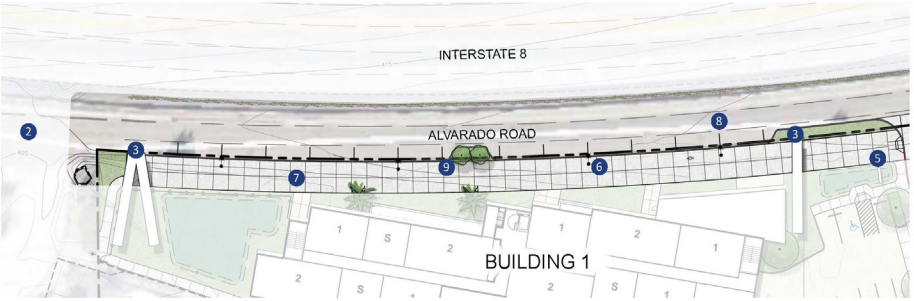
LEGEND

1. Pick up and drop off zone
2. MTS Trolley Station
3. Existing billboards to remain
4. Prefabricated pedestrian / bike bridge
5. Proposed entry monument
6. Pole light, Typ.
7. 16'-0" wide pedestrian sidewalk / shared bike lane (4'-0" tree grate, 12'-0" shared path)
8. Parallel parking
9. Accent street trees
10. Palm trees in 5x8 tree grates

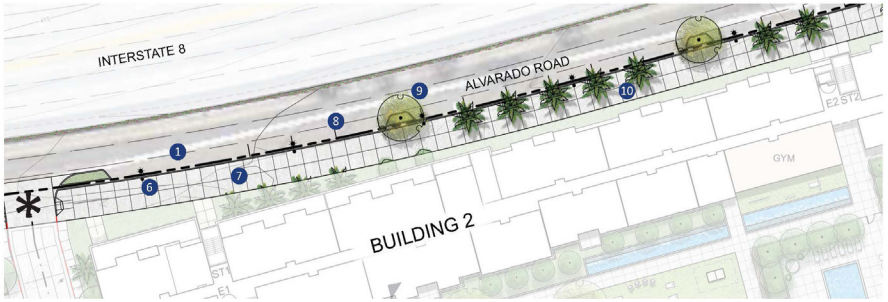
* Primary vehicle entry point

○ Secondary vehicle entry point

Key Map N.T.S.



ENLARGEMENT A



ENLARGEMENT B

ENLARGEMENT C

0 30 60 120

Source: Schmidt 2020

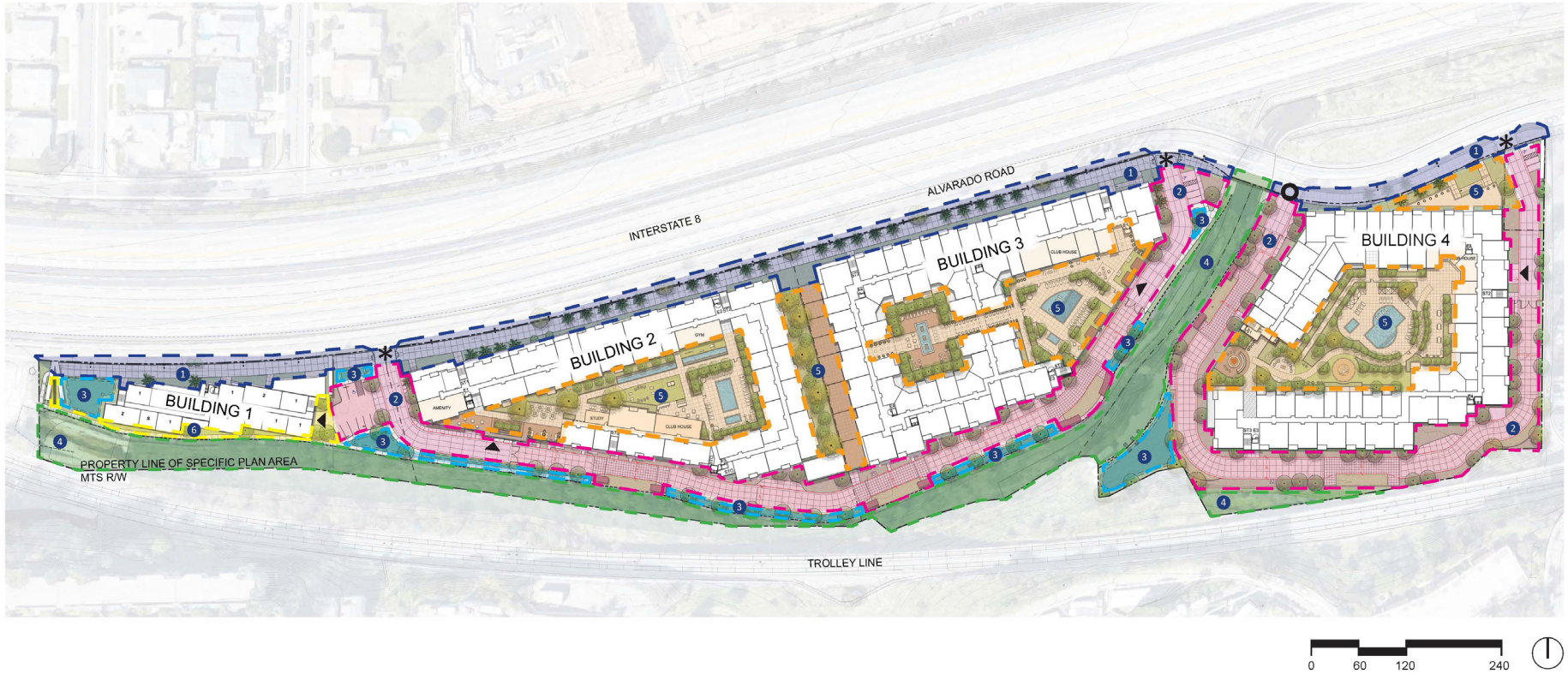
HELIX Environmental Planning

Alvarado Road Improvements

Figure 3-8

LEGEND

1. Alvarado Rd. streetscape
2. Interior private street
3. Stormwater management features
4. Alvarado Creek restoration
5. Podium deck, landscaping and amenities
6. Additional open space

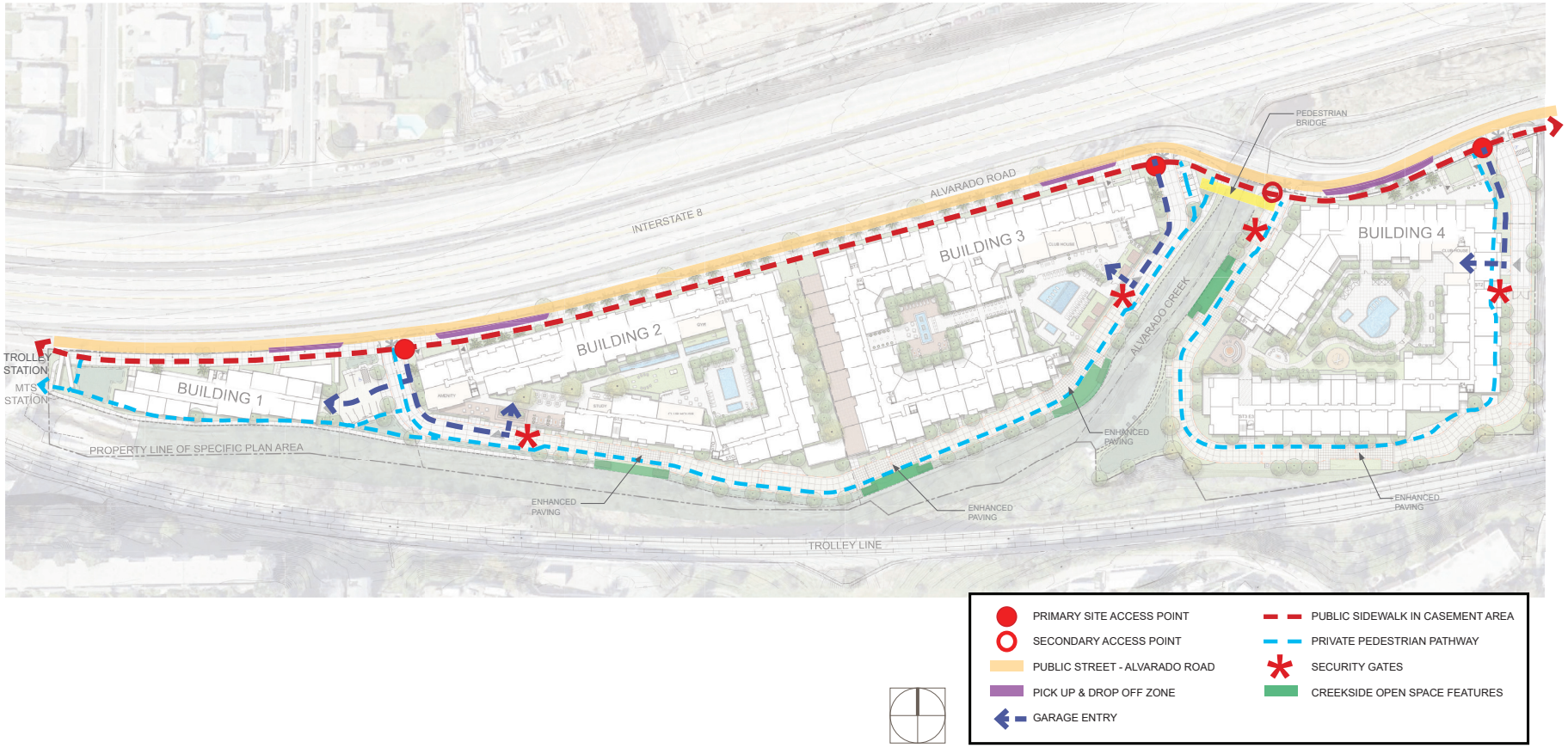


Source: Schmidt 2020

HELIX Environmental Planning

Landscape Plan Concept

Figure 3-9



Source: Schmidt 2020

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HELIX Environmental Planning

On-site Circulation Plan

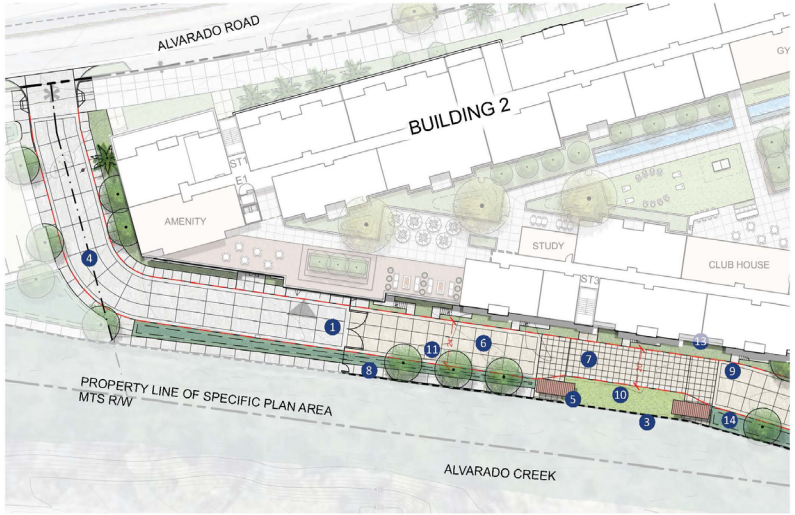
Figure 3-10

LEGEND

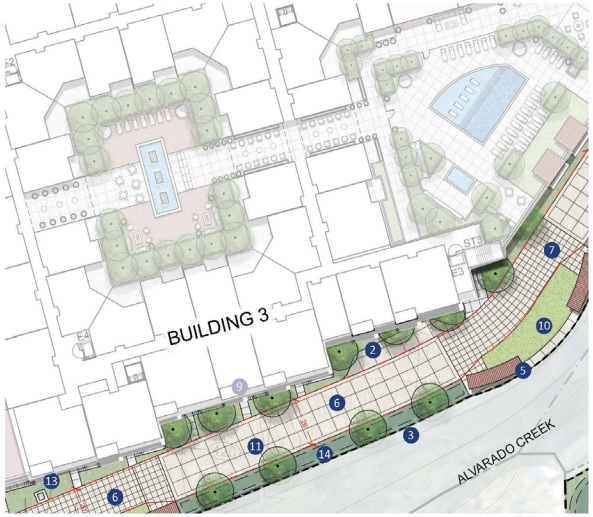
1. Vehicular and pedestrian gate
2. Loading zone
3. Retaining wall at creek edge / flood channel wall
4. Parcel division
5. Social node with shade element and turf
6. Decorative paving in pedestrian promenade 20'-0"-26'-0" wide / Emergency Vehicular Access (EVA)
7. Enhanced Paving
8. Private connection to MTS Trolley Station
9. Linear unit entries, Typ.
10. Flexible turf
11. Accent trees, Typ.
12. Shade trees, Typ.
13. Landscape accent planting
14. Bio-filtration basin
15. Rain event bio-filtration basin

- Parking structure entry point
- Primary vehicle entry point
- Secondary vehicle entry point

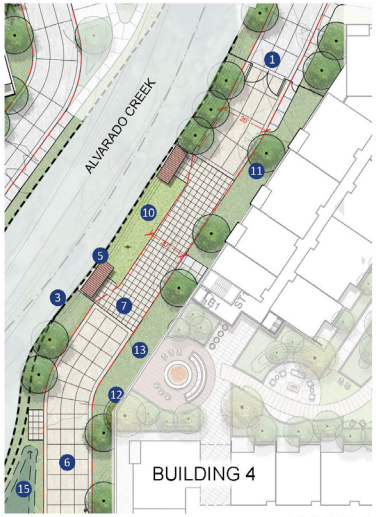
Key Map N.T.S.



ENLARGEMENT A



ENLARGEMENT B



ENLARGEMENT C

0 30 60 120

Source: Schmidt 2020

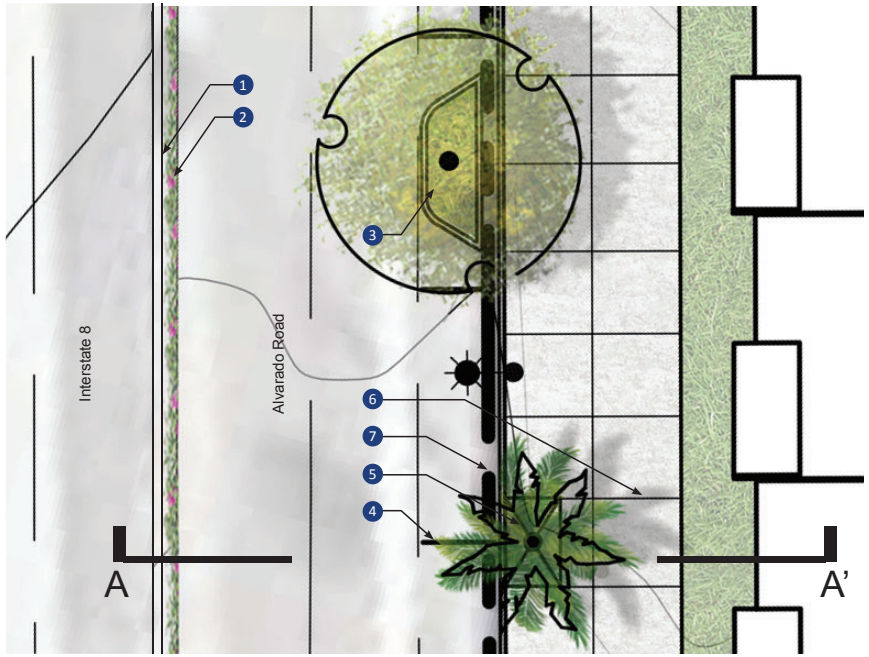
HELIX Environmental Planning

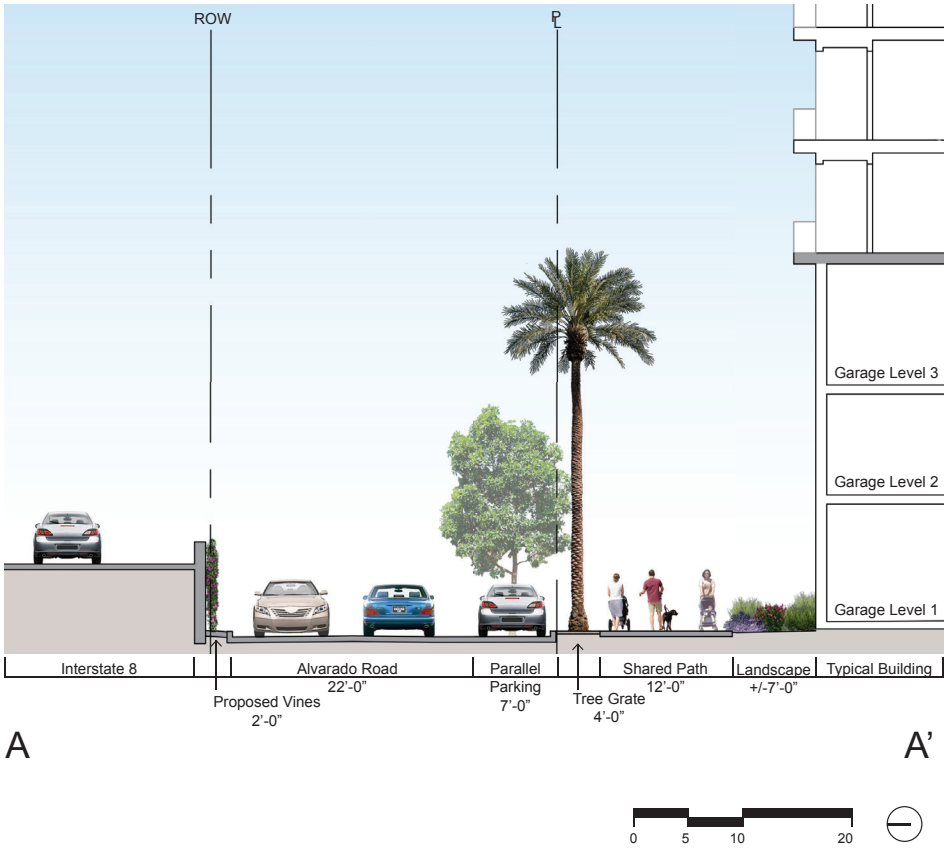
On-site Street Concept

Figure 3-11

LEGEND

1 Existing retaining wall
2 Vine planting on wall
3 Planting bump out
4 Parallel parking
5 4'-0" tree grate
6 12'-0" shared path
7 Property line





Source: Schmidt 2020

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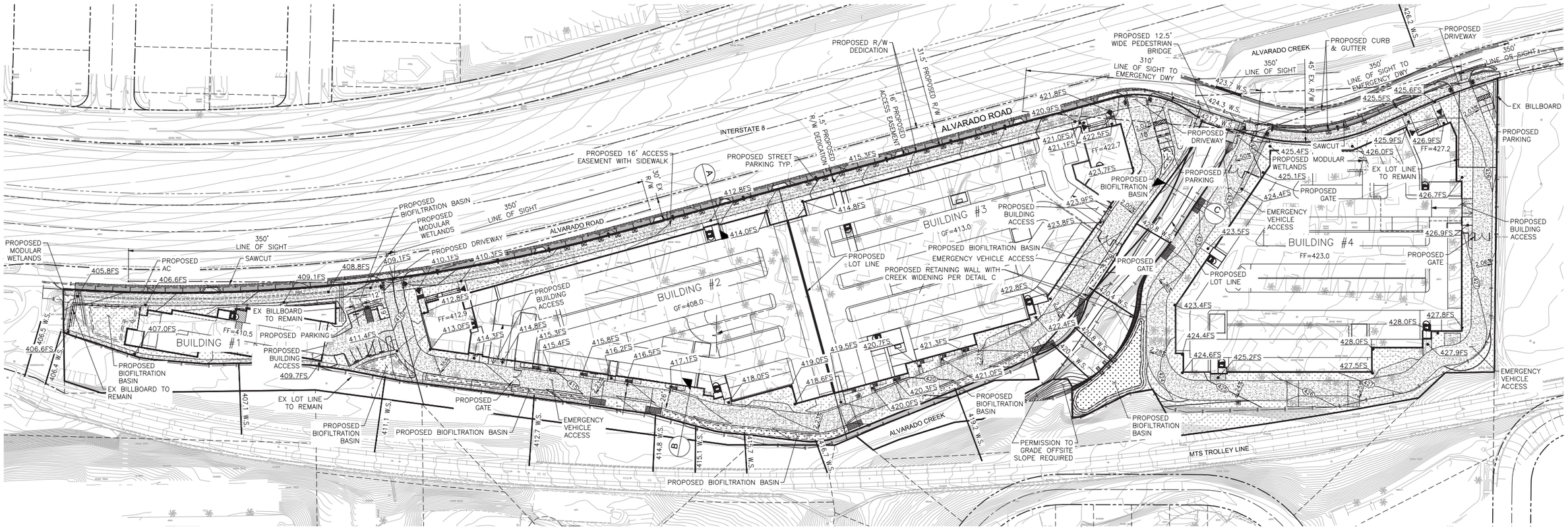
HELIX Environmental Planning

Shared Pedestrian/Bicycle Path

Figure 3-12



LEGEND

PROPERTY BOUNDARY	
RIGHT–OF–WAY	
EXISTING CONTOUR	
PROPOSED CONTOUR	
CONCRETE PAVEMENT	
LANDSCAPING	
BIOFILTRATION BASIN	
SAWCUT EXISTING AC	
PROPOSED ASPHALT CONCRETE	
HEC–RAS CROSS SECTION	
100–YEAR WATER SURFACE ELEVATION	423.7 W.S.

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Source: Fuscoe 2020

HELIX Environmental Planning

Conceptual Grading Plan

Figure 3-13

4.0 ENVIRONMENTAL ANALYSIS

Sections 4.1 through 4.14 analyze the potential environmental impacts that may occur as a result of implementation of the proposed project. The environmental issues analyzed in the following sections include those that were identified by the City as potentially significant in response to the NOP. There are 14 environmental issues addressed in the following sections. A brief discussion of additional impacts that were determined not to be potentially significant is included in Section 6.1, *Effects Found Not to be Significant*, of this EIR. The environmental topics addressed in this chapter include the following:

4.1 Air Quality
4.2 Biological Resources
4.3 Cultural and Tribal Cultural Resources
4.4 Geology and Soils
4.5 Greenhouse Gas Emissions
4.6 Hazards and Hazardous Materials
4.7 Hydrology and Water Quality
4.8 Land Use
4.9 Noise
4.10 Paleontological Resources
4.11 Public Services and Facilities
4.12 Public Utilities
4.13 Transportation
4.14 Visual Resources

Each section is formatted to include a description of the existing conditions and regulatory context; a description of methodology and assumptions used in the analysis, if applicable; the criteria for determining the significance for each impact; an evaluation of potential impacts; mitigation measures, if applicable; and a conclusion of significance.

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4.1 AIR QUALITY

This section of the EIR evaluates potential air quality impacts resulting from implementation of the proposed project. This analysis is based on the Air Quality Technical Report (AQTR; HELIX 2020a) prepared for the project, which is included as Appendix B of this EIR.

4.1.1 Existing Conditions

4.1.1.1 Climate and Meteorology

The project site is located within the San Diego Air Basin (SDAB) which coincides with the geographical boundary of San Diego County. The climate in the SDAB is controlled largely by the large-scale meteorological condition that dominates the west coast of the Undated States: a seasonally semi-permanent high-pressure cell centered over the northeastern Pacific Ocean, called the Pacific high, which keeps most storms from affecting the California coast. Areas within 30 miles of the coast in the San Diego region, including the project site, experience moderate temperatures and comfortable humidity.

Temperature inversion layers (inversions; layers of warmer air over colder air) affect air quality conditions significantly because they influence the mixing depth (i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground). The highest air pollutant concentrations in the SDAB generally occur during inversions. During the summer, air quality problems in the SDAB are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide (NO_2) react under the strong, abundant sunlight in the San Diego region, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to CO and NO_2 emissions. High NO_2 levels usually occur during autumn or winter, on days with summer-like conditions.

The predominant wind direction in the vicinity of the project site is from the southwest and the average wind speed is approximately six miles per hour (mph; Iowa Environmental Mesonet [IEM] 2019). The annual average maximum temperature in the project area is approximately 75 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 52°F. Total precipitation in the project area averages approximately 13 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2006).

4.1.1.2 Air Pollutant Descriptors and Terminology

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 (O_3)
- Reactive organic gases (ROGs) or volatile organic compounds (VOCs)
- CO
- NO_2

- Respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$)
- Sulfur dioxide (SO_2)
- Lead (Pb)

Criteria pollutants can be emitted directly from sources (primary pollutants; e.g., CO, SO_2, PM_{10}, $PM_{2.5}$, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants; e.g., ozone, NO_2, PM_{10}, and $PM_{2.5}$). The principal precursor pollutants of concern are reactive organic gasses ([ROGs] also known as volatile organic compounds [VOCs])[1] and nitrogen oxides (NO_X).

The descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table 4.1-1, *Summary of Health Effects of Criteria Air Pollutants*, based on information provided by the California Air Pollution Control Officers Association (CAPCOA; 2018). Specific adverse health effects to individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_X) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO_2 are, therefore, the product of emissions generated by numerous sources throughout a region. Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be directly correlated to the incremental contribution from the project.

Table 4.1-1
SUMMARY OF HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Man-Made Sources	Human Health Effects
Ozone (O_3)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO_X) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles and dyes.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.

[1] CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

Table 4.1-1 (cont.)
SUMMARY OF HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Man-Made Sources	Human Health Effects
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO_2)	A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2018

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2018a). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on

published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a significant impact on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2018a).

Asbestos is a mineral fiber that naturally occurs in some rock and soil. Long-term exposure to airborne asbestos fibers has been linked to major health effects including: lung cancer; mesothelioma, a rare form of cancer that is found in the thin lining of the lung, chest, abdomen, and heart; and asbestosis, a serious progressive, long-term, non-cancer disease of the lungs (USEPA 2019a). Because of its fiber strength and heat resistance, asbestos has been used in a variety of building construction materials for insulation and as a fire retardant, primarily in buildings constructed before 1979. Asbestos fibers may be released into the air by the disturbance of asbestos containing material (ACM) during renovation and demolition activities; or during earth disturbing activities in areas where naturally occurring asbestos (NOA) is present in the rock or soil. NOA is not likely to be present in the soil and rock of San Diego County (California Geologic Survey [CGS] 2000).

Lead is a naturally occurring metallic element that is found in small amounts in the earth's crust. In addition to its status as a criteria pollutant, lead is listed as a TAC because, depending on the level and duration of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. There is also a probable link between lead exposure and kidney cancer, brain cancer (gliomas), and lung cancer (USEPA 2019b). Lead particulate matter can be emitted during demolition and renovation activities that disturb material that contains lead-based paint (LBP), most typically found in structures built before 1978.

4.1.1.3 Existing Air Quality

Attainment Designations

Areas that do not meet state or federal standards (California Ambient Air Quality Standards [CAAQS] and National Ambient Air Quality Standards [NAAQS]) for a particular pollutant are considered to be "nonattainment areas" for that pollutant. The SDAB is classified as a moderate nonattainment area for the 8-hour NAAQS for ozone. The SDAB is an attainment area or unclassified for the NAAQS for all other criteria pollutants. The SDAB is currently classified as a nonattainment area under the CAAQS for ozone (one-hour and eight-hour), PM_{10}, and $PM_{2.5}$. The SDAB is an attainment area or unclassified for the CAAQS for all other criteria pollutants. The current federal and state attainment status for the SDAB is provided in Table 4.1-2, *Federal and State Air Quality Designations in the San Diego Air Basin.*

Table 4.1-2
FEDERAL AND STATE AIR QUALITY DESIGNATIONS IN THE SAN DIEGO AIR BASIN

Criteria Pollutant	Federal Designation	State Designation
Ozone (O_3) (1-hour)	(No federal standard)	Nonattainment
Ozone (O_3) (8-hour)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Respirable Particulate Matter (PM_{10})	Unclassifiable[1]	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment
nitrogen dioxide (NO_2)	Attainment	Attainment
sulfur dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility	(No federal standard)	Unclassified

Source: CARB 2018b; SDAPCD 2018

[1] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Monitored Air Quality

The San Diego Air Pollution Control District (SDAPCD) operates a network of ambient air monitoring stations throughout the San Diego region. The purpose of the monitoring stations is to measure ambient concentrations of criteria air pollutants and determine whether the ambient air quality meets state and federal standards, pursuant to the CAAQS and the NAAQS. The nearest ambient monitoring station to the project site is the El Cajon-Lexington Elementary School monitoring station located approximately five miles east of the project site at 533 First Street in El Cajon. This station monitors the following criteria air pollutants: O_3, NO_2, PM_{10}, and $PM_{2.5}$. Air quality data collected at the El Cajon-Lexington Elementary School monitoring station for the years 2016 through 2018 (the most recent available data) are shown in Table 4.1-3, *Air Quality Monitoring Data*.

Table 4.1-3
AIR QUALITY MONITORING DATA

Pollutant Standards	2016	2017	2018
Ozone (O_3)			
Maximum concentration 1-hour period (ppm)	0.087	0.096	0.087
Maximum concentration 8-hour period (ppm)	0.074	0.081	0.079
Days above 1-hour state standard (>0.09 ppm)	0	1	0
Days above 8-hour state/federal standard (>0.070 ppm)	1	9	2
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration (ppm)	0.048	0.045	0.045
Days above state 1-hour standard (0.18 ppm)	0	0	0
Days above federal 1-hour standard (0.100 ppm)	0	0	0
Annual average (ppm)	*	0.010	0.008
Exceed annual federal standard (0.053 ppm)	*	No	No
Exceed annual state standard (0.030 ppm)	*	No	No

Table 4.1-3 (cont.)
AIR QUALITY MONITORING DATA

Pollutant Standards	2016	2017	2018
Suspended Particulates (PM_{10})			
Maximum 24-hour concentration (µg/m^3)	43.0	50.0	43.0
Measured Days above 24-hr state standard (>50 µg/m^3)	0	0	0
Measured Days above 24-hr federal standard (>150 µg/m^3)	0	0	0
Annual average (µg/m^3)	*	23.0	23.0
Exceed state annual standard (20 µg/m^3)	*	Yes	Yes
Suspended Particulates ($PM_{2.5}$)			
Maximum 24-hour concentration (µg/m^3)	23.9	31.8	36.2
Days above 24-hour federal standard (>35 µg/m^3)	0	0	1
Annual average (µg/m^3)	*	9.6	10.5
Exceed state and federal annual standard (12 µg/m^3)	*	No	No

Source: CARB 2020. Data collected at the El Cajon-Lexington Elementary School air quality monitoring station.
ppm = parts per million; µg/m^3 = micrograms per cubic meter; * = insufficient data

Monitoring data at the El Cajon-Lexington Elementary School station reported one exceedance of the one-hour state ozone standard in 2017 and several days above the eight-hour state/federal ozone standard throughout 2016 to 2018. No exceedances of the state or federal standards for NO_2 occurred during 2016 to 2018. There were no exceedances of the state or federal standards for PM_{10} during 2016 to 2018. The annual average for PM_{10} exceeded the state and federal standard in 2017 and 2018; however, insufficient data was available for 2016. The maximum 24-hour concentrations of $PM_{2.5}$ indicate levels above the federal standard occurred for one day in 2018, but no exceedances of the state or federal annual average during 2016 to 2018.

4.1.1.4 Existing On-site Air Emissions

The criteria pollutant and precursor emissions associated with operation of the existing on-site land use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, described in Section 4.1.3. The estimated emissions for the Phase 1 area (Parcels 1-3) and Phase 2 area (Parcel 4) are shown in Table 4.1-4, *Existing On-site Land Use Emissions*.

Table 4.1-4
EXISTING ON-SITE LAND USE EMISSIONS

Source Category	Pollutant Emissions (pounds per day) VOC	Pollutant Emissions (pounds per day) NO_X	Pollutant Emissions (pounds per day) CO	Pollutant Emissions (pounds per day) SO_X	Pollutant Emissions (pounds per day) PM_{10}	Pollutant Emissions (pounds per day) $PM_{2.5}$
Existing Land Use Parcels 1-3						
Area	2.6	<0.1	7.7	<0.1	<0.1	<0.1
Energy	<0.1	0.5	0.2	<0.1	<0.1	<0.1
Mobile	0.7	2.7	7.0	<0.1	1.8	0.5
Parcels 1-3 Total[1]	**3.4**	**3.4**	**14.9**	**<0.1**	**1.9**	**0.6**
Existing Land Use Parcel 4						
Area	1.0	<0.1	3.0	<0.1	<0.1	<0.1
Energy	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Mobile	0.2	0.9	2.4	<0.1	0.7	0.2
Parcel 4 Total[1]	**1.3**	**1.1**	**5.4**	**<0.1**	**0.7**	**0.2**

Source: HELIX 2020a

[1] Total may not sum due to rounding. Parcels 1-3 correspond to Phase 1 of the project and Parcel 4 corresponds to Phase 2 of the project.

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

4.1.1.5 Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptors to the project site are single- and multi-family residences across the MTS Green Line trolley corridor to the south, approximately 80 feet from the southern boundary of the project site; and single- and multi-family residences across I-8 to the north, approximately 260 feet from the northern boundary of the project site. The closest school is the Maryland Avenue Elementary School, approximately 1,100 feet (0.2 mile) across I-8 to the north. The closest daycare center is the Taproot Montessori, approximately 1,500 feet (0.3 mile) to the east. There are no hospitals within 0.5 mile of the project site.

4.1.2 Regulatory Setting

4.1.2.1 Federal

Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for

enforcing the CAA of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are discussed in Section 4.1.1.2. Table 4.1-5, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards for these pollutants.

Table 4.1-5
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards Primary[1]	Federal Standards Secondary[2]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
$PM_{2.5}$	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
SO_2	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	–	–
Pb	30-day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards
Sulfates	24 Hour	25 µg/m^3	No Federal Standards	No Federal Standards
H_2S	1 Hour	0.03 ppm (42 µg/m^3)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	No Federal Standards	No Federal Standards

Source: CARB 2016
[1] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.
[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
Note: More detailed information of the data presented in this table can be found at the CARB website (www.arb.ca.gov).
O_3 = ozone; ppm = parts per million; µg/m^3 = micrograms per cubic meter; PM_{10} = large particulate matter;
AAM = Annual Arithmetic Mean; $PM_{2.5}$ = fine particulate matter; CO = carbon monoxide; mg/m^3 = milligrams per cubic meter;
NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; km = kilometer; – = No Standard.

As discussed in Section 4.1.1.3, areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. The SDAB was classified as a

moderate nonattainment area for the 8-hour NAAQS for ozone and is an attainment area or unclassified for the NAAQS for all other criteria pollutants.

4.1.2.2 State

California Clean Air Act

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. As such, CARB has established the more stringent CAAQS for the criteria air pollutants regulated by the NAAQS through the California Clean Air Act of 1988 (CCAA), and has also established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H_2S), vinyl chloride and visibility-reducing particles (see Table 4.1.4). As discussed in Section 4.1.1.3, the SDAB is currently classified as a nonattainment area under the CAAQS for ozone (1-hour and 8-hour), PM_{10}, and $PM_{2.5}$. The SDAB is an attainment area or unclassified for the CAAQS for all other criteria pollutants.

CARB is the state regulatory agency with the authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The SDAPCD is responsible for developing and implementing the rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, developing of air quality management plans, and adopting and enforcing air pollution regulations for San Diego County (County).

State Implementation Plan

The CAA requires areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain the NAAQS. The 1990 amendments to the CAA set deadlines for attainment based on the severity of an area's air pollution problem.

SIPs are not single documents—they are a compilation of new and previously submitted plans, programs (e.g., monitoring, modeling, permitting), district rules, state regulations and federal controls. Many of California's SIPs rely on a core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards the SIP revisions to the USEPA for approval and publication in the Federal Register. The Code of Federal Regulations (CFR) Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items which are included in the California SIP. At any one time, several California submittals are pending USEPA approval.

California Energy Code

California Code of Regulations (CCR) Title 24 Part 6, California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California’s energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas (GHG) emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Title 24 standards went into effect on January 1, 2020. The 2019 update to the Building Energy Efficiency Standards focuses on

several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards is a requirement for onsite photovoltaic electricity generation (e.g., solar panels) for most new or modified residential building up to three stories high. The project proposes five story residential buildings and the solar panel requirement would not apply.

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach. Future development per the proposed project would be required to be designed to meet the current Title 24 energy efficiency standards.

4.1.2.3 Local

Regional Air Quality Strategy

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for the attainment and maintenance of the AAQS in the SDAB. The SDAPCD prepared the San Diego County Regional Air Quality Strategy (RAQS), which was initially adopted in 1991, and is updated on an approximate triennial basis. The most recent version of the RAQS was adopted by the SDAPCD in December 2016 (SDAPCD 2016). As part of, and attached to, the RAQS are the Transportation Control Measures for the air quality plan prepared by SANDAG. Together, the RAQS and Transportation Control Measures provide the framework for achieving attainment of the CAAQS. The local RAQS, in combination with the plans from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to the CARB, which develops the SIP.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County, to estimate future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County of San Diego as part of the development of the County's General Plan. While SANDAG collaborates with the SDAPCD on the development of the portion of the SIP applicable to the SDAB, the SDAPCD is the lead agency. As such, the SDAPCD is responsible for projecting all future mobile source emissions (using CARB's mobile source emissions inventory EMFAC).

San Diego Air Pollution Control District Rules and Regulations

Future development pursuant to the project would be required to comply with SDAPCD Rules and Regulations which require the incorporation of best management practices (BMPs) during construction to reduce emissions of fugitive dust.

Rule 50 (Visible Emissions)

Particulate matter pollution impacts the environment by decreasing visibility (haze). These particles vary greatly in shape, size and chemical composition, and come from a variety of natural and manmade sources. Some haze-causing particles are directly emitted to the air such as windblown dust and soot.

Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of $PM_{2.5}$. These fine particles, caused largely by combustion of fuel, can travel hundreds of miles causing visibility impairment.

Visibility reduction is probably the most apparent symptom of air pollution. Visibility degradation is caused by the absorption and scattering of light by particles and gases in the atmosphere before it reaches the observer. As the number of fine particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range. Light absorption by gases and particles is sometimes the cause of discolorations in the atmosphere but usually does not contribute very significantly to visibility degradation. Scattering by particulates impairs visibility much more readily. SDAPCD Rule 50 (Visible Emissions) sets emission limits based on the apparent density or opacity of the emissions using the Ringelmann scale.

Rule 51 (Nuisance)

SDAPCD Rule 51 (Nuisance) states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. The provisions of the rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals.

Rule 55 (Fugitive Dust Control)

SDAPCD Rule 55 (Fugitive Dust Control) requires action be taken to limit dust from construction and demolition activities from leaving the property line. Similar to Rule 50 (Visible Emissions), Rule 55 (Fugitive Dust Control) places limits on the amount of visible dust emissions in the atmosphere beyond the property line. It further stipulates that visible dust on roadways as a result of track-out/carry-out shall be minimized through implementation of control measures and removed at the conclusion of each workday using street sweepers.

Rule 67.0.1 (Architectural Coatings)

Construction of development within the Specific Plan is required to comply with SDAPCD Rule 67.0.1 (Architectural Coatings) which requires residential interior/exterior flat coatings to be less than or equal to 50 grams per liter VOC content and interior/exterior non-flat coatings to be less than or equal to 100 grams per liter VOC content.

4.1.3 Methodology and Assumptions

4.1.3.1 Air Emissions Modeling

Air emissions from mobile, area, and energy sources were calculated using the CalEEMod, Version 2016.3.2. CalEEMod is a computer model used to estimate air emissions resulting from land development projects throughout the state of California. CalEEMod was developed by the South Coast Air Management District (SCAQMD) with the input of several air quality management and pollution control districts. CalEEMod is a computer model that estimates criteria air pollutant and greenhouse gas emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating, ventilation, and

cooling; lighting; and plug-in appliances), water use and wastewater generation, and solid waste disposal. Emissions are estimated based on land use information input to the model by the user.

In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, climate zone, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. The input land use information consists of land use subtypes (such as the residential subtypes of single-family residential and multi-family medium-rise residential) and their unit or square footage quantities. For the project, the residential buildings were modeled as high-rise apartments with 950 dwelling units (DUs). The ground-level, resident-serving commercial space allowed in the Specific Plan was included in the modeling, assuming a maximum of 15,000 square feet.

Subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions), area sources (woodstoves, fireplaces, consumer products [cleansers, aerosols, solvents], landscape maintenance equipment, architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components including an associated mitigation module to account for further reductions in the reported baseline calculations. Other inputs include trip generation rates, trip lengths, vehicle fleet mix (percentage autos, medium truck, etc.), trip distribution (i.e., percent work to home, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters.

In various places the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. For this assessment, the default parameters were not changed unless otherwise noted. The CalEEMod output files are included in Appendix B to this EIR.

4.1.3.2 Construction Emissions

Based on a conservative estimate (earliest and highest intensity of construction activities) of the project construction timeline, Phase 1 construction is assumed to begin July 2021 and be completed by September 2023, for a total construction period of 26 months. Phase 2 construction is assumed to begin September 2023 and be completed by May 2025, for a total construction period of 20 months. The actual construction period may differ based on market conditions. The quantity, duration, and intensity of construction activity influence the amount of construction emissions and related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

Construction activities would include demolition, site preparation, grading and installation of underground utilities, paving, construction of structures, and architectural coating (e.g., painting). Improvement to the Alvarado Creek channel and Alvarado Road are assumed to occurring during the grading and utilities phase. During Phase 1 site preparation, an export of approximately 6,500 cubic yards of vegetation/soil and old concrete/asphalt is anticipated. During Phase 1 grading/utilities, an export of approximately 2,000 cubic yards of soil is anticipated for underground utilities and creek

channel improvements. During Phase 2 site preparation, an export of approximately 3,060 cubic yards of vegetation/soil and old concrete/asphalt is anticipated. During Phase 2 grading/utilities, an export of approximately 1,000 cubic yards of soil for underground utilities is anticipated. All other Phase 1 and Phase 2 grading and excavation cut and fill activities are assumed to be balanced on site (e.g., no import or export of soil).

Construction would require heavy equipment during demolition, site preparation, grading/utilities, building construction, and paving. Construction equipment estimates are based on default values in CalEEMod, Version 2016.3.2 with additional equipment added for excavation for underground utilities and creek channel improvements, based on assumptions used for similar projects. Table 4.1-6, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 4.1-6
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Phase 1		
Demolition	Concrete/Industrial Saws	1
	Excavators	2
	Rubber Tired Dozers	1
Site Preparation	Excavators	1
	Rubber Tired Dozers	2
	Rubber Tired Loaders	1
	Tractors/Loaders/Backhoes	2
Grading/Utilities	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Table 4.1-6 (cont.)
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Phase 2		
Demolition	Concrete/Industrial Saws	1
	Excavators	1
	Rubber Tired Dozers	1
Site Preparation	Excavators	1
	Rubber Tired Dozers	1
	Rubber Tired Loaders	1
	Tractors/Loaders/Backhoes	1
Grading/Utilities	Excavators	1
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	3
Paving	Cement and Mortar Mixers	2
	Pavers	1
	Paving Equipment	2
	Rollers	2
	Tractors/Loaders/Backhoes	1
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Source: HELIX 2020a

Construction activities would implement the standard construction BMPs for the control of fugitive dust in conformance with SDAPCD Rule 55. The emissions modeling accounts for watering all exposed surfaces a minimum of twice per day and enforcing a 15-mile per hour (mph) speed limit for all vehicles traveling on unpaved surfaces. The modeling also assumes conformance with SDAPCD Rule 67, limiting the VOC content of architectural coatings to 50 g/L for flat coating and 100 g/L for non-flat coatings.

4.1.3.3 Operational Emissions

Area Source Emissions

Area sources include emissions from landscaping equipment, the use of consumer products, the reapplication of architectural coatings for maintenance, and hearths. With the exception of the number and mix of fireplaces, emissions associated with area sources were estimated using the CalEEMod default values. It was assumed the project would not permit wood-burning stoves or wood-burning fireplaces, and the CalEEMod default value for the number of residential units with natural gas fireplaces was maintained.

Energy Emissions

Development within the project would use electricity for lighting, heating, and cooling. Natural gas and electricity would be supplied by San Diego Gas and Electric. Direct emissions from the burning of natural

gas may result from furnaces, hot water heaters, and kitchen appliances. Electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which is then transmitted to end users. A building's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant) and is not included in this analysis.

Vehicular (Mobile) Sources

Operational emissions from mobile source emissions are associated with vehicle trip generation and trip length. Based on the trip generation rate from the Transportation Impact Analysis (TIA), the project would generate 5,415 average daily trips and the existing land use generates 668 average daily trips for a net increase of 4,747 average daily trips. The TIA also analyzed vehicle miles traveled (VMT) and determined that each trip would have an average distance of 4.83 miles (Kimley Horn 2020).

4.1.3.4 Sensitive Receptors

Because the project would site new sensitive receptors near a high-volume roadway (I-8), a health risk assessment (HRA) was completed to estimate to potential risks to future residents for exposure to DPM from I-8. The HRA was completed following OEHHA's *Air Toxics Hot Spots Program – Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (2015).

Estimation of Emissions

Almost all DPM is 10 microns or less in diameter. Therefore, it was conservatively assumed that all PM_{10} emissions from diesel-powered vehicle exhaust emissions are DPM. Emissions factors from diesel vehicles and the fleet mix typical of traffic on San Diego County roadways was estimated using the CARB EMFAC2017 online database. Emissions were estimated for the earliest anticipated first full year of Phase 1 operation, 2024. The peak-hour traffic volume on I-8 near the project site (from 70th Street to Fletcher Parkway) was estimated from Caltrans 2018 traffic counts (Caltrans 2018). Anticipated increases in traffic between 2018 and 2024 were extrapolated from data in the SANDAG Traffic Forecast Information Center (SANDAG 2020). All traffic was assumed to be traveling at the posted speed limit for I-8 (55 mph for medium- and heavy-duty trucks and 65 mph for all other vehicles). This speed scenario is conservative (higher emissions)–an examination of truck emissions from data in EMFAC2017 indicated that, between 5 mph and 55 mph, the highest emissions per mile traveled occur at 55 mph. The complete calculation sheets are included in Appendix B to this EIR.

Dispersion Modeling

Localized concentrations of pollutants were modeled using the Lakes AERMOD View, Version 9.8.3. The Lakes program utilizes the USEPA's AERMOD gaussian air dispersion model. Emissions from vehicles traveling on I-8 (diesel exhaust only) were modeled as four volume line sources from 70th Street to Fletcher Parkway, using the USEPA haul road modeling parameter recommendations. Each volume source included two travel-lanes of the 8-lane section of I-8. All heavy- and medium duty-duty trucks were assumed to be traveling exclusively in the outer two (right-hand) lanes in each travel direction. All other diesel vehicle traffic was assumed to be distributed equally across all travel lanes.

CARB provides pre-processed meteorological data suitable for use with AERMOD. The available data set most representative of conditions in the project vicinity was from the Montgomery-Gibbs Executive Airport station, approximately seven miles northwest of the project site. The Montgomery-Gibbs Executive Airport data set includes five years of data collected from 2009 to 2013. Urban dispersion

coefficients were selected in the model to reflect the developed nature of the project site and the region downwind (east).

United States Geological Survey (USGS) National Elevation Dataset (NED) files with a 10-meter resolution covering an area approximately one mile around the project site were used in the model to cover the analysis area. Terrain data was imported to the model using AERMAP (a terrain preprocessing program for AERMOD).

The DPM emissions were modeled as variable emissions by hour-of-day with each hour set as a fraction of the peak hour emissions based on studies of hourly traffic volume distribution typical of San Diego freeways. The Lakes AERMOD View output reports (which include all modeling parameters selected) are included in Appendix B to this EIR.

Risk Determination

Discrete receptors were placed in the model at estimated representative locations of residential unit balconies facing the freeway for each occupied floor of the buildings within the project (starting at the second floor for Building 1, and at the fourth floor four Buildings 2, 3, and 4). The height of the receptors was set to the estimated floor elevations for each building plus four feet, representing the average breathing height for a standing individual.

Health risks resulting from localized concentration of DPM were estimated using the CARB Hotspots Analysis and Reporting Program (HARP), Air Dispersion Modeling and Risk Tool (ADMRT), Version 19121. The plot files of localized concentrations from AERMOD were imported into the ADMRT model to determine health risks. The model conservatively assumes that residents would be standing and breathing on the apartment balconies every day between 17 and 21 hours per day (depending on the age group, starting with fetuses in utero in the third trimester of pregnancy) for 30 years. The OEHHA derived intake rate percentile method was selected. The output of the dispersion modeling provides unitized ground level concentrations of the modeled constituent in micrograms per cubic meter for the maximum one-hour and the average over the five-year period of the meteorological data. An inventory of maximum hourly and average annual emissions for each source of TACs was entered in the ADMRT program. The ADMRT combines the emissions inventory, the ground level concentration plots from AERMOD, and pollutant-specific risk factors to determine the health risks at each receptor point identified in the model. The ADMRT output files are included in Appendix B to this EIR.

4.1.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant air quality impact would occur if implementation of the proposed project would result in any of the following:

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

2. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

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

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

4.1.5 Impact Analysis

4.1.5.1 Air Quality Plans

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

The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for ozone. In addition, the SDAPCD relies on the SIP, which includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the CalEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the RAQS and SIP.

The RAQS relies on information from CARB and SANDAG, including projected growth in the County, and mobile, area, and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB's mobile source emission projections and SANDAG's growth projections are based on population, employment and transportation trends, and land use plans developed by the local governments. Accordingly, projects that propose development that is consistent with the population and employment growth anticipated by these land use plans would be consistent with the RAQS. If a project proposes development that results in growth greater than that anticipated in the adopted land use plans and SANDAG's growth projections upon which the RAQS is based, the project may conflict with the RAQS and SIP and could have a potentially significant impact on air quality. This situation would warrant further analysis to determine if the project and the surrounding projects would exceed the growth projections used in the RAQS for the specific subregional area.

Implementation of the project would result in a change in the City's General Plan land use designation for the project site from "Light Industrial" and "Regional Serving Commercial" to a specific plan overlay that would allow higher density mixed use multi-family housing and commercial land uses within the design form guidelines of the Specific Plan. Relative to the current General Plan, the proposed project would result in an overall increase in the capacity for multi-family residential units in the City. Based on the CalEEMod default values provided in the AQTR, the default population density for high-rise multi-family apartments for San Diego County would be 2.86 persons per dwelling unit (DU) and the project could increase the City's population by approximately 2,717 residents. Therefore, implementation of the project would potentially result in an increase of emissions of ozone precursors (i.e., ROG and NO_X) and PM greater than what is accounted for in the RAQS as a result. Even though the project would result in a potential increase in the City's population, the project would be consistent with General Plan policy LU-3.1.7 (City 2012a): "Encourage mixed-use transit-oriented development near public transportation facilities; new construction should be compact in form to take advantage of these transit-rich locations." and General Plan objective CS-3.1: "Facilitate a reduction of automobile dependency in favor of affordable alternative, sustainable modes of travel."

The project is within 0.5 mile of the 70th Street Trolley Station, which serves the MTS Green Line Trolley. Due the project's proposed higher density multi-family housing and proximity to a major transit stop,

the project would be considered TOD. TOD is a key component of SANDAG's Regional Plan to mitigate the adverse effects of traffic congestion and reduce GHG emissions (SANDAG 2015). Residents would be able to access other areas of the City and region via trolley and bus service at the adjacent 70th Street Trolley Station. This would help to reduce the average VMT for the average commuter, which would have the effect of reducing pollutant emissions from personal vehicle trips for project employees and visitors.

Another measurement tool used to determine consistency with the RAQS is to determine how a project would accommodate the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of VMT compared to regional averages, and consequently the minimization of air pollutant emissions, that aspect of the project would be consistent with the RAQS. The TIA analyzed the project's VMT per capita and compared it to the San Diego region. The regional VMT per capita is 15.3 miles and the project VMT per capita would be 13.5 miles, based primarily on proximity to the transit station (Kimley Horn 2020). Therefore, without consideration of other measures, the project would have a VMT estimate that is 88 percent of the regional average. The TIA also includes estimated VMT reductions that would further reduce the project's VMT, including an employer transit pass subsidy, transit-oriented development, parking pricing, pedestrian facility improvements, and bike facility improvements. Implementation of TOD alone would further reduce VMT by 5.2 percent, bringing the project's VMT below 85 percent of the regional average. Although the project would increase population density over what was considered in the RAQS, it would result in VMT per capita that would be below the region-wide average, which would overall reduce vehicular air pollutant emissions consistent with regional goals such as SANDAG's Regional Plan, SB 743, and the City's General Plan. Therefore, the project would not conflict with or obstruct implementation of the RAQS. Impacts would be less than significant.

4.1.5.2 Air Quality Standards

Threshold *2:* *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

The project would generate criteria pollutants in the short-term during construction and the long-term during operation. To determine whether a project would result in a cumulatively considerable net increase in criteria pollutant emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD as presented in Table 4.1-7, *Screening-Level Thresholds for Air Quality Impact Analysis.*

Table 4.1-7
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions		
Construction Emissions (Pounds/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		
Operational Emissions	**Pounds per Hour**	**Pounds per Day**	**Tons per Year**
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	55	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	137	15
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-Cancer Hazard	1.0		

Source: SDAPCD 2016; SCAQMD 2015
T-BACT = Toxics-Best Available Control Technology

Construction Emissions

As discussed in Section 4.1.3.2, the project's construction emissions were estimated using CalEEMod Version 2016.3.2. The results of the modeling of the project's construction emissions of criteria pollutants and precursors for Phases 1 and 2 are shown in Table 4.1-8, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SDAPCD thresholds.

Table 4.1-8
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Construction Phase	Pollutant Emissions (pounds per day) VOC	Pollutant Emissions (pounds per day) NO_X	Pollutant Emissions (pounds per day) CO	Pollutant Emissions (pounds per day) SO_X	Pollutant Emissions (pounds per day) PM_{10}	Pollutant Emissions (pounds per day) $PM_{2.5}$
Phase 1						
Demolition	1.9	19.0	14.7	<0.1	1.3	1.9
Site Preparation	3.2	36.0	18.9	<0.1	7.4	4.5
Grading/Utilities	4.3	46.5	31.4	0.1	6.1	3.5
Paving	1.3	11.2	14.9	<0.1	0.7	0.6
Building Construction	4.8	33.0	37.2	0.1	7.8	2.7
Architectural Coatings	23.4	1.5	2.7	<0.1	0.4	0.2
Phase 1 Maximum Daily Emissions[1, 2]	**28.2**	**46.5**	**39.9**	**0.1**	**8.2**	**4.5**
Phase 2						
Demolition	1.1	10.0	8.2	<0.1	0.6	0.5
Site Preparation	1.1	12.0	8.4	<0.1	3.4	2.0
Grading/Utilities	1.8	18.2	15.2	<0.1	3.8	2.3
Paving	0.9	8.3	12.6	<0.1	0.6	0.4
Building Construction	2.7	19.0	24.0	0.1	3.6	1.4
Architectural Coatings	15.9	1.3	2.6	<0.1	0.4	0.2
Phase 2 Maximum Daily Emissions[1, 2]	**18.6**	**20.3**	**26.6**	**<0.1**	**4.0**	**2.3**
SDAPCD Screening-Level Thresholds	*137*	*250*	*550*	*250*	*100*	*55*
Exceed Screening-Level Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: HELIX 2020a
1 Totals may not sum due to rounding.
2 The maximum daily emissions of some pollutants would be the sum of Building Construction and Architectural Coatings which would occur concurrently for both Phases.
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
SDAPCD = San Diego Air Pollution Control District

As shown in Table 4.1-8, the project's temporary Phase 1 and Phase 2 construction-related criteria pollutant and precursor emissions would be below the SDAPCD's screening-level thresholds. Therefore, the project's construction activities would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. The project's construction activities would not, therefore, conflict with the NAAQS or CAAQS, or result in adverse human health effects. Construction-related air quality impacts would be less than significant.

Operational Emissions

The project's operational emissions were estimated using the CalEEMod model, as described in Section 4.1.3. Since the long-term operation of the Phase 1 would occur concurrently with the temporary construction activities for the Phase 2, the maximum daily emissions during construction of

the project would be the aggregate of the Phase 1 operational emissions plus the Phase 2 construction emissions, and minus the existing land use emissions. The net total emissions from Phase 1 operation and Phase 2 construction, minus the existing land use emissions, are shown in Table 4.1-9, *Phase 1 Operational and Phase 2 Construction Concurrent Emissions*.

Table 4.1-9
PHASE 1 OPERATIONAL AND PHASE 2 CONSTRUCTION CONCURRENT EMISSIONS

Source Category	Pollutant Emissions (pounds per day) VOC	Pollutant Emissions (pounds per day) NO_X	Pollutant Emissions (pounds per day) CO	Pollutant Emissions (pounds per day) SO_X	Pollutant Emissions (pounds per day) PM_{10}	Pollutant Emissions (pounds per day) $PM_{2.5}$
Phase 1						
Area	17.8	6.5	55.8	<0.1	0.8	0.8
Energy	0.1	1.2	0.5	<0.1	0.1	0.1
Mobile	4.3	16.3	43.7	0.1	13.8	3.8
Phase 1 Operational Subtotal[1]	22.3	24.0	100.1	0.2	14.7	4.6
Phase 2 Construction (from Table 4.1-8)	18.6	20.3	26.6	<0.1	4.0	2.3
Less Existing Phase 1 Land Use (from Table 4.1-4)	(3.4)	(3.4)	(14.9)	(<0.1)	(1.9)	(0.6)
Net Maximum Daily Emissions	**37.5**	**40.9**	**111.8**	**0.2**	**16.8**	**6.3**
SDAPCD Screening-Level Thresholds	*137*	*250*	*550*	*250*	*100*	*55*
Exceed Screening-Level Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: HELIX 2020a
[1] Total may not sum due to rounding.
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter
SDAPCD = San Diego Air Pollution Control District

The final total maximum daily operation emissions, after completion of construction for both Phase 1 and Phase 2, is shown in Table 4.1-10*, Net Total Operational Emissions*.

Table 4.1-10
NET TOTAL OPERATIONAL EMISSIONS

Source Category	Pollutant Emissions (pounds per day) VOC	Pollutant Emissions (pounds per day) NO_X	Pollutant Emissions (pounds per day) CO	Pollutant Emissions (pounds per day) SO_X	Pollutant Emissions (pounds per day) PM_{10}	Pollutant Emissions (pounds per day) $PM_{2.5}$
Phase 2						
Area	8.3	3.1	26.4	<0.1	0.4	0.4
Energy	<0.1	0.6	0.2	<0.1	<0.1	<0.1
Mobile	1.8	7.2	18.6	<0.1	6.5	1.8
Phase 2 Operational Subtotal[1]	10.2	10.9	45.2	<0.1	7.0	2.2
Phase 1 Operational Subtotal (from Table 4.1-9)	22.3	24.0	100.1	0.2	14.7	4.6
Less Existing Phase 1 Land Use (from Table 4.1-4)	(3.4)	(3.4)	(14.9)	(<0.1)	(1.9)	(0.6)
Less Existing Phase 2 Land Use (from Table 4.1-4)	(1.3)	(1.1)	(5.4)	(<0.1)	(0.7)	(0.2)
Net Maximum Daily Emissions	**27.8**	**30.3**	**125.0**	**0.2**	**19.1**	**6.0**
SDAPCD Screening-Level Thresholds	*137*	*250*	*550*	*250*	*100*	*55*
Exceed Screening-Level Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: HELIX 2020a
[1] Total may not sum due to rounding.
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter;
SDAPCD = San Diego Air Pollution Control District

As shown in Tables 4.1-9 and 4.1-10, all the project's maximum daily emissions of criteria pollutants and precursors for concurrent Phase 1 operation and Phase 2 construction, and for the final total operation would be below the SDAPCD's screening-level thresholds. Therefore, the project's operational maximum daily emissions would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Long-term operation of the project would not, therefore, conflict with the NAAQS or CAAQS, or result in adverse human health effects. Operational air quality impacts would be less than significant.

4.1.5.3 Sensitive Receptors

Threshold 3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction Diesel Particulate Matter Emissions

Implementation of the project would result in the use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles. These vehicles and equipment could generate the TAC DPM. Generation of DPM from construction projects typically occurs in a localized area (e.g., at the project site) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction (e.g., grading, building construction), the construction-related emissions to which nearby receptors are exposed to would also vary throughout

the construction period. During some equipment-intensive phases such as grading, construction-related emissions would be higher than other less equipment-intensive phases such as hangar construction. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at approximately 500 feet (CARB 2005).

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed amount of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (Office of Environmental Health Hazard Assessment [OEHHA] 2015). Considering this information, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the project site, it is not anticipated that construction of the project would expose sensitive receptors to substantial DPM concentrations. Therefore, air quality impacts related to exposure of sensitive receptors to DPM would be less than significant.

Construction Asbestos and Lead-Based Paint Emissions

Asbestos dust and lead are known carcinogens classified as TACs by CARB. Both may be found in buildings constructed prior to 1979 when lead was used in lead-based paints (LBP) and asbestos was used as a component of building materials such as walls, ceilings, insulation, or fireproofing. Demolition of existing structures erected prior to 1979 could result in the disturbance of asbestos-containing materials (ACM) and LBP.

The project site contains six existing buildings, all constructed between 1954 and 1959, that would be demolished. Due to the age of these buildings, the potential exists for them to contain ACM and/or LBP. As discussed in Section 4.6, *Hazards and Hazardous Materials*, of this EIR, a pre-construction ACM and LBP survey would be conducted to determine if these materials are present in the existing on-site buildings. If present, compliance with the existing regulations described below would avoid exposure of nearby sensitive receptors to these TACs.

Airborne asbestos is regulated in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos regulations. Federal and state regulations prohibit emissions of asbestos from demolition or construction activities. Following identification of friable ACM, federal and state Occupational and Safety Health Administration (OSHA) regulations require that asbestos trained, and certified abatement personnel perform asbestos abatement and that all ACM removed from on-site structures be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. In accordance with the SDAPCD Rule 1206, *Asbestos Removal, Renovation, and Demolition*, prior to commencement of demolition operations and prior to submitting the notifications required by Section (e) of Rule 1206, a facility survey shall be performed to determine the presence or absence of ACM, regardless of the age of the facility (SDAPCD 2017). USEPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms

performing renovation, repair, and painting projects that disturb LBP in structures built before 1978 have their firm certified by USEPA (or an authorized state), use certified renovators who are trained by USEPA-approved training providers, and follow lead-safe work practices. These regulations specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers or lead dust and require notice to federal and/or local government agencies prior to beginning demolition or renovation that could disturb ACM. Therefore, compliance with established regulations would ensure that potential air quality impacts associated with ACM and LBP during project demolition activities would be less than significant.

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution in excess of the NAAQS concentration limit that is typically caused by severe vehicle congestion on major roadways. Transport of the criteria pollutant CO is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or “hot spots,” are typically associated with high volume intersections that are projected to operate at unacceptable levels of service during the peak commute hours.

Neither the City nor the SDAPCD have adopted screening methods for CO hotspots. Therefore, the screening methods of the Sacramento Metropolitan Air Quality Management District (SMAQMD) are used for this analysis because the SMAQMD jurisdiction is a metropolitan area in an interior valley with greater potential for inversion layers and increased CO concentrations than for the project area, resulting in a more conservative analysis. The SMAQMD states that a project would result in a less than significant impact to local CO concentrations if it meets all of the below criteria (SMAQMD 2016):

- The affected intersection carries less than 31,600 vehicles per hour;
- The project does not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other location where horizontal or vertical mixing of air would be substantially limited; and
- The affected intersection, which includes a mix of vehicle types, is not anticipated to be substantially different from the County average, as identified by EMFAC or CalEEMod models.

The project would not contribute traffic to a location where horizontal or vertical mixing of air would be substantially limited. All intersections affected by the project would include a mix of vehicle types that are not anticipated to be substantially different from the County average fleet mix, as identified in CalEEMod. According to the TIA, the busiest project-affected intersection would be the intersection of Fletcher Parkway and Baltimore Drive which would carry approximately 4,300 vehicles (including project trips) during the peak hour (Kimley Horn 2020). This would be far below the screening level of 31,600 vehicles per hour. Therefore, the project’s contribution to future traffic would not result in CO hotspots. Air quality impacts related to exposure of sensitive receptors to CO hotspots would be less than significant.

On-site Sensitive Receptors

The incremental excess cancer risk is an estimate of the chance a person exposed to a specific source of a TAC may have of developing cancer from that exposure beyond the individual's risk of developing cancer from existing background levels of TACs in the ambient air. For context, the average cancer risk from TACs in the ambient air for an individual living in an urban area of California is 830 in 1 million (CARB 2015). Cancer risk estimates do not mean, and should not be interpreted to mean, that a person will develop cancer from estimated exposures to toxic air pollutants. The potential health risks to future project residents from exposure to DPM was modeled, as described in Section 4.1.3.4. The resulting highest predicted incremental increased cancer risk for each residential floor of the project buildings is shown in Table, 4.1-11, *Project Residential Increased Incremental Cancer Risk from DPM*.

Table 4.1-11
PROJECT RESIDENTIAL INCREMENTAL INCREASED CANCER RISK FROM DPM

Building	Risk by Residential Floor (chances per million) Floor 2	Risk by Residential Floor (chances per million) Floor 3	Risk by Residential Floor (chances per million) Floor 4	Risk by Residential Floor (chances per million) Floor 5	Risk by Residential Floor (chances per million) Floor 6	Risk by Residential Floor (chances per million) Floor 7	Risk by Residential Floor (chances per million) Floor 8
Building 1	6.2	3.5	1.9	1.1	0.7	*	*
Building 2	*	*	1.7	1.1	0.7	0.5	0.4
Building 3	*	*	1.8	1.1	0.8	0.6	0.4
Building 4	*	*	1.9	1.2	0.8	0.6	0.5

Source: HELIX 2020a
DPM = diesel particulate matter
* = no residences facing the freeway on the floor

The highest estimated incremental increase in cancer risk to future project residents from DPM emissions on I-8 would be 6.2 in 1 million, measured on the apartment balconies facing I-8 on the second floor of Building 1. This increase in risk would be below the SDAPCD threshold of 10 in 1 million. The estimated risk assumes an individual standing and breathing on the apartment balcony every day between 17 and 21 hours per day for 30 years. The risk estimate does not account for future reductions of DPM emissions as more stringent CARB and USEPA diesel engine emissions standards take effect and older vehicles are retired. Therefore, the proposed project would not result in the exposure of on-site sensitive receptors (i.e., future project residents) to substantial concentrations of DPM. Therefore, air quality impacts related to exposure of on-site sensitive receptors to DPM would be less than significant.

4.1.5.4 Odors

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

The project may produce odors during proposed construction activities resulting from construction equipment exhaust, application of asphalt, and/or the application of architectural coatings. The odor of these emissions may be objectionable to some; however, emissions would be temporary, intermittent, and would disperse rapidly and therefore, would not affect a substantial number of people. Furthermore, odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction.

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations (SCAQMD 1993). The project, involving a multi-family residential development, would not include any of these uses nor are there any of these land uses in the project vicinity. In addition, the project would be required to comply with SDAPCD Rule 51, which prohibits the discharge of odorous emissions that would create a public nuisance. Accordingly, the project would not create objectionable odors affecting a substantial number of people during construction or operation, and impacts would be less than significant.

4.1.6 Mitigation Measures

4.1.6.1 Air Quality Plans

No significant air quality impacts related to conflicts with applicable air quality plans would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.1.6.2 Air Quality Standards

No significant air quality impacts related to air quality standards would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.1.6.3 Sensitive Receptors

No significant air quality impacts related to exposure of sensitive receptors to substantial pollutant concentrations would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.1.6.4 Odors

No significant air quality impacts related to emissions of objectionable odors would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.1.7 Significance Determination

The significance of air quality impacts before and after mitigation is summarized in Table 4.1-12, *Significance Determination Summary of Air Quality Impacts*. Implementation of the proposed project would not result in any significant air quality impacts. Impacts related to air quality plans, air quality standards, sensitive receptors, and odors would be less than significant, and no mitigation is required.

Table 4.1-12
SIGNIFICANCE DETERMINATION SUMMARY OF AIR QUALITY IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Air Quality Plans	Less than significant	None required	Less than significant
Air Quality Standards	Less than significant	None required	Less than significant
Sensitive Receptors	Less than significant	None required	Less than significant
Odors	Less than significant	None required	Less than significant

4.2 BIOLOGICAL RESOURCES

This section of the EIR evaluates anticipated impacts to biological resources resulting from implementation of the proposed project. It is based on a Biological Resources Report prepared for the project (RECON Environmental, Inc. [RECON] 2019), which is included as Appendix C of this EIR.

4.2.1 Existing Conditions

A biological survey was conducted on January 23, 2018 to map the extent of vegetation communities and land cover types; perform a general botanical and zoological species survey, assess the presence of suitable habitat for sensitive plant and animal species; and determine the presence of jurisdictional areas (RECON 2019). The biological survey covered the approximately 12.36-acre project site and immediately adjacent off-site areas along Alvarado Creek and the Alvarado Road site frontage, totaling approximately 13.66 acres that is collectively referred to as the "biological survey area."

The biological survey area is located within a developed urban area that includes a recreational vehicle resort facility, the channelized Alvarado Creek, and Alvarado Road. Topography is relatively level at approximately 400 feet AMSL.

4.2.1.1 Soils

The biological survey area includes three soil types mapped by the U.S. Department of Agriculture, including Riverwash; Redding-Urban land complex, 2 to 9 percent; and Redding-Urban land complex, 9 to 30 percent. Riverwash soils occur in intermittent stream channels and typically consist of sand, gravel, or cobble. Riverwash soil is rapidly permeable and excessively drained and may be devoid of vegetation in many places or may contain sparse patches of shrubs and forbs. Redding-Urban land complex, 2 to 9 percent and Redding-Urban land complex, 9 to 30 percent occur on marine terraces, at elevations of 200 to 500 feet. The soils in these areas has been altered through cut and fill operations and leveling for building sites. Prior to cut and fill operations and leveling, the slope was 2 to 9 percent or 9 to 30 percent, respectively.

4.2.1.2 Vegetation Communities/Land Cover Types

The project site supports two vegetation communities and three land cover types, including freshwater marsh, willow woodland, disturbed land, urban/developed land, and concrete channel. The approximate acreages of these vegetation communities and land cover types are presented in Table 4.2-1, *Existing Vegetation Communities and Land Cover Types Within the Biological Survey Area*, and their locations within the biological survey area are shown on (Figure 4.2-1, *Vegetation Communities and Land Cover Types within the Biological Survey Area)*.

Table 4.2-1
EXISTING VEGETATION COMMUNITIES AND LAND COVER TYPES WITHIN THE BIOLOGICAL SURVEY AREA

Vegetation Community/ Land Cover Type	Existing On Site (acres)	Existing Off Site (acres)	Survey Area Total (acres)
Freshwater Marsh	0.70	0.43	1.13
Willow Woodland	0.28	0.47	0.75
Disturbed Land	0.23	0.03	0.26
Urban/Developed Land	10.87	0.36	11.23
Concrete Channel	0.28	0.01	0.29
TOTAL	**12.36**	**1.30**	**13.66**

Source: RECON 2019

Freshwater Marsh

Freshwater marsh consists of perennial emergent monocots such as cattails and bulrush that typically form a closed canopy that is 13 to 16 feet tall. Freshwater marsh vegetation occurs in open bodies of fresh water with little current flow, such as ponds, and to a lesser extent around seeps and springs. Freshwater marsh communities, as with all wetland habitats, have been greatly reduced throughout their entire range and continue to decline as a result of urbanization.

Within the biological survey area, freshwater marsh occurs along Alvarado Creek (Figure 4.2-1) and is dominated by broad-leaved cattail (*Typha latifolia*), southern bulrush (*Scirpus californica*), and Olney's three-square bulrush (*Schoenoplectus americanus*). Other plant species found in the freshwater marsh at this site include saplings of Mexican fan palm (*Washingtonia robusta*), Brazilian peppertree (*Schinus terebinthifolius*), and scattered native trees of red willow (*Salix laevigata*) and Goodding's black willow (*Salix gooddingii*). Freshwater marsh covers approximately 0.70 acre of the project site, and approximately 0.43 acre adjacent to the project site.

Willow Woodland

Willow woodland is a riparian community dominated by broad-leaved winter-deciduous willow trees. This vegetation community is typically found along major drainages but also occurs in smaller drainages. The density of the willows typically prevents a dense understory of smaller plants from growing. The representative species typically grows in loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This community requires repeated flooding to prevent succession to community dominated by sycamores and/or cottonwoods.

Within the biological survey area, willow woodland occurs along Alvarado Creek on the southwestern portion of the site (Figure 4.2-1). The willow woodland on-site is composed of patches of trees and saplings of black willow, red willow, and shrubs of mule fat (*Baccharis salicifolia*). The understory of the willow woodland includes the same freshwater marsh species previously noted above. Scattered non-native species found in this section of the creek include castor bean (*Ricinus communis*), Mexican fan palm, and Brazilian peppertree. Willow woodland covers approximately 0.28 acre of the project site, and approximately 0.47 acre adjacent to the site.

Disturbed Land

Disturbed land is present within the biological survey area mostly south of and east of Alvarado Creek in the eastern portion of the biological survey area. The disturbed habitat occurs on a slope below a concrete wall associated with the MTS Trolley Line down to Alvarado Creek and along the eastern bank of the creek (Figure 4.2-1). The slope supports a cover of ivy (*Hedera helix*), olive tree (*Olea europa*), fennel (*Foeniculum vulagre*), and non-native grasses. A small area of disturbed land also occurs in the western portion of the biological survey area on the south side of Alvarado Creek. Disturbed land covers approximately 0.23 acre of the project site, and approximately 0.03 acre adjacent to the project site.

Urban/Developed Land

The majority of the site consists of a developed recreational vehicle facility with ornamental vegetation consisting of maintained non-native landscaped areas (Figure 4.2-1). These ornamental plants included Washington palm (*Washingtonia robusta*), Brazilian peppertree, Peruvian peppertree (*Schinus molle*), American century plant (*Agave americana*), and bird of paradise flower. Urban/developed land covers approximately 10.87 acres of the project site, and approximately 0.36 acre adjacent to the site.

Concrete Channel

Portions of Alvarado Creek at the box culvert crossing at Alvarado Road and the box culvert inlet near the trolley station at the west end of the project site have been covered in concrete to control erosion and stabilize the creek bed (Figure 4.2-1). In addition, portions of the northern bank of the creek are also covered in concrete to stabilize the bank from erosive forces. Concrete channel covers approximately 0.28 acre of the project site, and approximately 0.01 acre adjacent to the project site.

4.2.1.3 Observed Plant Species

A total of 41 plant species were observed within the biological survey area during the biological survey. Given the highly developed nature of the project site, most of the plants observed (29 of the 41) were non-native species. The 12 native species were mostly associated with freshwater marsh or willow woodland habitat, such as Olney's three-square bulrush (*Schoenoplectus americanus*), southern bulrush (*Schoenoplectus californicus)*, broad-leaved cattail (*Typha latifolio*), mule fat – seep willow (*Baccharis salicifolia*), water cress (*Nasturtium offininale*), Goodding's black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepsis*). A complete list of observed wildlife species is contained in Attachment 1 of the Biological Resources Report (RECON 2019), which is included as Appendix C of this EIR.

4.2.1.4 Observed Wildlife Species

A total of 18 wildlife species were detected within the biological survey area during the biological survey through either observation or vocalization. Although Alvarado Creek passes through the project site, the number and variety of wildlife species detected during the survey was generally low. This is likely due to the noise from the nearby I-8 and MTS Trolley Line bordering the site. The species detected during the field survey included invertebrates such as honey bee (*Apis mellifera*) and mourning cloak (*Nymphalis antiopa*); one species of amphibian, the southern California toad (*Anaxyrus boreas halophilus*); and birds such as the red-shouldered hawk (*Buteo lineatus elegans*), mourning dove (*Zenaida macroura marginella*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), Nuttall's woodpecker (*Picoides nuttallii*), black phoebe (*Sayornis nigricans semiatra*), American crow (*Corvus brachyrhynchos hesperis*), bushtit (*Psaltriparus minimus melanurus*), northern mockingbird (*Mimus*

polyglottos polyglottos), yellow-rumped warbler (*Setophaga coronata*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), lesser goldfinch (*Spinus psaltria hesperophilus*), and house finch (*Haemorhous mexicanus frontalis*). A complete list of observed wildlife species is contained in Attachment 2 of the Biological Resources Report (RECON 2019), which is included as Appendix C of this EIR.

4.2.1.5 Sensitive Biological Resources

The Biological Resources Report classified species as candidate, sensitive, or of special concern if they met at least one of the following three criteria:

- Species covered under the City of La Mesa Subarea Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP);
- Species listed by state or federal agencies as threatened or endangered, or were proposed for listing; or
- Species listed on California Rare Plant Rank (CRPR) 1B (considered endangered throughout their range) or CRPR 2 (considered endangered in California but are more common in other regions) of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California. Noteworthy plant species are considered those on the CRPR 3 (more information about the plant's distribution and rarity needed) and CRPR 4 (plants of limited distribution).

Sensitive Vegetation Communities

Two sensitive vegetation communities occur within the survey area, including freshwater marsh and willow woodland. As stated in Section 4.2.1.1, freshwater marsh covers approximately 0.70 acre of the project site and approximately 0.43 acre adjacent to the project site, and willow woodland covers approximately 0.28 acre of the project site and approximately 0.47 acre adjacent to the site. The locations of these two sensitive vegetation communities are shown on Figure 4.2-1.

Sensitive Plant Species

Based on a search of CNPS and California Natural Diversity Data Base (CNDDB) records, there are nine sensitive plant species that may have the potential to occur in the project vicinity as identified in Table 4.2-2, *Sensitive Plant Species with Potential to Occur in the Biological Survey Area*. As shown in Table 4.2-2, none are expected to occur within the survey area. No sensitive plant species were observed during the biological survey.

Table 4.2-2
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR IN BIOLOGICAL SURVEY AREA

Species	Listing Status Federal State CNPS City	Lifeform and Bloom Period	Potential to Occur/Preferred Habitat/Range
San Diego viguiera (*Bahaiopsis laciniata*)	-- -- 4.3 --	Perennial shrub February to June	**Not Expected**. Occurs in coastal sage scrub at elevations below 2,500 feet AMSL. Suitable habitat is not present on site.
San Diego marsh elder (*Iva hayesiana*)	-- -- 2B.2 --	Perennial herb April to September	**Not Expected**. Occurs in marshes and swamps, playas, and riparian areas at elevations below 1,700 feet AMSL. Riparian habitat is present along Alvarado Creek, but species was not observed.
San Diego barrel cactus (*Ferocactus viridescens*)	-- -- 2B.1 --	Perennial stem succulent May to June	**Not Expected**. Occurs in chaparral, coastal sage scrub, valley and foothill grasslands, and vernal pools at elevations below 1,500 feet AMSL. Suitable habitat is not present on site.
Nuttall's scrub oak (*Quercus dumosa*)	-- -- 1B.1 --	Perennial evergreen shrub February to March	**Not Expected**. Occurs in closed-cone coniferous forest, coastal chaparral, coastal sage scrub at elevations below 1,300 feet AMSL. Suitable habitat is not present on site.
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT CE 1B.1 MSCP Covered NE	Annual herb April to June	**Not Expected**. Occurs in chaparral, coastal sage scrub, and grasslands at elevations below 3,200 feet AMSL. Suitable habitat is not present on site.
willowy manardella (*Monardella viminea*)	FE CE 1B.1 MSCP Covered	Perennial herb June to August	**Not Expected**. Occurs in closed-cone coniferous forest, coastal chaparral, coastal sage scrub, riparian scrub, riparian woodlands, and sandy seasonal dry washes at elevations between 160 and 740 feet AMSL. Suitable habitat is not present on site.
California adolphia (*Adolphia californica*)	-- -- 2B.1 --	Perennial deciduous shrub December to May	**Not Expected**. Occurs in Diegan coastal sage scrub and chaparral at elevations between 100 and 2,500 feet AMSL. Suitable habitat is not present on site.
southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	-- -- 4.2 NE	Perennial herb May to June	**Not Expected**. Occurs in coastal dunes, meadows and seeps, coastal salt marsh, and riparian areas at elevations below 3,000 feet AMSL. Riparian habitat is present along Alvarado Creek but species was not observed.
San Diego goldenstar (*Bloomeria clevelandii*)	-- -- 1B.1 MSCP Covered	Perennial herb May	**Not Expected**. Occurs in chaparral, coastal sage scrub, valley and foothill grassland, and vernal pools at elevations between 170 and 15000 feet AMSL. Suitable habitat is not present on site.

Source: RECON 2019
Federal Status Codes: FE = federally listed endangered; FT = federally listed threatened
State Status Codes: CE = state listed endangered
California Native Plant Society Rare Plant Rankings:
1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
2B = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
3 = Review list: Plants about which more information is needed. Some eligible for state listing.
4 = Watch list: plants of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.
.1 = Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat.
.3 = Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known.
City Status Codes: MSCP Covered = Multiple Species Conservation Program covered species; NE = narrow endemic.

Sensitive Wildlife Species

No sensitive wildlife species were detected within the survey area during the biological survey. Based on a search of CNPS and CNDDB records, there is potential for 17 sensitive wildlife species to occur in the project vicinity as identified in Table 4.2-3, *Sensitive Wildlife Species with Potential to Occur in the Biological Survey Area*. No sensitive wildlife species were observed during the biological survey.

Table 4.2-3
SENSITIVE WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE BIOLOGICAL SURVEY AREA

Species	Listing Sensitivity Federal State City	Habitat and Potential to Occur
Amphibians		
Western spadefoot (*Spea hammondii*)	-- CSC --	**Not Expected.** Inhabits vernal pools, floodplains, and alkali flats within areas of open vegetation. Suitable habitat is not present on site.
Arroyo toad (*Anaxyrus californicus*)	FE CSC MSCP Covered	**Not Expected.** Inhabits open streamside and sand/gravel flats and breeds in quiet, shallow pools along stream edges. Suitable habitat is not present on site because Alvarado Creek is channelized.
Reptiles		
Coast horned lizard (*Phrynosoma balinvillii*)	-- CSC MSCP Covered	**Not Expected.** Inhabits chaparral and coastal sage scrub with fine, loose soil. Suitable habitat is not present on site.
Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)	-- CSC MSCP Covered	**Not Expected.** Inhabits chaparral and coastal sage scrub with coarse, sandy soils and scattered brush. Suitable habitat is not present on site.
Two-striped garter snake (*Thamnophis hammondii*)	-- CSC --	**Not Expected.** Inhabits permanent freshwater streams with rocky bottoms in mesic areas. Suitable habitat is not present on site because Alvarado Creek is channelized and does not have a rocky bottom.
Red diamond rattlesnake (*Crotalus ruber*)	-- CSC --	**Not Expected.** Inhabits desert scrub, riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields. Suitable habitat is not present on site.
Birds		
Cooper's hawk (*Accipiter cooperii*)	-- WL MSCP Covered	**Moderate Potential.** Inhabits mature forest, open woodlands, wood edges, river groves, and parks and residential areas. Mature trees within Alvarado Creek and the existing RV facility could potentially be used for nesting by this species.
White-tailed kite (*Elanus leucurus*)	-- CFP --	**Not Expected.** Nests in riparian woodland, oaks, and sycamores and forages in open, grassy areas. Riparian habitat occurs on site, but species was not observed and not expected to nest or forage on site due to the narrow riparian habitat and proximity to urban development.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE CE MSCP Covered	**Not Expected.** Nesting restricted to willow thickets and also occupies other woodlands. Willow woodland occurs on site, but species was not observed and not expected to occur due to the minimal amount of willow riparian habitat on site.

Table 4.2-3 (cont.)
SENSITIVE WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE BIOLOGICAL SURVEY AREA

Species	Listing Sensitivity Federal State City	Habitat and Potential to Occur
Birds (cont.)		
Least Bell's vireo (*Vireo bellii pusillus*)	FT CSC MSCP Covered	**Low Potential.** Inhabits willow riparian woodlands. Willow woodland occurs on site, but species was not observed and not expected to occur due to the minimal amount of willow woodland habitat on site.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT CSC MSCP Covered	**Not Expected.** Inhabits coastal sage scrub and maritime succulent scrub. Suitable habitat is not present on site.
Yellow-breasted chat (*Icteria virens auricollis*)	-- CSC --	**Low Potential.** Inhabits dense riparian woodland. Willow woodland occurs on site, but species was not observed and has low potential to occur because the willow woodland habitat is likely not dense enough for breeding.
Mammals		
Western mastiff bat (*Eumops perotis californicus*)	-- CSC --	**Moderate Potential**. Inhabits woodlands, rocky habitat, arid and semi-arid lowlands, cliffs crevices, buildings and tree hollows. Species was not observed on site but has a moderate potential to forage on site given the presence of woodlands and trees.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	-- CSC --	**Moderate Potential.** Normally roosts in crevice in rocks, slopes, and cliffs. Species was not observed on site but has a moderate potential to forage on site.
Big free-tailed bat (*Nyctinomops macrotis*)	-- CSC --	**Moderate Potential**. Inhabits rugged, rocky terrain and roosts in crevices, buildings, caves, and tree holes. Species was not observed on site but has a moderate potential to forage on site given the presence of woodlands and trees.
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	-- CSC --	**Low Potential.** Occurs in San Diego County west of mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils. Species was not observed on site but has a moderate potential to forage on site.
San Diego desert woodrat (*Neotoma lepida intermedia*)	-- CSC --	**Not Expected.** Inhabits coastal sage scrub and chaparral. Suitable habitat is not present on site.

Source: RECON 2019
Federal Status Codes: FE = federally listed endangered; FT = federally listed threatened
State Status Codes: CE = state listed endangered; CSC = state species of special concern; WL = watch list
City Status Codes: MSCP Covered = Multiple Species Conservation Program covered species

4.2.1.6 Wildlife Corridors and Nursery Sites

Wildlife corridors are defined as linear spaces of undeveloped native habitats that connect both large and small natural open space and provide opportunities for wildlife movement. Wildlife corridors contribute to species' sustainability by providing access to adjacent habitat areas for dispersal, foraging, and mating. Linkages between wildlife corridors connect isolated blocks of habitat and allow movement or dispersal species over a large scale and the consequent mixing of genes between populations (i.e., gene pool diversity).

Alvarado Creek, portions of which are located within the biological survey area, functions as a local wildlife corridor. The creek flows east to west, entering into the site in the northeast portion of the site

and draining underground at the western end of the project site. The remainder of the site does not serve as a wildlife corridor. Although a portion of the site may function for local wildlife movement, the site is not a significant regional wildlife corridor as it does not connect large blocks of habitat or provide a throughway for wildlife species into major areas of off-site habitats.

Wildlife nursery sites are specific areas that contain the resources necessary for adult wildlife species to breed, give birth, and rear their young. Nursery sites support the constituent habitat elements required by juvenile wildlife species to grow and develop, including adequate space, refuge, food, and physical conditions in the environment. No known or potential wildlife nursery sites occur on, or in the immediate vicinity, of the biological survey area.

4.2.1.7 Federal and State Jurisdictional Waters

A wetland delineation was conducted within the biological survey area to map the extent of federal and state jurisdictional waters (RECON 2019). USACE federal waters of the U.S. and CDFW and RWQCB waters of the State occur within the biological survey area associated with Alvarado Creek (Table 4.2-4, *Existing Federal and State Jurisdictional Areas within the Biological Survey Area*). Federal and state wetlands include areas of the creek vegetated with either freshwater marsh or willow woodland habitat. Federal non-wetland waters include the concrete lined portions of the creek bottom. State streambed and bank include the concrete-lined portions of the creek bottom, as well as the concrete-lined and earthen banks. The location of federal waters is shown on Figure 4.2-2, *Federal Jurisdictional Areas*, and the location of state waters is shown on Figure 4.2-3, *State Jurisdictional Areas*.

Table 4.2-4
EXISTING FEDERAL AND STATE JURISDICTIONAL AREAS WITHIN THE BIOLOGICAL SURVEY AREA

Jurisdiction	On Site (acres)	Off Site (acres)	Total (acres)
Federal Waters of the U.S. (USACE)			
Wetland	0.98	0.90	1.88
Non-wetland Waters	0.09	0	0.09
TOTAL Federal	**1.07**	**0.90**	**1.97**
Waters of the State (RWQCB, CDFW)			
Wetland	0.98	0.90	1.88
Streambed/Bank	0.37	0.02	0.39
TOTAL State	**1.35**	**0.92**	**2.27**

Source: RECON 2019
USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife

4.2.2 Regulatory Setting

4.2.2.1 Federal

Federal Endangered Species Act

Administered by the USFWS, FESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that impact endangered or threatened species and the habitats upon which they rely are considered a “take” under the FESA. Section 9(a) of the FESA defines take as “to harass, harm, pursue, hunt, shoot, wound,

kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. No critical habitat has been designated within the City.

Sections 7 and 10(a) of the FESA regulate actions that could impact endangered or threatened species. Section 7 generally describes a process when federal actions may adversely affect listed species. Section 10(a) generally describes a process for non-federal agencies; including preparation of a Habitat Conservation Plan and issuance of an Incidental Take Permit (ITP).

Migratory Bird Treaty Act

Migratory bird species that are native to the U.S. or its territories are protected under the MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (Federal Register Doc. 05-5127). The MBTA protects migratory birds and their breeding activities from deliberate take. Enforced in the U.S. by the USFWS, the MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in Code of Federal Regulations Title 50, Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered a "take" and is potentially punishable by fines and/or imprisonment. In common practice, the MBTA is used to place restrictions on disturbance of or near active bird (including raptor) nests during the avian nesting season (generally February 1 to July 30).

Clean Water Act

The CWA is legislation that regulates water quality standards and impacts (fills and discharges) to surface waters, including wetlands. The USACE regulates impacts to waters of the United States under Section 404 of the CWA (33 U.S.C. 401 et seq.; 33 U.S.C. 1344; U.S.C. 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). A federal CWA Section 404 Permit would be required for a project to place fill in waters of the United States. Projects impacting waters of the United States could be permitted on an individual basis or be covered under one of several approved nationwide permits. Individual permits are assessed individually based on the type of action, amount of fill, etc. Individual permits typically require substantial time (often longer than one year) to review and approve, while nationwide permits are pre-approved if a project meets appropriate conditions. A CWA Section 401 Water Quality Certification administered by the RWQCB must be issued prior to issuance of a Section 404 Permit.

4.2.2.2 State

California Endangered Species Act

Similar to FESA, the California Endangered Species Act (CESA) of 1970 provides protection to species considered threatened or endangered by the State of California (California Fish and Game Commission [CFGC], Section 2050 et seq.). The CESA recognizes the importance of threatened and endangered fish, wildlife, and plant species and their habitats, and prohibits the taking of any endangered, threatened, or rare plant and/or animal species unless specifically permitted for education or management purposes.

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the CFGC. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFGC Code Section 2080.1[a]). For state-only listed species, CFGC Section 2081 authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met, including (1) the taking is incidental to an otherwise lawful activity; (2) the taking will be minimized and fully mitigated; (3) the applicant ensures adequate funding for minimization and mitigation; and (4) the authorization will not jeopardize the continued existence of the listed species.

California Fish and Game Code

The California Fish and Game (CFG) Code regulates the protection of birds, mammals, fish, amphibians, and reptiles, in addition to natural resources such as wetlands and waters of the State. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors, including owls, and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds would not be disturbed, subject to approval by CDFW and/or USFWS.

Under sections 1600 et. seq. of the CFG Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife and requires a Streambed Alteration Agreement for such activities. The CDFW issues a Streambed Alteration Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources. The CDFW has jurisdiction over riparian habitats associated with watercourses.

Natural Community Conservation Planning Act

The Natural Communities Conservation Planning (NCCP) program is a cooperative effort to protect habitats and species. It began under the State's NCCP Act of 1991, legislation broader in its orientation and objectives than the CESA or FESA. These laws are designed to identify and protect individual species that have already declined significantly in number. The NCCP Act of 1991 and the associated Southern California Coastal Sage Scrub NCCP Process Guidelines (1993b), Southern California Coastal Sage Scrub

NCCP Conservation Guidelines (1993a), and NCCP General Process Guidelines (1998) have been superseded by the NCCP Act of 2003.

The primary objective of the NCCP program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

This voluntary program allows the State to enter into planning agreements with landowners, local governments, and other stakeholders to prepare plans that identify the most important areas for a threatened or endangered species, and the areas that may be less important. These NCCP plans may become the basis for a State permit to take threatened and endangered species in exchange for conserving their habitat. The CDFW and USFWS worked to combine the NCCP program with the federal HCP process to provide take permits for State and federal listed species. Under the NCCP, local governments, such as the City, can take the lead in developing these NCCP plans and become the recipients of State and federal take permits. The City has developed such a plan, as discussed below under Section 4.2.2.3.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7) was created to facilitate the coordination of water quality regulations throughout the state of California. The Act established the SWRCB as the statewide authority and authorizes the SWRCB to adopt, review, and revise policies for all waters of California, including both surface and ground waters. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. Additionally, the Act established nine separate RWQCBs to oversee smaller regional areas within California and directs the RWQCBs to develop regional Basin Plans. The San Diego Basin Plan is designed to preserve and enhance the quality of water resources in the San Diego region to benefit present and future generations (RWQCB 1994). The purpose of the plan is to designate beneficial uses of the region's surface and ground waters, designate water quality objectives for the reasonable protection of those uses and establish an implementation plan to achieve the objectives.

4.2.2.3 Local

City of La Mesa General Plan

According to the City of La Mesa General Plan, approximately 98 percent of the City's land has been developed with residential and commercial uses, so La Mesa does not have an abundance of biological resources such as significant natural habitat areas or bodies of water (City 2012a). As such, the General Plan includes a Conservation and Sustainability Element that focuses on supporting regional resource conservation efforts and sustainability as the City continues to grow. One of the main goals within the Conservation and Sustainability Element that is applicable the proposed project is Goal CS-1, which encourages the sustainable use of land and natural resources. Goal CS-1 is further supported through Objective CS-1.1, which is the intention of creating compact, mixed-use projects with amenities to enhance the City's natural setting. This is maintained by Policy CS-1.1.2 to promote the Mixed-Use Overlay Zone and related Design Guidelines to encourage infill along the City's transit corridors, and Policy CS-1.1.3 to preserve existing trees where appropriate and require planting of new trees in conjunction with public and private developments.

The Recreation and Open Space Element also contains goals, objectives, and policies aimed at conservation of natural areas and biological habitat. Goal RO-2 is to be a city that values areas of native vegetation for open space and biological habitat. The supporting Objective RO-2.1 is to preserve and restore open space and natural features consistent with the City's HCP. Furthermore, Policy RO-2.1.1 promotes the preservation, where feasible, of the most sensitive open space and natural lands and the inclusion of landscape features that are compatible with adjacent natural vegetation.

City of La Mesa Subarea Habitat Conservation Plan

The City of La Mesa Subarea Habitat Conservation Plan/Natural Community Conservation Plan (City 1998) is a local habitat conservation plan prepared pursuant to the NCCP Act to supplement the San Diego MSCP Subregional Plan. The MSCP is intended to provide for the protection and conservation of the region's sensitive plant and wildlife species habitat while continuing to allow appropriate levels of development and growth. As a planning tool, the MSCP protects the region's biodiversity while reducing conflicts between development interests and natural resources. The project site is located within the boundaries of the City's Subarea Plan but is not located within a designated preserve area.

4.2.3 Methodology and Assumptions

The analysis of potential impacts of the proposed project on biological resources is based on the Biological Resources Report prepared for the project (RECON 2019), which is included as Appendix C of this EIR. The Biological Resources Report includes a biological survey of the project site and some adjacent off-site areas along Alvarado Creek to identify vegetation communities and land cover types within the biological survey area and map them on an aerial photograph of the site. The survey also included notation plant species observed in the area, as well as wildlife species found either directly or detected from calls, tracks, scat, nests, or other signs.

A jurisdictional delineation was also conducted on the project site and some adjacent off-site areas along Alvarado Creek in accordance with USACE guidelines. Prior to conducting the delineation, aerial imagery was examined to aid in the determination of potential federal and state jurisdictional areas within the biological survey area. During the delineation, the biological survey area was surveyed to determine the presence of jurisdictional indicators, including wetland vegetation, hydric soils, and hydrology. Soil test pits (four sampling points) were conducted within potential wetland areas and in, or adjacent to, the inferred boundary between wetland and upland vegetation (based on changes in topography, hydrology, and composition of the vegetation).

Regulatory databases were reviewed to identify the potential for listed, sensitive, or noteworthy species to occur on the site, which was based upon known ranges and habitat preferences for the species, and species occurrence records from the CNDDB, USFWS, and other sites in the vicinity of the biological survey area.

4.2.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact associated with biological resources would occur if implementation of the proposed project would result in any of the following:

1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

2. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

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

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

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

6. Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

4.2.5 Impact Analysis

4.2.5.1 Sensitive Species

Threshold 1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Sensitive Plant Species

As stated above in Section 4.2.1.5, none of the nine sensitive plant species with the potential to occur in the biological survey area are expected to occur within the survey area and no sensitive plant species were observed during the biological site survey. Most of the project site is developed or disturbed, and the vegetation that exists is composed primarily of non-native plant species. Some native plant species are present along Alvarado Creek and in disturbed areas, but none are considered sensitive. Given the level of disturbance, no sensitive plant species would be expected to occur within the survey area. Therefore, no impacts are anticipated to occur to candidate, sensitive, or special status plant species as a result of the proposed project.

Sensitive Wildlife Species

As stated above in Section 4.2.1.5, none of the 17 sensitive wildlife species with the potential to occur in the biological survey area were observed during the site survey. Although riparian habitat is present within the survey area along Alvarado Creek, there is zero to low potential for the site to support sensitive bird species that inhabit riparian areas (e.g., least Bell's vireo, yellow-breasted chat, southwestern willow flycatcher, and white-tailed kite) due to the level of disturbance within this reach of the creek and lack of vegetation within the understory.

As identified in Table 4.2-3, there is moderate potential for the Cooper's hawk to nest on site due to the presence of existing tall trees within the site and Alvarado Creek, although this species was not observed or detected during the biological site survey. The removal of vegetation during the general bird nesting

season (February 1 through September 15) could result in direct or indirect impacts to this sensitive raptor species. Direct impacts could occur if vegetation is removed that supports an active nest, while indirect impacts could occur as a result of construction noise and vibration adjacent to an active nest, which could result in a nest failure. Therefore, construction of the proposed project could result in potentially significant impacts to the Cooper's hawk.

There is also moderate potential for three sensitive bat species to forage on the site, including the western mastiff bat, pocketed free-tailed bat, and big free-tailed bat (see Table 4.2-3). While known to occur within two miles of the project site, none of these species were observed or detected during the biological site survey and the site does not contain suitable bat habitat preferences or features (i.e., caves, crevices, cliffs) to support roosts of these species. Thus, while foraging may potentially occur in the project area, no direct impacts to these bat species would occur as a result of the proposed project.

The developed nature of the site and other disturbance factors generally limit the potential for other sensitive wildlife species (including those identified in Table 4.2-3) from occurring within the biological survey area. The site is developed and mostly devoid of habitat that could support sensitive wildlife species. Other limiting factors include the developed nature of surrounding areas and exposure to regular disturbances, including lighting, noise, and vehicle activity. Furthermore, the project site is regionally isolated and lacks direct connectivity or reasonable proximity to larger stands of native habitat. Given these factors, no other sensitive wildlife species are anticipated to occur within the biological survey area.

Nesting Birds

Implementation of the proposed project would involve the removal of on-site vegetation which has the potential to serve as habitat for nesting or migratory birds protected under the MBTA and CFG Code. The removal of vegetation during the general bird nesting seasons (January 15 through August 31) could result in both direct and indirect impacts to nesting or migratory birds. Direct impacts could occur if vegetation is removed that supports an active nest, while indirect impacts could occur as a result of construction noise and vibration adjacent to an active nest, which could result in a nest failure. These impacts to nesting and migratory birds would violate the MBTA and CFG Code. Therefore, construction of the proposed project could result in potentially significant impacts to nesting and migratory birds.

4.2.5.2 Sensitive Habitats

Threshold 2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

As stated above in Section 4.2.1.2, there are two sensitive vegetation communities that are located on the project site, including freshwater marsh and willow woodland. Other vegetation communities/land cover types within the biological study area include disturbed land, developed, and concrete channel, none of which are considered sensitive vegetation communities. As shown in Table 4.2-1, 1.13 acres of freshwater marsh and 0.75 acre of willow woodland are present in the biological survey area. Implementation of the proposed project would not result in permanent impacts to these two sensitive vegetation communities; however, temporary impacts to both freshwater marsh and willow woodland

would occur, as presented in Table 4.2-5, *Summary of Temporary Impacts to Sensitive Vegetation Communities*, and Figure 4.2-4, *Project Impacts to Biological Resources*.

Table 4.2-5
SUMMARY OF TEMPORARY IMPACTS TO SENSITIVE VEGETATION COMMUNITIES

Sensitive Vegetation Community	On Site Impacts (acres)	Off Site Impacts (acres)	Total Impacts (acres)
Freshwater Marsh	0.03	0.01	0.04
Willow Woodland	0.01	0	0.01
TOTAL	**0.04**	**0.01**	**0.05**

Source: RECON 2019

A total of 0.04 acre of freshwater marsh and 0.01 acre of willow woodland would be temporarily impacted as a result of the project, resulting in a total of 0.05 acre of impacts to sensitive vegetation communities. Temporary impacts to freshwater marsh and willow woodland would be considered significant, and therefore mitigation is required.

4.2.5.3 Jurisdictional Waters and Wetlands

Threshold 3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As shown in Table 4.2-4, there are 1.97 total acres of federal jurisdictional waters and 2.27 total acres of state jurisdictional waters within the biological survey area. The federal and state wetlands include areas of Alvarado Creek that are vegetated with either freshwater marsh or willow woodland. Federal non-wetland waters include the concrete lined portions along the bottom of the creek, while state streambed and bank included these concrete lined portions of the creek bottom in addition to the concrete lined and earthen banks (refer to Figures 4.2-2 and 4.2-3).

Implementation of the proposed project would result in permanent and temporary impacts to federal and state jurisdictional waters. The impacts would occur along the banks of Alvarado Creek are a result of the removal and replacement of retaining walls and concrete banks and within the creek bed due to the removal/relocation of utility lines. Permanent and temporary impacts resulting from project implementation are presented in Tables 4.2-6, *Summary of Permanent Impacts to Federal and State Jurisdictional Waters*, and 4.2-7, *Summary of Temporary Impacts to Federal and State Jurisdictional Waters*. The locations of anticipated project impacts are shown on Figure 4.2-5, *Project Impacts to Federal Jurisdictional Waters*, and Figure 4.2-6, *Project Impacts to State Jurisdictional Waters*.

Table 4.2-6
SUMMARY OF PERMANENT IMPACTS TO FEDERAL AND STATE JURISDICTIONAL WATERS

Jurisdiction	On Site Impacts[1] (acres)	Off Site Impacts[1] (acres)	Total Impacts[1] (acres)
Federal Waters of the U.S. (USACE)			
Wetland	0.03	0	0.03
Non-wetland Water	0	0	0
TOTAL Federal	**0.03**	**0**	**0.03**
Waters of the State (RWQCB, CDFW)			
Wetland	0.03	0	0.03
Streambed/Bank	0.06	0	0.06
TOTAL State	**0.09**	**0**	**0.09**

Source: RECON 2019
Acreages are rounded to the nearest 0.01.
USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife
[1] Impacts to Waters of the U.S. and Waters of the State are not additive; impacts to federal wetlands coincide with state wetlands.

Table 4.2-7
SUMMARY OF TEMPORARY IMPACTS TO FEDERAL AND STATE JURISDICTIONAL WATERS

Jurisdiction	On-Site Impacts[1] (acres)	Off-Site Impacts[1] (acres)	Total Impacts[1] (acres)
Federal Waters of the U.S. (USACE)			
Wetland	0.04	0.01	0.05
Non-wetland Water	0	0.01	0.01
TOTAL Federal	**0.04**	**0.02**	**0.06**
Waters of the State (RWQCB, CDFW)			
Wetland	0.04	0.01	0.05
Streambed/Bank	0.16	0.02	0.18
TOTAL State	**0.20**	**0.03**	**0.23**

Source: RECON 2019
Acreages are rounded to the nearest 0.01.
USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife
[1] Impacts to Waters of the U.S. and Waters of the State are not additive; impacts to federal wetlands coincide with state wetlands.

Implementation of the proposed project would result in permanent impacts to 0.03 acre of federal jurisdictional waters and 0.09 acre of state jurisdictional waters. Temporary impacts would occur to 0.06 acre of federal waters and 0.23 acre of state waters. Permanent and temporary impacts to federal and state jurisdictional waters are considered significant and would require compensatory mitigation, as well as a federal CWA Section 404 Permit from the USACE, a Section 401 Water Quality Certification from the State Water Resources Control Board (SWRCB)/RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW.

4.2.5.4 Wildlife Movement

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

As stated in Section 4.2.1.6, Alvarado Creek functions as a local wildlife corridor. The creek flows into the site from the east and drains underground at the western end of the project site and then continues off site to west. However, this portion of Alvarado Creek is not considered a regional wildlife corridor because although it may function for some local wildlife movement, the project site and surrounding areas are developed such that this reach of the creek does not serve as a habitat linkage to off-site wildlife corridors or large native habitat areas. Additionally, the La Mesa Subarea HCP/NCCP does not identify the project site as a core biological resource or linkage area (City 1998). Any work conducted within and adjacent to Alvarado Creek as part of the proposed project would be temporary, and the proposed improvements to Alvarado Creek would improve the function and value of habitat within this reach through native revegetation and increased hydrologic flow, which would benefit wildlife movement. Consequently, the proposed project would not substantially interfere with wildlife movement within this local wildlife corridor. As stated in Section 4.2.1.6, no known or potential wildlife nursery sites occur on, or in the immediate vicinity, of the project site. As a result, the project would not impede the use of a native wildlife nursery site. Impacts related to wildlife corridors and nursery sites as a result of the project would be less than significant.

4.2.5.5 Biological Resource Protection Policies and Ordinances

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

Construction of the proposed project would require the removal of existing vegetation on the site, including numerous non-native/ornamental trees and landscaping within the developed portion of the site, as well as some native vegetation within and along Alvarado Creek (as discussed in Section 4.2.5.2). The proposed project would not conflict with applicable goals, objectives, and policies within the General Plan Conservation and Sustainability Element or Recreation and Open Space Element, including Goal CS-1 (the sustainable use of natural resources and land), Policy CS-1.1.3 (preserve existing trees where appropriate and require planting of new trees in conjunction with public and private developments), Goal RO-2 (a City that values areas of native vegetation for their open space and biological habitat), Objective RO-2.1 (preserve and restore open space and natural features consistent with the City's HCP), and Policy RO-2.1.1 (the most sensitive open space and natural lands shall be preserved where feasible and include landscape features that are compatible with adjacent natural vegetation). The project would minimize impacts to sensitive biological resources and Alvarado Creek would be revegetated with native riparian vegetation, which would provide for improved biological habitat and resources. New trees, ornamental landscaping, and native riparian vegetation would be planted as part of the comprehensive landscape plan for the project. New trees would be planted in accordance with the City's Tree Policy Manual, which provides a reference for existing guidelines, policies, and standards for the planting, care, preservation, maintenance, and replacement of trees (City 2013a). In addition, project implementation would not impact the City's habitat preserve area as identified in the La Mesa Subarea HCP/NCCP. Therefore, the proposed project would not conflict with local policies or ordinances protecting biological resources. Impacts would be less than significant.

4.2.5.6 Habitat Conservation Plans

Threshold 6: Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

The project site is located within the boundaries of the City of La Mesa Subarea HCP/NCCP, but not within or in the vicinity of areas designated as Multi-Habitat Planning Area, Core Biological Resource Areas and Linkages, or other preserve lands as identified in the Subarea HCP/NCCP. Although the project site is located within a highly developed area of the City, there are trees throughout the site and riparian habitat along Alvarado Creek that could potentially support sensitive species (Cooper's hawk within trees and least Bell's vireo within riparian habitat) protected by the Subarea Plan (refer to Table 4.2-3). Implementation of mitigation is identified in Section 4.2.6.1 that would avoid significant project impacts to these MCSP-covered species. Therefore, the proposed project would not conflict with the provisions of the adopted La Mesa Subarea HCP/NCCP. Impacts would be less than significant with mitigation.

4.2.6 Mitigation Measures

4.2.6.1 Sensitive Species

Potentially significant impacts to sensitive species (Cooper's hawk and other raptor species) and nesting birds could result from the proposed project. Implementation of mitigation measure BIO-1 would reduce these impacts to below a level of significance.

BIO-1 Biological Resource Protection

I. Prior to Construction

a. **Biologist Verification** – The owner/permittee shall designate a project biologist (Qualified Biologist) to be retained to implement a project biological monitoring program.

b. **Pre-construction Meeting** – The Qualified Biologist shall attend the pre-construction meeting(s), discuss the project's biological monitoring program.

c. **Avian Protection Requirements** – To avoid direct impacts to avian species identified as listed, candidate, sensitive, or special status, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the avian breeding season (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 bird species 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 owner/permittee shall submit the results of the pre-construction survey to the City of La Mesa for review and approval prior to initiating any construction activities. If nesting activities for any sensitive bird or MBTA-protected species are detected, a letter report or mitigation plan in conformance with 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 birds or eggs or disturbance of breeding activities is

avoided. The report or mitigation plan shall be submitted to the City of La Mesa for review and approval and implemented to the satisfaction of the City.

d. **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.

e. **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 biological resources.

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 the approved grading plans. 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.

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 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.

4.2.6.2 Sensitive Habitats

Implementation of the proposed project would result in temporary impacts to two sensitive vegetation communities, including freshwater marsh and willow woodland. These impacts are considered significant and require compensatory mitigation. Implementation of mitigation measure BIO-2 would reduce these impacts to below a level of significance.

BIO-2 Sensitive Habitat Replacement. Temporary impacts to 0.04 acre of freshwater marsh and 0.01 acre of willow woodland shall be mitigated within the biological survey area at a minimum 1:1 ratio through revegetation and establishment within Alvarado Creek. Temporarily impacted areas of Alvarado Creek shall be revegetated, and new wetlands shall be established in areas of the widened creek bed. The revegetation and establishment areas shall be planted with wetland native species, including broad-leaved cattail, Olney's three-square bulrush, and southern bulrush and shall be maintained and monitored for an initial period of five years in accordance with a project Habitat Restoration Plan and regulatory permit conditions.

4.2.6.3 Jurisdictional Waters and Wetlands

Implementation of the proposed project would result in temporary and permanent impacts to federal and state jurisdictional waters and wetlands, as identified in Tables 4.2-6 and 4.2-7. Implementation of the mitigation measure BIO-3 would reduce these impacts to below a level of significance.

BIO-3 **Wetland Habitat Replacement**. Temporary and permanent impacts to federal and state jurisdictional waters (i.e., wetlands, non-wetland/streambed/bank and associated sensitive vegetation communities) shall be mitigated within the biological survey area through wetland revegetation and establishment within Alvarado Creek, as identified in Table 4.2-8, *Summary of Proposed Jurisdictional Waters Mitigation*. Temporarily impacted areas of Alvarado Creek shall be revegetated, and new wetlands shall be established in areas of the widened creek bed. The revegetation and establishment areas shall be planted with wetland native species, including broad-leaved cattail, Olney's three-square bulrush, and southern bulrush and shall be maintained and monitored for an initial period of five years in accordance with a project Habitat Restoration Plan and regulatory permit conditions. Following project construction, Alvarado Creek, within the limits of the project site, shall be preserved and enhanced as part of the long-term maintenance and management of Alvarado Creek in accordance with an approved Management Plan. Long-term maintenance task shall include removal of non-native species and selective thinning of woody vegetation.

Table 4.2-8
SUMMARY OF PROPOSED JURISDICTIONAL WATERS MITIGATION

Wetland Mitigation Type	On Site Mitigation (acres)	Off Site Mitigation (acres)	Total Mitigation (acres)
Wetland Revegetation	0.12	0.02	0.14
Wetland Establishment	0.21	0.01	0.22
TOTAL	**0.33**	**0.03**	**0.36**

Source: RECON 2019

4.2.6.4 Wildlife Movement

No significant impacts related to wildlife corridors, linkages, and nursery sites would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.2.6.5 Biological Resource Protection Policies and Ordinances

No significant impacts related to biological resources protection policies or ordinances would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.2.6.6 Habitat Conservation Plans

Implementation of the proposed project could potentially result in significant impacts to MSCP-covered species (Cooper's hawk within trees and least Bell's vireo within riparian habitat). Implementation of mitigation measure BIO-1 above would avoid significant project impacts to these MCSP-covered species.

4.2.7 Significance Determination

The significance of biological resources impacts before and after mitigation is summarized in Table 4.2-9, *Significance Determination Summary of Biological Resources Impacts*. Impacts related to wildlife movement, and biological resources protection policies and ordinances would be less than significant, and no mitigation is required. Implementation of the proposed project, however, would result in potentially significant impacts to sensitive species, sensitive habitats, jurisdictional waters and wetlands, and habitat conservation plans. With implementation of mitigation measures BIO-1 through BIO-3 these impacts would be reduced to below a level of significance.

Table 4.2-9
SIGNIFICANCE DETERMINATION SUMMARY OF BIOLOGICAL RESOURCES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Sensitive Species	Potentially significant	BIO-1	Less than significant
Sensitive Habitats	Potentially significant	BIO-2	Less than significant
Jurisdictional Waters and Wetlands	Potentially significant	BIO-3	Less than significant
Wildlife Movement	Less than significant	None required	Less than significant
Biological Resource Protection Policies and Ordinances	Less than significant	None required	Less than significant
Habitat Conservation Plans	Potentially significant	BIO-1	Less than significant

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Source: RECON 2019

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HELIX Environmental Planning

Vegetation Communities and Land Cover Types within the Biological Survey Area

Figure 4.2-1

Source: RECON 2019

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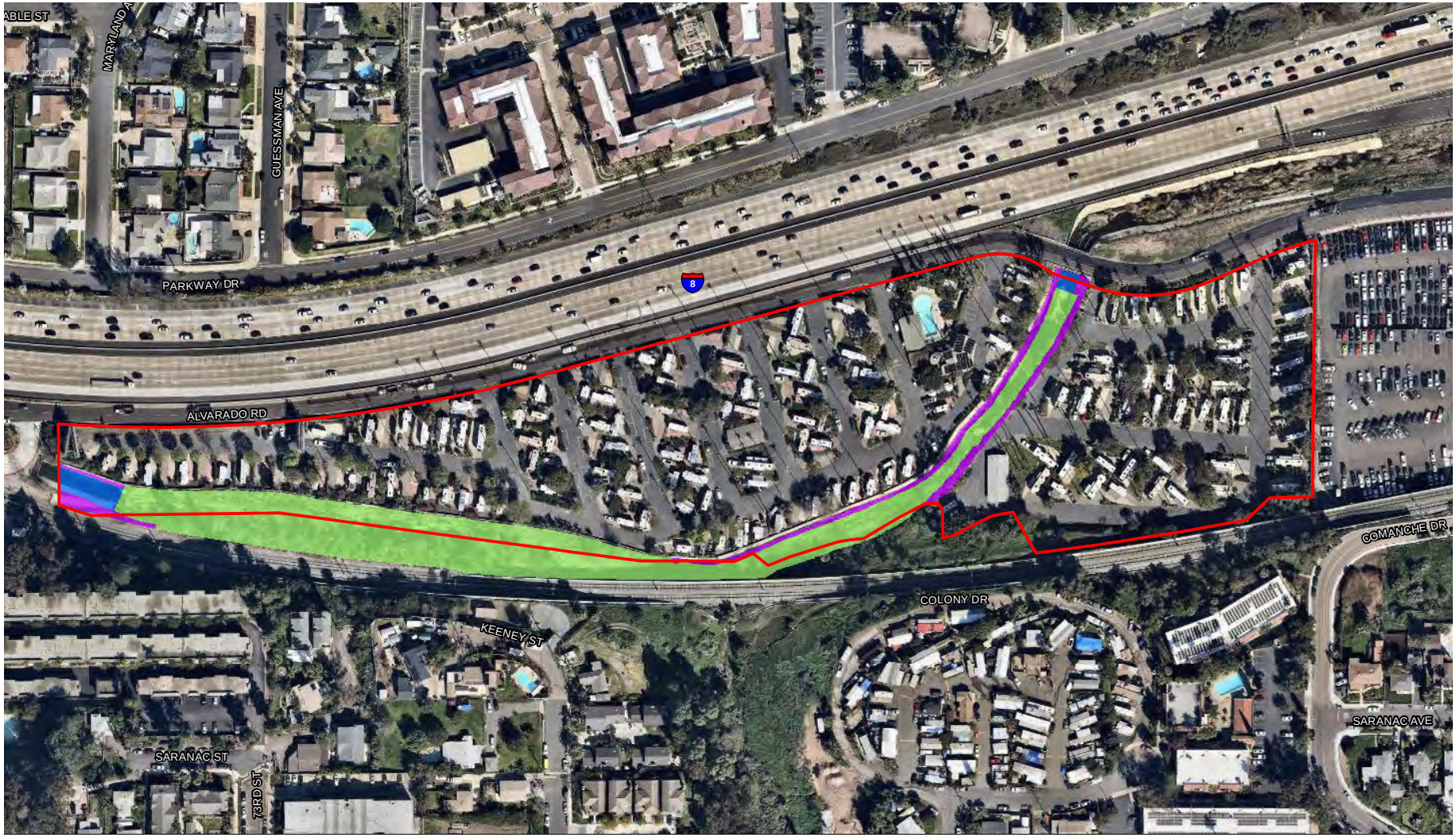
HELIX Environmental Planning

Federal Jurisdictional Areas

Figure 4.2-2



Waters of the State (RWQCB, CDFW)

- Streambed
- Riparian
- Bank

Property Boundary

0 Feet 150

Source: RECON 2019

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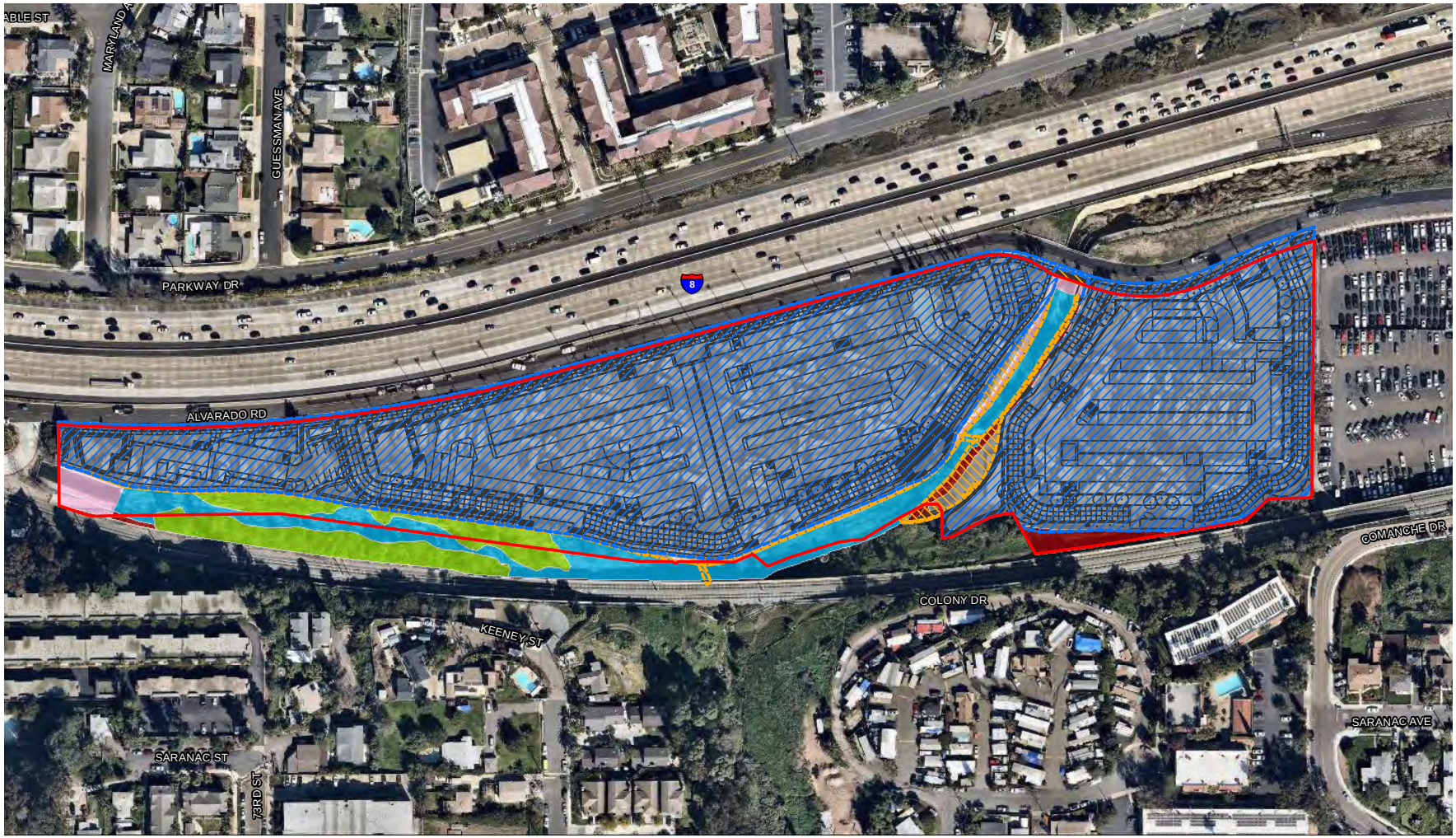
HELIX Environmental Planning

State Jurisdictional Areas

Figure 4.2-3



Vegetation Community and Land Cover Type

- Freshwater Marsh
- Willow Woodland
- Concrete Channel
- Disturbed Land
- Developed

Impact

- Permanent
- Temporary
- Property Boundary
- Project Plan Lines

0 Feet 150

Source: RECON 2019

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HELIX Environmental Planning

Project Impacts to Biological Resources

Figure 4.2-4

Source: RECON 2019

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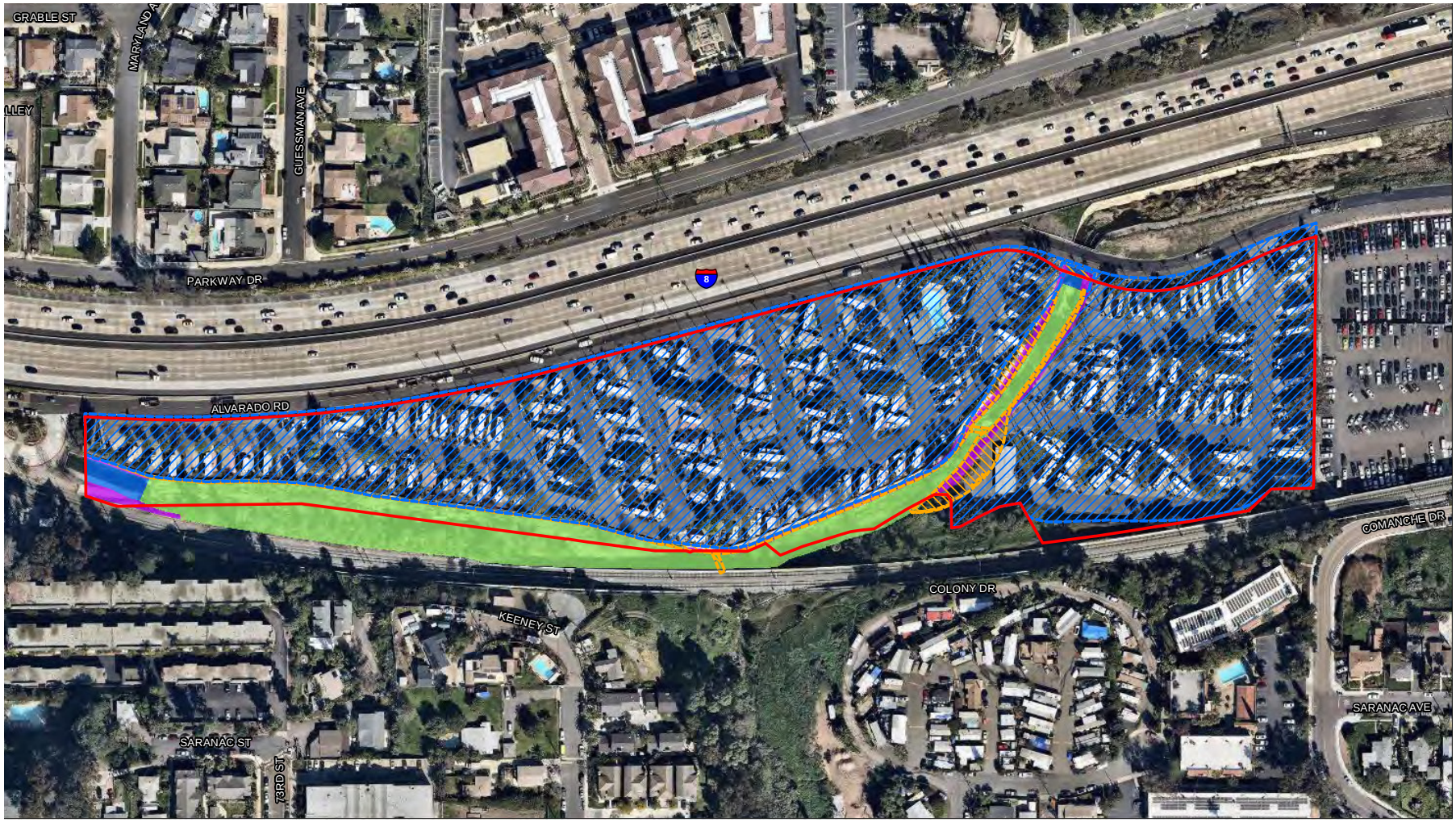
Project Impacts to Federal Jurisdictional Waters

Figure 4.2-5



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HELIX Environmental Planning

Project Impacts to State Jurisdictional Waters

Figure 4.2-6

4.3 CULTURAL AND TRIBAL CULTURAL RESOURCES

The analysis in this section of the EIR addresses the potential impacts associated with cultural and tribal cultural resources that could occur due to implementation of the proposed project. The following discussion includes information based on the Cultural Resources Survey for the Alvarado Creek Specific Plan (RECON 2018a), which is included as Appendix D of this EIR, and the Historic Resource Analysis Report (Urbana Preservation & Planning, LLC [Urbana] 2019), which is included as Appendix E of this EIR.

4.3.1 Existing Conditions

4.3.1.1 Cultural Resource Definitions

Archaeological resources include prehistoric and historic locations or sites where human actions have resulted in detectable changes to the area. This can include changes in the soil, as well as the presence of physical cultural remains. Archaeological resources can have a surface component, a subsurface component, or both. Historic archaeological resources are those originating after European contact. These resources may include subsurface features such as wells, cisterns, or privies. Other historic archaeological remains include artifact concentrations, building foundations, or remnants of structures.

Historical resources are physical features, both natural and constructed, that reflect past human existence and are of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance. These resources may include such physical objects and features as archaeological sites and artifacts, buildings, groups of buildings, structures, districts, street furniture, signs, cultural properties, and landscapes. Historical resources in the San Diego region span a timeframe of at least the last 10,000 years and include both the prehistoric and historic periods.

A Tribal Cultural Resource is defined as a site, feature, place, cultural landscape, sacred place, or object, which is of cultural value to a Tribe, and is either on or eligible for listing in the national, state, or a local historic register, or the lead agency, at its discretion, chooses to treat the resource as a Tribal Cultural Resource (PRC Section 21074).

4.3.1.2 Cultural Setting

Prehistoric Period

In San Diego County, the prehistoric cultural sequence generally comprises three distinct periods: the Paleoindian, the Archaic, and the Late Prehistoric. The Paleoindian dates the earliest of the three periods, between about 11,500 and 8,500 years ago, and is most closely associated with the San Dieguito Complex. This period placed a large emphasis on hunting and is characterized by scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points.

The Paleoindian Period is then followed by the Archaic Period, lasting from approximately 8,500 to 1,500 years ago. The Archaic Period is associated with the La Jollan Complex along the coast and the Pauma Complex inland. The period largely focused on a generalized economy and emphasized seed resources, small game, and shellfish. Items emerging during the Archaic Period include rough cobble-based choppers and scrapers, slab and basin metates, and large side-notched and Elko series projectile points.

The Archaic Period is followed by the Late Prehistoric, beginning approximately 1,500 years ago. This period is associated with the Cuyamaca Complex and is characterized by higher population densities and elaborations in social, political, economic, and technological systems. Items associated with the Cuyamaca Complex include steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes", ceramic rattles, miniature pottery, various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert side-notched and Cottonwood Series projectile points.

Ethnohistory

The project area is located within the traditional territory of the Kumeyaay, also known as Ipai, Tipai, or Diegueño, who occupied the southern region of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. Their settlement system typically consisted of two or more seasonal villages surrounded by temporary camps. The most basic social and economic unit was the patrilocal extended family. The Kumeyaay were largely focused on hunting and gathering, specifically of resources such as small game, acorns, grass seeds, and other plant resources. Items typically associated with the Kumeyaay include a shoulder-height bow for hunting, mortars and pestles, and flaked stone tools such as scrapers, choppers, flake-based cutting tools, and biface knives. Additionally, the Kumeyaay made fine baskets using either coiled or twined construction, and both brown utility and decorated pottery using the paddle-and-anvil technique.

Historic Period

There are three general eras in California history: the Spanish, Mexican, and American periods.

The Spanish Period lasted from 1769 to 1821 and was characterized by European exploration and settlement. Settlement and development of Spanish colonies was incentivized by giving large land grants to prominent individuals as part of the rancho system. Military naval forces along with a religious contingent founded the San Diego Presidio, the pueblo of San Diego, and the San Diego Mission. As a result of the European settlement, Native American culture in the coastal strip of California rapidly deteriorated.

The Spanish Period was followed by the Mexican Period, which began when Mexico declared its independence from Spain in 1821. The Mexican Period is noted for secularizing the previously religious mission system and allowing for the vast expansion of the rancho system, which caused the southern California economy to become largely based on cattle ranching. The Mexican Period ended in 1848 when Mexico signed the Treaty of Guadalupe Hidalgo on February 2 of that year, concluding the Mexican-American War.

American governance began in 1848, when Mexico signed the Treaty of Guadalupe Hidalgo, ceding California to the United States at the conclusion of the Mexican–American War, which marked the start of the American Period. A great influx of settlers to California and the San Diego region occurred during the American Period, resulting from several factors, including the discovery of gold in California, the end of the Civil War, the availability of free land through passage of the Homestead Act, and later, the importance of San Diego County as an agricultural area supported by roads, irrigation systems, and connecting railways. The increase in American and European populations quickly overwhelmed many of

the Spanish and Mexican cultural traditions, and greatly increased the rate of population decline among Native American communities.

La Mesa History

La Mesa was originally part of the Rancho de la Mission San Diego de Alcala, consisting of 58,875 acres and extending from the Pueblo of San Diego to El Cajon in the east, Clairemont Mesa in the north, and National City in the south. The Rancho supported the mission until secularization in 1834 and was then placed under the administration of Joaquin Ortega the following year. In 1845, the lands were deeded to Don Santiago Arguello.

In 1868, Robert Allison purchased the land that now comprises La Mesa for the purpose of ranching. The discovery of gold in the eastern mountains (near what is now Julian), in addition to the construction of a flume to bring water down from the Cuyamaca Mountains, helped to foster the growth of La Mesa and caused a large boost to development in the area. The San Diego Flume Company formed in 1886 and raised capital by selling land along present-day El Cajon Boulevard between College Avenue and Garfield Street. Robert Allison also donated 100 one-acre lots in the La Mesa town site to the Flume Company for sale to raise money for the flume construction. In 1887, Robert Allison purchased construction bonds and granted a right-of-way to the San Diego, Cuyamaca, and Eastern Railroad Company. By 1890, service was available from Lakeside to San Diego, with a stop at the Allison Springs Station located in what would become the downtown La Mesa area.

La Mesa incorporated in 1912, and in the early 1900s, the economy of La Mesa expanded to include agriculture and citrus orchards with packing warehouses, health resorts, and a film production company named the American Film Manufacturing Company. At this time, University Avenue was the main road for traveling east and west between San Diego and La Mesa, and development was concentrated adjacent to it. During World War I, El Cajon Boulevard was constructed, and development shifted north along the El Cajon Boulevard corridor. As with the entire San Diego region, development in La Mesa slowed during the Great Depression but resurged during World War II and continued into the 1950s. To support the growing population, residential tracts, schools, and shopping centers were constructed. Transportation expanded in the 1950s and 1960s as well, including the construction of SR 94, SR 125, Fletcher Parkway, and the expansion of US Highway 80. The Grossmont shopping center opened in 1961, which initially drew much business away from the downtown area, but this trend has reversed in subsequent years as new businesses have moved into the old downtown area.

4.3.1.3 History of the Project Site

The project site remained undeveloped until 1954 when Chris A. Cosgrove, a pioneer builder and developer in San Diego County, constructed a mobile home park called the La Mesan. The La Mesan initially included 118 spaces over approximately 7.7 acres and was expanded to include 49 additional spaces over approximately four acres in subsequent years. By 1958, the property included 167 spaces over approximately 11.86 acres and was later expanded to 181 spaces. The site reflected standard mobile home parks, which were initially created in the early 1930s to serve as short-term and highly mobile forms of housing, but quickly shifted into more permanent housing in the post-World War II era. Mobile home parks created a sense of instant communities for people in the decades following World War II.

Between 1954 and 1959, the project site was developed with eight buildings comprising a restroom and laundry building, a two-story office building, a comfort station, a lounge and rumpus room building with a sky room, a proprietor's residence, a utility building, a drafting office, and a lath house. Recreational facilities were also constructed, including a swimming pool with patio, shuffleboard and badminton courts, a fenced children's playground, a private terrace, and barbeque. The La Mesan mobile home park incorporated all of the character-defining features of a post-World War II resort park: private paved roads; numerous mobile home spaces with concrete pads and hookups for electricity, gas, water, and sewage; a recreational Club House (with office and changing rooms); a manager's residence; a laundry room; community bathroom facilities; a swimming pool; and landscaping. By 1990, the mobile home park was converted into an RV resort and all of the mobile homes were removed. The RV resort remains the current use of the site and contains six of the original eight buildings, the swimming pool, a spa, and 181 concrete slabs (for RV parking) arranged along 13 asphalt-covered streets.

4.3.2 Regulatory Setting

4.3.2.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 established the framework that focused local, state, and national efforts with regards to the preservation of historic and archaeological resources. Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The Section 106 process (36 CFR Part 800) involves efforts to identify historic properties potentially affected by the undertaking, and assess effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. To help identify historic properties and provide community involvement, consulting parties are identified through coordination with the appropriate State Historic Preservation Officer and/or Tribal Historic Preservation Officer.

National Register of Historic Places

The NHPA established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their significance at the local, state, or federal level. The NRHP is the official lists of sites, buildings, structures, districts, and objects significant in American history, architecture, archaeology, engineering, and culture. Listing in the NRHP provides recognition that a property is 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. The NRHP is administered by the National Park Service. Nominations to the NRHP may come from the various State Historic Preservation Offices, Tribal Historic Preservation Offices, local governments, and from private individuals and organizations.

Criteria for listing in the NRHP are stated in 36 CFR 60.4. 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 the resource meets at least one of the following criteria:

Criterion A: Is associated with events that have made a significant contribution to the broad patterns of our history;

Criterion B: Is associated with the lives of persons important in our past;

Criterion C: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values; or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Has 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 resources. These criteria have largely been incorporated into the CEQA Guidelines (Section 15065.5) as well.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA; U.S.C., Title 25, Sections 3001 et seq.) 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.

4.3.2.2 State

California Register of Historic Resources

Similar to the NRHP, the California Register of Historic Resources (CRHR) program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies resources for planning purposes; determines eligibility of state historic grant funding; and provides certain protections under CEQA. State criteria are those listed in CEQA and used to determine whether an historic resource qualifies for the CRHR. A resource may be listed in the CRHR if it is significant at the federal, state, or local level under one or more of the following four criteria:

Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States;

Criterion 2: Is associated with the lives of persons important to the nation or to California's past;

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

In addition to meeting one of the above criterion, a resource eligible for CRHR listing must retain integrity, meaning it must evoke the resource's period of significance or, in the case of criterion 4, it may be disturbed but must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues.

CEQA Guidelines Section 15064.5

CEQA Guidelines Section 15064.5 provides guidance on determining the significance of impacts to archaeological and historical resources. The term "historical resources" is defined as a resource listed in or determined eligible for listing on the CRHR; a resource included in a local register of historical resources or identified as significant in a historical resource survey that meets certain requirements; and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant. Archaeological resources are considered "historical resources" for the purposes of CEQA.

A resource that is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historic resources, or not deemed significant in a historical resource survey may nonetheless be historically significant for purposes of CEQA (Section 15064.5 and CEQA Statutes Section 21083.2).

A project that may cause a substantial adverse change in the significance of an historical resource is one that may have a significant effect on the environment. A substantial adverse change in the significance of an historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project demolishes or alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR, or that account for its inclusion in a local register of historical resources.

California Native American Graves Protection and Repatriation Act

The California NAGPRA (2001), like the federal act, 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.

California Health and Safety Code, Section 7050.5

California Health and Safety Code Section 7050.5 specifies protocol for the inadvertent discovery of human remains. In the event of discovery or recognition of any human remains, disturbance of the site shall halt and remain halted until the County coroner has conducted an investigation into the circumstances, manner, and cause of any death, and has provided recommendations concerning the treatment and disposition of the human remains. If the County coroner determines that the human remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours.

California Public Resources Code Section 5097

California PRC Section 5097 et seq., Native American Historic Resource Protection Act; Archaeological, Paleontological, and Historical Sites; Native American Historical, Cultural, and Sacred Sites specifies the procedures to be followed in the event of the unexpected discovery of human remains on non-federal

public lands. California PRC Section 5097.9 states that no public agency or private party on public property shall "interfere with the free expression or exercise of Native American Religion." The code further states that:

> No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine... except on a clear and convincing showing that the public interest and necessity so require. County and city lands are exempt from this provision, expect for parklands larger than 100 acres.

Assembly Bill 52

Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014) was passed on September 25, 2014, and applies to all projects that file a Notice of Preparation or Notice of Intent to Adopt a Negative Declaration, Mitigated Negative Declaration or EIR, on or after July 1, 2015. The bill requires that a lead agency begin consultation with a California Native American tribe that is 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 of whether a negative declaration, mitigated negative declaration, or EIR will be prepared. The bill also specifies mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources.

AB 52 codified this consultation process within the CEQA statute (PRC Section 20174). It also defines tribal cultural resources as either of the following:

a. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    - Included or determined to be eligible for inclusion in the CRHR.
    - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Senate Bill 18

Native American involvement in the planning and development review process is addressed by several state laws. The most notable of the state laws is SB 18, which includes detailed requirements for local agencies to consult with identified California Native American tribes early in the planning and/or development process. These consultation and notice requirements apply to adoption and amendment of general plans and specific plans.

4.3.2.3 Local

City of La Mesa General Plan

The Historic Preservation Element of the adopted General Plan (City 2012a) includes multiple policies and objectives relating to the project. Objective HP-1.1 is to broaden the awareness of the La Mesa Historic Preservation Program. This is supported by Policy HP-1.1.1, to share information between the City and preservation advocacy organizations, and Policy HP-1.1.2, to inform citizens and project applicants of preservation regulations as part of the development review process. Objective HP-1.2 is to update and maintain the La Mesa Historic Resources Inventory to identify the potential eligibility of properties built in the historic era. This is supported by Policy HP-1.2.1, to implement a phased Historical Resource Survey program to account for all locations in the City classified within the historic era, and Policy HP-1.2.2, to establish guidelines for identifying eligible properties in the Modern Period, extending from 1935 to 1975 in the City of La Mesa. The La Mesa Historic Resources Inventory designates local historic and cultural resources, and consists of the overall Historic Resources Inventory, the Potential Landmark Listing, and the Historic Landmark Register.

City of La Mesa Historic Preservation Ordinance

La Mesa Municipal Code Title 25, Historic Preservation, enacts the goals of the Historic Preservation Element of the City of La Mesa General Plan. The Historic Preservation Commission was created by Municipal Code Section 25.01.060, which also established their powers and responsibilities. The Historic Landmark and Historic District Designation Criteria are both identified in Municipal Code Section 25.03.010. The ordinance states that a cultural resource may be recommended for designation as a Historic Landmark or Historic District if it meets one or more of the following criteria:

Criterion A: It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, or architectural history;

Criterion B: It is identified with persons or events significant in local, state, or national history;

Criterion C: It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;

Criterion D: It is representative of the notable work of an acclaimed builder, designer, or architect;

Criterion E: It is identified with a person or persons or groups who significantly contributed to the culture and development of the City;

Criterion F: It embodies elements of outstanding attention to architectural design, detail, materials or craftsmanship;

Criterion G: It is an archeological or paleontological site which has the potential of yielding information of scientific value; or

Criterion H: It is a geographically definable area possessing a concentration of sites, buildings, structures, improvements, or objects linked historically through location, design, setting, materials, workmanship, feeling, and/or association, in which the collective

value of the improvements may be greater than the value of each individual improvement.

The demolition of any designated Historic Landmark or any contributing structure within a designated Historic District is prohibited, with the exceptions of the provisions listed in Municipal Code Section 25.03.060, which requires City Council approval of a demolition permit based on the recommendation of the Historic Preservation Commission.

4.3.3 Methodology and Assumptions

A Cultural Resources Survey (RECON 2018a) and a Historical Resource Analysis Report (Urbana 2019) were prepared for the project, which are provided as Appendices D and E of this EIR. As part of the Cultural Resources Survey, site records searches were conducted through the California Historical Resources Information System, South Coastal Information Center (SCIC) at San Diego State University. Additionally, a field survey of the project area was conducted. The surveyed areas included the majority of the 12.36-acre project site and a 1.30-acre off-site impact area. The portion of the project within the Alvarado Creek channel was not walked but was visually inspected wherever possible from the edge of the channel. Landscaped and bare dirt areas in the developed portion of the property were inspected closely for any indication of cultural materials. Ground visibility in these areas varied considerably, with some grass-covered areas having no ground visibility, and areas between trees and bushes having excellent ground visibility.

The NAHC was contacted on July 11, 2017 for a Sacred Lands File search and list of Native American contacts, which were received on July 13, 2017. Letters were sent to tribal representatives identified by the City and the NAHC in September 2019 informing them of the proposed project and asking them of any knowledge or information about cultural resources they may have about the project area. One response was received by the Viejas Band of Kumeyaay Indians on October 2, 2019 indicating that Viejas has cultural ties to the project site. No consultation was requested, however, a Kumeyaay cultural monitor was requested to be present during ground disturbing construction activities.

The Historical Resource Analysis Report consisted of research and a field survey of historic-era buildings (i.e., those greater than 45 years old) on the project site. The research resources included United States census records; digitized copies of the San Diego Union; La Mesa City Directories; City of La Mesa building permits; San Diego County Assessor records, including the Grantor-Grantee Index and the Commercial-Industrial Building Record; La Mesa Historical Society archives; and historic aerial imagery on file at the San Diego History Center, HistoricAerials.com, and the University of California Santa Barbara Library. The field survey was conducted on August 15, 2019 and included both photographs of the property boundaries and notes on existing conditions, architectural features, and observed modifications of existing on-site historic-era buildings.

4.3.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact associated with cultural and tribal cultural resources would occur if implementation of the proposed project would result in any of the following:

1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

3. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.3.5 Impact Analysis

4.3.5.1 Historical Resources

Threshold 1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

Based on the results of the records search, no historic archaeological resources have been recorded within or adjacent to the project site. One recorded historical resource (P-37-035910) is located within 0.5 mile of the project site, which is a pump station consisting of two small single-story buildings in a Spanish Eclectic architectural style that were constructed by the City of San Diego between 1941 and 1953. Implementation of the project would not impact this recorded resource.

During the field survey, no previously recorded historic resources were observed on or near the site. However, the six existing on-site buildings were constructed in the 1950s as part of the original RV resort development, dating them at over 45 years old. As such, the buildings were evaluated for eligibility for listing on the CRHR and designation as a City of La Mesa Historic Landmark.

The Historical Resource Analysis Report (Urbana 2019) indicates that the existing buildings were constructed between 1954 and 1959 and that there were originally eight buildings, including a two-story office building, a lounge and rumpus room building, a proprietor's residence, a drafting office, restroom and laundry building, a utility building, a comfort station, and a lath house. As shown in Table 4.3-1, *Project Site Buildings*, six of the original eight buildings are still currently on the site; the comfort station was not identified during the field survey and the lath house is no longer standing. Each of the six existing buildings are described below followed by a CRHR/La Mesa Historical Landmark eligibility analysis.

Table 4.3-1
PROJECT SITE BUILDINGS

Historic Name	Common Name	Year Built
Office Building	Office and TV Room/Billiards Building	1954
Lounge and Rumpus Room Building	Fitness Center Building	1954
Proprietor's Residence	Apartment Building	1954
Drafting Office	Meeting Room Building	1958
Restroom and Laundry Building	Restroom and Laundry Building	1954
Utility Building	East Restroom and Laundry Building	1957
Comfort Station	N/A[1]	1954
Lath House	N/A[2]	1959

Source: Urbana 2019
[1] Not identified during the field survey.
[2] No longer standing.
N/A = Not Applicable

The Office and TV Room/Billiards Building, historically identified as the Office Building, has a very low-pitched side-gable roof with wide overhanging eaves, overhanging and cantilevered second-story walls, stucco-clad exterior walls, and composition shingle roofing. Fenestration includes metal-framed windows with wood sills, wood-framed windows, and wood-framed doors installed around the perimeter at both levels. Two open concrete staircases with metal railing are installed at the north and south exteriors. The building is set back from the street (Alvarado Road) and is west of the swimming pool. The ground floor breezeway, a distinctive element of the building, has been infilled. The painted or neon sign originally installed on the building's roof is no longer present and has been replaced by a sign advertising "Sunland RV Resort San Diego." Additionally, the original decorative masonry screen wall enclosing the pool area has been replaced by metal fencing.

The Fitness Center Building, historically identified as the Lounge and Rumpus Room Building, is a two-story building with a flat roof and wide overhanging eaves with a sweeping curve extending from the northeast corner to the southeast corner. Features include stucco wall surfaces, horizontal wood siding, smooth stucco with slightly protruding large squares on the first floor, a 2-foot by 18-foot glass bay on the second floor of the north elevation, and smooth flush wood-framed doors.

The Apartment Building, historically identified as the Proprietor's Residence, is a compound plan, two-story building with a low-pitched side-gable roof, wide overhanging eaves, and solar panels. Features include stucco wall surfaces, a bowed wall surface on the north elevation, metal framed windows, and wood framed doors. A wood-covered porch and a concrete staircase are present on the second floor of the west elevation, and five square wood posts and a concrete staircase are present on the east elevation.

The Meeting Room Building, historically identified as the Drafting Office, is south of the Office and TV Room/Billiards Building. The Meeting Room Building is a one-story building with a rectangular plan and angled walls on the northeast and southeast corners, a flat roof, and wide overhanging eaves. Features include stucco wall surfaces, metal-framed windows with wood molding, and wood-framed doors. Four large metal mailboxes are centered on the west elevation.

The Restroom and Laundry Building is located on the west portion of the property. This building is a one-story building with a rectangular plan and has a low-pitched front-gable roof, wide overhanging

eaves, and composition shingles. Features include stucco wall surfaces, horizontal sliding metal-framed windows, and smooth flush wood-framed doors.

The East Restroom and Laundry Building, historically identified as the Utility Building, is located on the east side of Alvarado Creek on the east portion of the property. The building is a one-story building with a rectangular plan, a low-pitched front-gable roof, wide overhanging eaves, and composition shingles. Features include stucco wall surfaces, horizontal sliding metal-framed windows, and smooth flush wood-framed doors.

These six remaining buildings on the site only reflect a portion of the site's original use. The original mobile homes and features were removed, so the property no longer represents an intact mobile home park design that offered affordable housing options for long-term local occupants and snowbirds amid a wave of residential growth in the post-World War II period. Although six remaining buildings are still standing, the site no longer conveys an association with the development of post-World War II mobile home parks in the San Diego region. Additionally, while the site's builder, Chris A. Cosgrove, is regarded as a Master Builder for some of his work, the current site is not regarded as a masterful representation of his work as a builder. The property was laid out in a manner consistent with mobile home parks throughout the country, and has lost many of its original character-defining features, such as the mobile homes, monumental roof signage, landscape features, shuffleboard and badminton courts, and patios, barbeques, and storage units for each trailer. The current property would not appear to yield information that could be regarded as important to local, regional, state, or national history, and is not considered an archeological or paleontological site at this time. For these reasons, the San Diego RV Resort does not meet the CRHR or La Mesa Historic Landmark eligibility criteria (as identified in Sections 4.3.2.2 and 4.3.2.3, respectively) and thus, is ineligible for listing on the CRHR and ineligible for designation as a City of La Mesa Historic Landmark. Accordingly, the property does not meet the definition of an historical resource pursuant to Section 15064.5 of the CEQA Guidelines. Demolition and removal of the buildings, structures, and site features at the proposed property would not result in a substantial adverse change in the significance of a historical resource. Impacts to historical resources would be less than significant.

4.3.5.2 Archaeological Resources

Threshold 2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The Cultural Resources Survey conducted for the project site included a SCIC records search for an area that included the project site and a one-half mile radius around it. No recorded prehistoric archaeological resources are listed on the project site or within the one-half mile radius buffer. Additionally, no prehistoric archaeological resources were observed on or near the site during the field survey. The project site, however, is located within the Alvarado Creek floodplain and consequently, there is potential that unknown prehistoric material has been buried by streambed deposits from periodic flooding of the creek. It is possible that construction-related subsurface grading and trenching activities may uncover buried unknown archaeological resources. In the event that subsurface archaeological resources are encountered during construction, such resources could potentially be damaged or destroyed, resulting in a substantial adverse change in the significance of an archaeological resource. As a result, implementation of the proposed project could result in a potentially significant impact to archaeological resources.

4.3.5.3 Tribal Cultural Resources

Threshold 3: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The Sacred Lands File check from the NAHC indicated that no known sacred lands or Native American cultural resources have been identified within the project area and as stated above in Section 4.3.5.2, the SCIC records search did not identify any known prehistoric cultural resources on or within 0.5 mile of the project site and none were observed during the field survey.

In accordance with the requirements of PRC Section 21080.3.1, AB 52, and SB18, the City of La Mesa notified Native American tribes that are traditionally and culturally affiliated with the project area. The tribes were sent notification letters in September 2019 informing them of the proposed project and asking them of any knowledge or information about tribal cultural resources they may have about the project area. No specific tribal cultural resources were identified by the tribes and no requests for consultation were received. One response was received by the Viejas Band of Kumeyaay Indians on October 2, 2019 indicating that Viejas has cultural ties to the project site. No consultation was requested; however, a Kumeyaay cultural monitor was requested to be present during ground disturbing construction activities.

Based on the NAHC Sacred Lands Files, SCIC records search, field survey, and Native American outreach, no tribal cultural resources are known to occur in the project area. However, there is potential for unknown buried tribal cultural resources to be present given the site's location within the Alvarado Creek floodplain. Project construction could encounter unknown tribal cultural resources during subsurface grading and trenching activities that may have been buried by streambed deposits from periodic flooding of Alvarado Creek. If encountered, such resources could potentially be damaged or destroyed, resulting in a substantial adverse change in the significance of a tribal cultural resource. Therefore, implementation of the proposed project could result in a potentially significant impact to tribal cultural resources.

4.3.6 Mitigation Measures

4.3.6.1 Historical Resources

No significant impacts related to historical resources would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.3.6.2 Archaeological Resources

Implementation of the proposed project could result in a potentially significant impact to unknown archaeological resources. Implementation of mitigation measure CUL-1 would reduce this impact to a below a level of significance.

CUL-1 **Archaeological and Native American Construction Monitoring.** Prior to the issuance of grading permits, the owner/permittee shall prepare a cultural resources monitoring program that shall be reviewed and approved by the City's Community Development Department. The monitoring program shall include the retention of a qualified archaeologist and a Native American (NA) monitor. The archaeological and NA monitors shall attend a pre-construction meeting with the construction manager and be in attendance during initial ground disturbing activities at the project site. The monitors shall determine the extent of their presence during soil disturbing activities.

The archaeological and NA monitors shall have the authority to temporarily halt or redirect grading and other ground-disturbing activity if cultural resources are encountered. If an artifact is encountered, all operations in the area where the artifact was found shall be suspended immediately, the City shall be notified, and a qualified archaeologist shall be retained by the owner/permittee to evaluate, in consultation with the NA monitor, the significance of the find; to salvage, record, clean, and curate significant artifact(s); and to document the find in accordance with current professional archaeological standards. Within 30 days of completion of ground-disturbing activities, either a letter signed by the archaeological and NA monitors stating that no artifacts were found or, if artifacts were found, a report prepared by the qualified archaeologist and NA monitor documenting the mitigation program shall be submitted to the City.

4.3.6.3 Tribal Cultural Resources

Implementation of the proposed project could result in a potentially significant impact to unknown tribal cultural resources. Implementation of mitigation measure CUL-1 identified above would reduce this impact to a below a level of significance.

4.3.7 Significance Determination

The significance of cultural resources impacts before and after mitigation is summarized in Table 4.3-2, *Significance Determination Summary of Cultural and Tribal Cultural Resources Impacts*. Impacts related to historical resources would be less than significant, and no mitigation is required. Implementation of the proposed project, however, would result in potentially significant impacts related to archaeological and tribal cultural resources. With implementation of mitigation measure CUL-1, these impacts would be reduced to below a level of significance.

Table 4.3-2
SIGNIFICANCE DETERMINATION SUMMARY OF CULTURAL AND TRIBAL CULTURAL RESOURCES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Historical Resources	Less than significant	None required	Less than significant
Archaeological Resources	Potentially significant	CUL-1	Less than significant
Tribal Cultural Resources	Potentially significant	CUL-1	Less than significant

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4.4 GEOLOGY AND SOILS

This section of the EIR evaluates potential impacts associated with geology and soils resulting from implementation of the proposed project. The following discussion is based on the Report of Preliminary Geotechnical Investigation (Geotechnical Exploration, Inc. 2004), Interim Report of Site Conditions and Preliminary Opinions (Geotechnical Exploration, Inc. 2018), and Report of Geotechnical Investigation Update (Geotechnical Exploration, Inc. 2019), which are included as Appendix F of this EIR.

4.4.1 Existing Conditions

4.4.1.1 Geologic Setting

The project site is located within the coastal plain portion of the Peninsular Ranges Geomorphic Province (Province), a region characterized by relatively uplifted northwest-trending structural blocks and relatively down-dropped intervening fault zones and alluvial valleys. The Province extends approximately 920 miles from the Los Angeles Basin to the southern tip of Baja California and varies in width from approximately 30 to 100 miles. Bedrock units in the Province include Jurassic (approximately 144 million to 206 million years old) metavolcanic and metasedimentary rocks, and Cretaceous (approximately 65 to 144 million years old) igneous rocks of the Southern California Batholith (a large igneous intrusive body). The coastal plain area in San Diego County encompasses a series of stair-stepped marine terraces that increase in age from west to east, and typically include a sequence of relatively undisturbed and non-conformable (i.e., not in direct chronologic sequence) upper Cretaceous through Pleistocene (between approximately 11,000 and 2 million years old) marine and non-marine sedimentary strata. These deposits have been dissected, in general, by west-flowing drainages to produce the characteristic canyon and mesa topographic features present today in western San Diego County, as well as deposit surficial materials such as alluvium, colluvium, and topsoil. Additional description of on-site surficial and formational deposits is provided below under the discussion of stratigraphy.

The project site is located within the seismically active San Diego region, which is on the eastern boundary of the Southern California Continental Borderland, part of the Province. This region is part of a broad tectonic boundary between the North American and Pacific Plates. The actual plate boundary is characterized by a complex system of active, major, right-lateral strike-slip faults trending northwest/ southeast. This fault system extends eastward to the San Andreas Fault (approximately 84 miles from La Mesa) and westward to the San Clemente Fault (approximately 72 miles offshore from La Mesa).

4.4.1.2 Topography

Topographically, the project site is relatively level with an approximate on-site elevation of 410 feet AMSL. The project site is currently developed as an RV resort and is largely covered with concrete pads and asphalt used for vehicle parking and driveways. Alvarado Creek traverses the site and borders a portion of the southern edge of the site and flows from east to west.

4.4.1.3 Stratigraphy

Geologic and surficial units identified within the project site include artificial fill, stream deposits, and Stadium Conglomerate Formation.

Artificial Fill

Since almost the entire project site has been previously graded and/or excavated during development of the RV resort, surface soils are highly disturbed. The surface of the project site is covered by a relatively shallow layer of artificial fill soils that extend to a depth of two to three feet. The fill consists of loose to medium dense and consists of damp, red-brown to gray-brown, silty, fine to medium and fine to coarse sand with pebbles and cobbles. The shallow fill soils are considered to have a low expansion potential. These fill soils are not suitable in their current condition for bearing support of development.

Stream Deposits

The fill soils along the southern perimeter of the project site are underlain by stream deposits to an approximate depth of nine feet below the present surface grade. The stream deposits consist of a medium dense, wet, tan-gray and orange-brown, fine to coarse sand with abundant cobbles and boulders (to 14 inches in diameter). Stream deposits are considered to have low expansion potential. These stream deposit soils are not suitable in their current condition for bearing support.

Stadium Conglomerate Formation

The entire site is underlain by dense cobble conglomerate formational material of the Tertiary Stadium Conglomerate Formation at depths below three feet. These formational soils are considered to have a negligible to very low liquefaction potential and low consolidation and expansion potential characteristics.

4.4.1.4 Faulting and Seismicity

There are no known active or potentially active faults are located at the project site (Geotechnical Exploration, Inc. 2019). The closest active fault to the project site is the Rose Canyon fault, which is located 7.4 miles west of the site. Active faults are defined as those exhibiting historic seismicity or displacement of Holocene (less than approximately 11,000 years old) materials, while potentially active faults have no historic seismicity and displace Pleistocene but not Holocene strata.

Five major active faults are located within approximately 60 miles of the site, as shown in Table 4.4-1, *Summary of Regional Fault Locations and Earthquake Magnitudes*. Due to its proximity, the Rose Canyon fault is considered the dominant source of potential seismic-related hazards at the project site.

Table 4.4-1
SUMMARY OF REGIONAL FAULT LOCATIONS AND EARTHQUAKE MAGNITUDES

Fault Name	Distance from Project Site (miles)	Direction from Project Site	Maximum Earthquake Magnitude (M)
Rose Canyon	7.4	W	7.5
Coronado Bank	21.3	SW	7.0
Elsinore	34	NE	7.1
Newport-Inglewood	35	NW	7.4
San Jacinto	55	NE	7.2

Source: Geotechnical Exploration, Inc. 2019
W=West; SW=Southwest; NE=Northeast; NW=Northwest

4.4.1.5 Groundwater

Groundwater was encountered at a depth of three feet at one of the exploratory trenches along the southern perimeter of the project site, adjacent to Alvarado Creek and two exploratory borings in the western portion of the site.

4.4.2 Regulatory Setting

4.4.2.1 State

California Alquist-Priolo Earthquake Fault Zoning Act

The California Alquist-Priolo Earthquake Fault Zoning Act of 1972 (PRC Section 2621 et seq.) is intended to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The law requires the State Geologist to establish regulatory zones known as Earthquake Fault Zones (previously called Special Studies Zones and Fault-Rupture Hazard Zones) around the surface traces of active faults, and to distribute maps of these zones to all affected cities, counties, and state agencies. The Act also requires completion of a geologic investigation prior to project approval, to demonstrate that applicable structures will not be constructed across active faults and/or that appropriate setbacks from such faults (generally 50 feet) are included in the project design.

California Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (PRC Division 2, Chapter 7.8, Section 2690 et seq.) provides a statewide seismic hazard mapping and technical advisory program to assist local governments in protecting public health and safety relative to seismic hazards other than surface fault rupture, which is covered by the Alquist-Priolo Earthquake Fault Zoning Act (described above). This Act is intended to protect the public from the effects of strong ground shaking, ground failure, liquefaction, earthquake-induced landslides, and other hazards caused by earthquakes. The Act provides direction and funding for the State Geologist to compile seismic hazard maps and to make those maps available to local governments. The Act, along with related standards in the Seismic Hazards Mapping Regulations (CCR Title 14, Division 2, Chapter 8, Article 10, Section 3270 et seq.), also directs local governments to require the completion and review of appropriate geotechnical studies prior to approving development projects. These requirements are implemented on a local level through means such as general plan directives and regulatory ordinances (with applicable City standards outlined below). Special Publication 117A, Guidelines for Evaluation and Mitigating Seismic Hazards in California (California Geological Survey 2008), contains guidance for the evaluation and mitigation of earthquake hazards for projects within designated zones of required investigations.

California Building Code

The California Building Code (CBC; CCR Title 24, Part 2) encompasses a number of requirements related to geologic issues. Specifically, these include general provisions (Chapter 1); structural design, including soil and seismic loading (Chapters 16/16A); structural tests and special inspections, including seismic resistance (Chapters 17/17A); soils and foundations (Chapters 18/18A); concrete (Chapters 19/19A); masonry (Chapters 21/21A); wood, including consideration of seismic design categories (Chapter 23); construction safeguards (Chapter 33); and grading, including excavation, fill, drainage, and erosion control criteria (Appendix J). The CBC encompasses standards from other applicable sources, including

the International Building Code as outlined below, and ASTM International, with appropriate amendments and modifications to reflect site-specific conditions and requirements in California.

4.4.2.2 Local

City of La Mesa Building Code

La Mesa Municipal Code Title 14, Building Regulations, sets forth rules, regulations, and minimum standards for buildings, grading, and construction activities that take place in the City. Section 14.04.010 adopts the 2019 Edition of the CBC as the building code of the City of La Mesa that serves to regulate the erection, construction, alteration, enlargement, movement, repair, removal, demolition, occupancy, conversion, equipment, use, height, area, and maintenance of all buildings or structures.
Section 14.05.010 adopts Appendix J of the CBC, 2019 Edition, for the purpose of prescribing regulations governing the excavation and grading on private property, including the issuance of permits and providing inspections.

General Plan Safety Element

The Safety Element of the General Plan (City 2012a) identifies a number of applicable goals, objectives, and policies related to seismic, geologic, and structural considerations. Specifically, Goal SE-3 calls for protection from adverse effects caused by earthquakes and other seismic hazards. Objective SE-3.1 promotes ongoing efforts to improve the seismic safety of buildings and structures, and Policy SE-3.1.1 is to apply and enforce seismic design standards and building construction codes for new development.

4.4.3 Methodology and Assumptions

The Geotechnical Investigation is based upon a field investigation consisting of testing conducted during multiple site visits. Nine cone penetrometer tests were placed on the project site on March 26, 2004. The cone penetrometer measurements extended up to a maximum depth of eight feet and were performed to aid in evaluating soil types, basic strength parameters, and the liquefaction potential of existing subsurface soils. Three exploratory trenches were conducted at the site on April 26, 2004, and two supplemental drilling borings within the site were performed on July 24, 2018. The trenches and borings were performed on the site where the proposed structures and improvements are proposed to be located, and where feasible due to the existing structures and utilities currently on the site. The soil within the trenches was logged, and both bulk and in-situ soil samples were taken of the predominant soils during the investigation. The results of the field investigation are summarized in the Geotechnical Investigation found in Appendix F of this EIR (Geotechnical Exploration, Inc. 2004, 2018, 2019).

Additionally, relevant information from the California Department of Conservation and the California Geological Survey, as well as relevant maps and geologic documentation, were reviewed.

4.4.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact associated with geology and soils would occur if implementation of the proposed project would result in any of the following:

1. Would the project directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or

based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

2. Would the project result in substantial soil erosion or the loss of topsoil?

3. Would the project be located on a geological unit or soil that is unstable as a result of the project, and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?

4. Would the project be located on an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

4.4.5 Impact Analysis

4.4.5.1 Seismic Hazards

Threshold 1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

Ground Rupture

Ground rupture is characterized by bedrock slippage along an established earthquake fault and may result in the displacement of the ground surface. For ground rupture to occur along a fault, an earthquake typically must exceed a magnitude of 5.0. The project site is not underlain by a known active or potentially active fault. Therefore, the potential for ground surface rupture is considered to be low and it is unlikely that implementation of the proposed project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving ground rupture. Impacts would be less than significant.

Ground Shaking

The project site could potentially be subject to relatively high levels of ground shaking and site acceleration in the event of an earthquake on any of the major active faults in the region, most notably the Rose Canyon fault (refer to Table 4.4-1). The intensity of ground shaking at any specific site and relative potential for damage from this hazard depends on the earthquake magnitude, distance from the source (epicenter), and the site response characteristics (ground acceleration, predominant period, and duration of shaking). Ground shaking can affect the integrity of surface and subsurface facilities such as structures, foundations, and utilities, either directly from vibration-related damage to rigid structures, or indirectly through associated hazards including liquefaction (as described below). The Rose Canyon fault is the dominant source of potential ground motion at the project site. The estimated maximum source

of potential earthquake magnitude for the Rose Canyon fault is 7.5, and the calculated site acceleration corresponding to a 10 percent probability of exceedance in 50 years is 0.20g.[1]

In the event of a major earthquake, the project site and proposed buildings could be subject to moderate to strong ground shaking, which has the potential to damage or destroy buildings and other structures, thereby exposing people to hazardous conditions. However, pursuant to La Mesa Municipal Code Title 14, the proposed project would be designed and constructed in compliance with the CBC, which contains specific structural requirements for seismic safety. Proper engineering and adherence to the CBC guidelines would minimize the risk to life and property from potential ground motion at the project site. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving ground shaking. Impacts would be less than significant.

Liquefaction

Liquefaction typically occurs in areas with loose, saturated sands and silts when they are shaken by an earthquake of sufficient magnitude. The occurrence of liquefaction under the described conditions results in a rapid pore-water pressure increase and a corresponding loss of shear strength, with affected soils behaving as a viscous liquid. Surface manifestations from these events can include effects such as a loss of bearing capacity for structures/foundations, ground subsidence, differential settlement (different degrees of settlement over relatively short distances), and lateral spreading (horizontal displacement on sloped surfaces as a result of underlying liquefaction). Lateral spreads develop on gentle slopes and entail the sidelong movement of large masses of soil as an underlying layer liquefies. Loss of bearing strength results when the soil supporting structures liquefies and causes structures to collapse. Loosely structured soils, such as alluvium or improperly compacted fill, are more susceptible to liquefaction, while clay-rich, well-compacted soils are less susceptible to liquefaction. A high groundwater table increases the risk of liquefaction hazard.

The Geotechnical Investigation (Geotechnical Exploration, Inc. 2004, 2018, 2019) concludes that the potential for liquefaction at the project site is minimal due to the dense nature of the underlying formational materials associated with the Stadium Conglomerate. Although groundwater was encountered on the site at a relatively shallow depth of three feet, it would not increase the potential for liquefaction to occur based on the characteristics of the underlying geologic formation. No loss of strength is anticipated to occur to the on-site soils due to an anticipated seismic event. Therefore, it is unlikely that implementation of the proposed project would expose people or structures to substantial adverse effects involving liquefaction. Impacts would be less than significant.

Landslides

Landslides occur when rock, earth, or debris move down a slope, including rock falls, deep failure of slopes, and shallow debris flows. Landslides and other slope failures may occur in hillside areas due to several factors including seismic ground shaking or substantial rainfall. Structures, engineered slopes, roadways, utilities, and people located on or below unstable areas could be subject to severe damage or injury. Landslide, debris flows, and surficial material failures affect the area where the material originates, as well as downslope areas where the landslide debris accumulates.

[1] Ground acceleration is expressed in units of acceleration due to gravity (g), where 1 g corresponds to the vertical acceleration force due to gravity.

According to the Geotechnical Investigation, the project area is underlain by generally flat bedding and lacks steep slopes. The proposed project would follow the construction recommendations provided by the Geotechnical Investigation and CBC requirements, which would avoid potential slope failure and/or landslide hazards. Therefore, it is unlikely that implementation of the proposed project would expose people or structures to substantial adverse effects from seismic-induced landslides. Impacts would be less than significant.

4.4.5.2 Soil Erosion

Threshold 2: Would the project result in substantial soil erosion or the loss of topsoil?

The proposed project may result in or indirectly accelerate erosion on the project site during construction. Ground-disturbing activities, such as grading and excavation, and stockpiling of excavated materials would expose bare soils that could be eroded by wind or water. Furthermore, vegetation removal could reduce soil cohesion and temporarily diminish the buffer provided by vegetation from wind, water, and surface disturbance, causing the exposed soils to be more susceptible to erosion.

Construction activities would comply with the CBC, which regulates excavation, construction of foundations and retaining walls, and grading, including drainage and erosion control. As discussed in Section 4.1, *Air Quality*, SDAPCD Rule 55 requires that construction activities implement fugitive dust control measures, which would minimize the effects of wind erosion. As discussed in Section 4.7, *Hydrology and Water Quality*, erosion and sedimentation control BMPs would be implemented as part of the site-specific Storm Water Pollution Prevention Plan (SWPPP) developed pursuant to the NPDES Construction General Permit and the City's Storm Water BMP Manual, which would minimize the effects of water erosion.

Although it is anticipated that the proposed project would be constructed in two phases, grading of the entire project site may occur during the first phase with the development of the second phase improvements (Building 4 and associated improvements on the portion of the site east of Alvarado Creek) occurring much later, thereby leaving graded areas exposed during the interim period. All graded areas that would not be developed immediately would remain subject to the SDAPCD Rule 55, NPDES Construction General Permit, and City's Storm Water BMP Manual until permanently stabilized in accordance with the standards contained within these regulations. As indicated above, compliance with these regulations requires the implementation of dust control measures and construction BMPs, which include provisions for the stabilization of inactive disturbed areas and graded slopes. Stabilization methods include hydroseeding, soil binders, chemical soil stabilizers, geotextiles, tarps, fencing, or other erosion control measures. Following construction of each phase, any remaining disturbed areas within that phase would be stabilized with landscaping to prevent erosion and topsoil loss. With implementation of the dust control measures and construction BMPs described above, the proposed project would not result in substantial erosion or loss of topsoil. Impacts would be less than significant.

4.4.5.3 Unstable Soils

Threshold 3: Would the project be located on a geological unit or soil that is unstable as a result of the project, and potentially result in on-site or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?

As stated above in Section 4.4.5.1, the Geotechnical Investigation does not consider landslides to be a substantial risk for the project due to the generally flat nature of the site. The project site is also not

located within a rain-induced landslide hazard area identified in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan (County of San Diego 2018). The proposed project would follow the construction recommendations provided by the Geotechnical Investigation and CBC requirements, which would avoid potential slope failure and/or landslide hazards. Additionally, the risk of liquefaction is minimal due to the dense nature of the site's underlying formational material below three feet in depth. As a result, lateral spreading is not considered to be a substantial risk because it is often caused by earthquake-induced liquefaction.

According to the Geotechnical Investigation (Geotechnical Exploration, Inc. 2004, 2018, 2019), the underlying formational materials (i.e., Stadium Conglomerate) would provide adequate support for the proposed structures and improvements. However, the existing artificial fill and stream deposits on the site within the first nine feet of depth are not considered suitable in their current condition to provide a stable soil base to support the proposed structures and improvements. In the areas of the proposed garages, the fill and stream deposits would be removed during excavation. The Geotechnical Investigation recommends these soils be removed and recompacted as part of the site preparation prior to the addition of any new fill or structural improvements. Adherence to the recommendations contained in the Geotechnical Investigation, which will be required as project conditions of approval and incorporated into the construction contract specifications, would avoid impacts related to unstable soils. Therefore, although shallow underlying soils may not be suitable to provide a stable base for the proposed development, adherence to the measures in the Geotechnical Investigation would ensure that the project would not result in landslides, lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant.

4.4.5.4 Expansive Soils

Threshold 4: Would the project be located on an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Expansion of soils may result in unacceptable settlement or heave of structures or concrete slabs supported on grade. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors. Soils with a relatively high fines content (clays dominantly) are generally considered expansive or potentially expansive.

According to the Geotechnical Investigation (Geotechnical Exploration, Inc. 2004, 2018, 2019), soils at the project site are considered to have a very low to low expansion potential. Adherence to the recommendations contained in the Geotechnical Investigation, which will be required as project conditions of approval and incorporated into the construction contract specifications, would avoid impacts related to expansive soils. Therefore, impacts associated with expansive soils would be less than significant.

4.4.6 Mitigation Measures

4.4.6.1 Seismic Hazards

No significant impacts related to seismic hazards would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.4.6.2 Soil Erosion

No significant impacts related to soil erosion and topsoil loss would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.4.6.3 Unstable Soil

No significant impacts related to unstable soil would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.4.6.4 Expansive Soil

No significant impacts related to expansive soil would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.4.7 Significance Determination

The significance of impacts to geology and soils before and after mitigation is summarized in Table 4.4-2, *Significance Determination Summary of Geological Impacts.* Implementation of the proposed project would not result in any significant impacts to geology and soils. Impacts related to seismic hazards, soil erosion, unstable soils, and expansive soils would be less than significant with adherence to applicable regulatory/industry standard and codes, including the CBC, NPDES requirements, and recommendations contained in the Geologic Investigation prepared for the project. No mitigation is required.

Table 4.4-2
SIGNIFICANCE DETERMINATION SUMMARY OF GEOLOGICAL IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Seismic Hazards	Less than significant	None required	Less than significant
Soil Erosion	Less than significant	None required	Less than significant
Unstable Soils	Less than significant	None required	Less than significant
Expansive Soils	Less than significant	None required	Less than significant

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4.5 GREENHOUSE GAS EMISSIONS

This section of the EIR evaluates potential GHG impacts resulting from implementation of the proposed project. The analysis in this section is based on the *Greenhouse Gas Emissions Technical Report* (HELIX 2020b) prepared for the project, which is included as Appendix G of this EIR.

4.5.1 Existing Conditions

4.5.1.1 Global Climate Change Overview

Global climate change refers to changes in average climatic conditions over the entire Earth, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting light in but preventing heat from escaping, thus warming the Earth's atmosphere. These gases allow solar radiation (sunlight) into the Earth's atmosphere but prevent radiative heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2018 ranked as the fourth warmest year on record with an increase of 1.5 degrees Fahrenheit compared to the 1951-1980 average. Globally, 2018's temperatures rank behind the three warmest years on record—2016, 2017 and 2015 (National Aeronautics and Space Administration [NASA] 2019). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

4.5.1.2 Types of Greenhouse Gases

The GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Each of these GHGs are described below.

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of January 2020, the CO_2 concentration exceeded 412 ppm (National Oceanic and Atmospheric Administration [NOAA] 2020).

Methane. CH_4 is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Because GHGs vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP.

4.5.1.3 GHG Inventories

Global and National GHG Inventories

In 2014, total GHG emissions worldwide were estimated at 48,892 million metric tons (MMT) of CO_2e emissions (World Resource Institute [WRI] 2020). The U.S. contributed the second largest portion (13 percent) of global GHG emissions in 2014. The total U.S. GHG emissions was 6,319 MMT CO_2e in 2019, of which 82 percent was CO_2 emission (WRI 2020). On a national level, approximately 27 percent of GHG emissions were associated with transportation and about 38 percent were associated with electricity generation (WRI 2020).

State GHG Inventory

The CARB performed statewide inventories for the years 1990 to 2017, as shown in Table 4.5-1, *California State Greenhouse Gas Emissions by Sector*. The inventory is divided into six broad sectors of economic activity: agriculture, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO_2e. As shown, statewide GHG source emissions totaled 431 MMT CO_2e in 1990, 471 MMT CO_2e in 2000, 449 MMT CO_2e in 2010, and 424 MMT CO_2e in

2017. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

Table 4.5-1
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	Emissions (MMT CO_2e) 1990	Emissions (MMT CO_2e) 2000	Emissions (MMT CO_2e) 2010	Emissions (MMT CO_2e) 2017
Agriculture and Forestry	18.9 (4%)	31.0 (7%)	33.7 (8%)	32.4 (8%)
Commercial	14.4 (3%)	14.1 (3%)	20.1 (4%)	23.3 (5%)
Electricity Generation	110.5 (26%)	105.4 (22%)	90.6 (20%)	62.6 (15%)
Industrial	105.3 (24%)	105.8 (22%)	101.8 (23%)	101.1 (24%)
Residential	29.7 (7%)	31.7 (7%)	32.1 (7%)	30.4 (7%)
Transportation	150.6 (35%)	183.2 (39%)	170.2 (38%)	174.3 (41%)
Unspecified Remaining	1.3 (<1%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
TOTAL	**430.7**	**471.1**	**448.5**	**424.1**

Source: CARB 2007 and CARB 2019
MMT = million metric tons; CO2e = carbon dioxide equivalent

Regional GHG Inventory

A San Diego regional emissions inventory that was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC) accounted for the unique characteristics of the region (EPIC 2017). Its 2014 emissions inventory update for San Diego is presented in Table 4.5-2, *San Diego County GHG Emissions by Sector in 2014*. The sectors included in this inventory are somewhat different from those in the statewide inventory. Similar to the statewide emissions, transportation related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

Table 4.5-2
SAN DIEGO COUNTY GHG EMISSIONS BY SECTOR IN 2014

Sector	2014 Emissions MMT CO_2e (% total)[1]
On-Road Transportation	1.46 (45%)
Electricity	0.76 (24%)
Solid Waste	0.34 (11%)
Natural Gas Consumption	0.29 (9%)
Agriculture	0.16 (5%)
Water	0.13 (4%)
Off-Road Transportation	0.04 (1%)
Wastewater	0.02 (1%)
Propane	0.01 (<0.5%)
TOTAL	**3.21**

Source: EPIC 2017
[1] Percentages may not total 100 due to rounding.
MMT = million metric tons; CO_2e = carbon dioxide equivalent

On-site GHG Inventory

For the project site, existing on-site sources of GHG emissions are from vehicle emissions associated with customers, employees, and vendors driving to and from the RV resort; emissions resulting from energy (i.e., electricity and natural gas) used in resort operation; emissions resulting from the disposal of solid waste; emissions from the energy required for the sourcing, conveyance and treatment of water and wastewater; and emissions from maintenance and landscaping activities. The existing on-site GHG emissions inventory was calculated using CalEEMod, described in Section 4.5.3. The estimated existing land use GHG emissions are presented in Table 4.5-3, *Estimated Existing On-site Land Use GHG Emissions*.

Table 4.5-3
ESTIMATED EXISTING ON-SITE LAND USE GHG EMISSIONS

Emission Sources	Emissions (MT CO_2e/year)
Area (e.g., painting and consumer products)	1.6 (<0.1%)
Energy (i.e., electricity and natural gas use)	389.4 (40.0%)
Vehicular (Mobile)	484.4 (49.8%)
Solid Waste	29.8 (3.1%)
Water and Wastewater	66.6 (7.0%)
TOTAL	**971.9**

Source: HELIX 2020b
Notes: Totals may not sum due to rounding.
MT = metric tons; CO_2e = carbon dioxide equivalent

4.5.2 Regulatory Setting

4.5.2.1 Federal

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. USEPA* that CO_2 is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA). The standards were established on April 1, 2010 for 2012 through 2016 model year vehicles and on October 15, 2012 for 2017 through 2025 model year vehicles (USEPA 2017; USEPA and NHTSA 2012).

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA worked together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. On August 2, 2018, the agencies released a notice of proposed rulemaking—the Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026

Passenger Cars and Light Trucks (SAFE Vehicles Rule). The purpose of the SAFE Vehicles Rule is "to correct the national automobile fuel economy and GHG emissions standards to give the American people greater access to safer, more affordable vehicles that are cleaner for the environment (USEPA 2018)." The direct effect of the rule is to eliminate the standards that were put in place to gradually raise average fuel economy for passenger cars and light trucks under test conditions from 37 miles per gallon in 2020, to 50 miles per gallon in 2025. By contrast, the new SAFE Vehicles Rule freezes the average fuel economy level standards indefinitely at the 2020 levels. The new SAFE Vehicles Rule also results in the withdrawal of the waiver previously provided to California for that State's GHG and zero emissions vehicle (ZEV) programs under section 209 of the CAA. The combined USEPA GHG emission standards and NHTSA Corporate Average Fuel Economy (CAFE) standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2017; USEPA and NHTSA 2012).

4.5.2.2 State

California Code of Regulations, Title 24, Part 6

CCR Title 24 Part 6, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Title 24 standards went into effect on January 1, 2020. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards is a requirement for on-site photovoltaic electricity generation (e.g., solar panels) for most new or modified residential building up to three stories high. The project proposes five-story residential buildings and thus, the solar panel requirement would not apply to the project.

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach. Future development per the proposed project would be required to be designed to meet the current Title 24 energy efficiency standards.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR (CBSC 2019). The 2019 Standards went into effect on January 1, 2020.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce

energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

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

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. In an effort to avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPOs). CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing. SANDAG is San Diego's local MPO and has responded to the requirements of SB 375 with the preparation of a RTP/SCS, *San Diego Forward: The Regional Plan* (SANDAG 2015).

Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

Senate Bill 97

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to the State CEQA Guidelines for addressing GHG emissions, including the effects associated with transportation and energy consumption. The amendments became effective on March 18, 2010.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28-nation European Union. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 32 and Assembly Bill 197

As a follow-up to AB 32 and in response to EO-B-30-15, SB 32 was passed by the California legislature in August 2016 to codify the EO's California GHG emission reduction target of 40 percent below 1990 levels by 2030 and requires the State to invest in the communities most affected by climate change. AB 197 establishes a legislative committee on climate change policies to help continue the State's activities to reduce GHG emissions.

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2017a). In January 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 and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2017a).

Assembly Bill 341

The State legislature enacted AB 341 (California Public Resource Code Section 42649.2), increasing the solid waste diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

Executive Order S-01-07

This EO, signed on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether an LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

Senate Bill 350

Approved on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 extends the renewable electricity procurement goals and requirements of SB 350. SB 100 requires that all retail sale of electricity to California end-use customers be procured from 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

California Air Resources Board: Scoping Plan

On December 11, 2008, CARB adopted the Scoping Plan (CARB 2008) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing VMT and vehicle GHG emissions through fuel and efficiency measures. These measures would be implemented statewide rather than on a project by project basis.

In response to EO B-30-15 and SB 32, all state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target (CARB 2014). The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and

investments in clean technologies and infrastructure needed to continue driving down emissions. In December 2017, CARB adopted the *2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target,* to reflect the 2030 target set by EO B-30-15 and codified by SB 32 (CARB 2017b).

4.5.2.3 Local

San Diego Forward: The Regional Plan

The Regional Plan (SANDAG 2015) is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The underlying purpose is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region as stipulated under SB 375. The Regional Plan establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." The Regional Plan encourages an increase in residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation. General urban form goals, policies, and objectives are summarized as follows:

- Mix compatible uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.

The Regional Plan also addresses border issues, providing an important guideline for communities that have borders with Mexico. In this case, the goal is to create a regional community where San Diego, its neighboring counties, tribal governments, and northern Baja California mutually benefit from San Diego's varied resources and international location.

On February 22, 2019, the SANDAG Board of Directors approved an action plan to develop a new vision for the 2021 Regional Plan that would transform the way people and goods move throughout the region. Development of the 2021 Regional Plan, including the associated projects, programs, and

policies, is underway and going through the planning process with an anticipated adoption by late 2021. While work progresses to develop this new vision, SANDAG prepared and adopted a 2019 Federal RTP (2019 Federal RTP; SANDAG 2019b) that complies with federal requirements for the development of regional transportation plans, retains air quality conformity approval from the U.S. Department of Transportation, and preserves funding for the region's transportation investments. The 2019 Federal RTP builds on The 2015 Regional Plan with updated project costs and revenues and a new regional growth forecast.

City of La Mesa Climate Action Plan

The City's Climate Action Plan (CAP) was adopted in March 2018. The CAP describes the 2010 GHG emissions baseline and forecasted emissions for 2020 and 2035, and identifies achievable, measurable strategies and actions for the City to implement to reduce emissions to 15 percent below 2010 levels by 2020 and 53 percent below 2010 levels by 2035 (City 2018). These CAP reduction goals were designed to enable the City to meet the 2020 GHG reduction mandates of AB 32, the 2030 GHG reduction mandates SB 32, and to be on-track to meet the 2050 of EO-S-3-05 goal of GHG emissions 80 percent below 1990 levels by 2050. The CAP contains reduction measures within the City's direct influence to achieve the City's 2020 and 2035 GHG reduction targets in five strategy areas: energy; transportation and land use; water; solid waste; and green infrastructure (City 2018).

4.5.3 Methodology and Assumptions

4.5.3.1 Emissions Modeling

The project's GHG emissions were calculated using the CalEEMod, Version 2016.3.2. CalEEMod is a computer model that estimates criteria air pollutant and greenhouse gas emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating, ventilation, and cooling; lighting; and plug-in appliances), water use and wastewater generation, and solid waste disposal. Emissions are estimated based on land use information input to the model by the user. Refer to Section 4.1.3.1 of this EIR for additional details regarding emissions modeling.

4.5.3.2 Construction Emissions

The methodology and assumptions utilized in the construction emissions modeling of GHG emissions is the same as used for criteria air pollutants, as described in detail in Section 4.1.3.2 of this EIR.

4.5.3.3 Operational Emissions

Area Source Emissions

The CalEEMod module estimates the GHG emissions that would occur from the use of hearths (e.g., wood or gas fireplaces and wood stoves), and landscaping equipment. This module also estimates emissions due to use of consumer products and architectural coatings that have VOCs; however, these sources do not emit GHGs. The project would not include wood burning fireplace or woodstoves; the modeling assumed only natural gas hearths.

The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. CalEEMod estimates the number and type of equipment needed based on the number of summer days

given the project's location as entered in the project characteristics module. The model defaults for landscaping equipment were assumed.

Vehicle (Mobile) Sources

Operational emissions from mobile source emissions are associated with project-related vehicle trip generation and trip length. Based on the trip generation rate from the TIA prepared for the project, the project would generate 5,415 average daily trips and the existing land use generates 668 average daily trips for a net increase of 4,747 average daily trips. The TIA also analyzed the project's VMT and determined that each trip would have an average distance of 4.83 miles (Kimley Horn 2020). All CalEEMod default trip rates, purposes and distances were replaced by the project specific trip data from the TIA.

Energy Source

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. GHGs are generated during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect and are calculated in CalEEMod as associated with a building's operation.

CalEEMod default energy values are based on the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies, which identify energy use by building type and climate zone. Each land use type input to the land use module is mapped in the energy module to the appropriate CEUS and RASS building type. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 building codes. The default adjustment is to the 2016 Title 24 energy code (part 6 of the building code).

Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. CalEEMod determines the GHG emissions associated with disposal of solid waste into landfills. Portions of these emissions are biogenic. CalEEMod methods for quantifying GHG emissions from solid waste are based on the IPCC method using the degradable organic content of waste. Existing land use GHG emissions associated with waste disposal were all calculated using CalEEMod's default parameters. A conservative 25 percent solid waste diversion rate was applied in CalEEMod to the new construction and redevelopment that would occur to account for mandatory compliance with AB 341.

Water and Wastewater Sources

The amount of water used, and wastewater generated, by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both methane and nitrous oxide.

CalEEMod uses default electricity intensity values for various phases of supplying and treating water from CEC's *Refining Estimates of Water-Related Energy Use in California*. The model estimates water/ wastewater emissions by multiplying the total projected water/wastewater demand by the applicable water electricity intensities and by the utility intensity GHG factors.

The default CalEEMod water use assumptions were used for the GHG emissions estimates for existing land uses and operation of the project. For the project's water and wastewater GHG emissions, an overall 20 percent reduction in water use was applied in the CalEEMod mitigation section to account for recent requirements of CALGreen.

4.5.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact associated with GHG emissions would occur if implementation of the proposed project would result in any of the following:

1. Would the project generate GHGs, either directly or indirectly, that may have a significant impact on the environment?

2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?

4.5.5 Impact Analysis

4.5.5.1 Generation of GHG Emissions

Threshold 1: Would the project generate GHGs, either directly or indirectly, that may have a significant impact on the environment?

To determine whether the project would result in emissions that may have a significant impact on the environment, the project's GHG emissions were compared to the GHG emissions efficiency threshold of 3.46 MT CO_2e per capita by the year 2035 selected as a target by the City for GHG reductions in the CAP (City 2018). This target was developed to meet the statewide GHG emissions reduction target of 40 percent below 1990 levels by 2030 and be on track to meet the 80 percent below 1990 levels by 2050 target in accordance with SB 32 and EO S-3-05.

A 2035 target value between the 2030 and 2050 state reduction targets would require GHG reductions of 50 percent below 1990 levels. A 50 percent reduction below 1990 levels is equivalent to a 53 percent reduction below 2010 levels. A 53 percent reduction below La Mesa's 2010 baseline of 7.37 MT CO_2e per capita would be 3.46 MT CO_2e per capita (City 2018).

Construction Emissions

GHG emissions generated during project construction activities were estimated using CalEEMod as described in Section 4.1.3.2. Emissions of GHGs related to the construction of the project would be temporary. As shown in Table 4.5-4, *Construction GHG Emissions*, the total estimated GHG emissions associated with construction of the project would be approximately 3,679 MT CO_2e. Neither the SDAPCD nor the City have adopted thresholds for determining the significance of a project's temporary construction GHG emissions. To be conservative in accounting for all the project's GHG emissions, the construction period emissions were amortized (i.e., averaged) over the anticipated 30-year lifespan of the project buildings and added to the project's operational emissions. Averaged over 30 years, the proposed construction activities would contribute approximately 122.6 MT CO_2e emissions per year.

Table 4.5-4
CONSTRUCTION GHG EMISSIONS

Project Phase and Year	Emissions (MT CO_2e)
Phase 1 2021	325.7
Phase 1 2022	1,330.1
Phase 1 2023	1,008.0
Phase 2 2023	98.8
Phase 2 2024	643.3
Phase 2 2025	273.1
TOTAL	**3,679.0**
Amortized Emissions (Total Emission/30 Years)	*122.6*

Source: HELIX 2020b
Notes: Totals may not sum due to rounding.
MT = metric tons; CO_2e = carbon dioxide equivalent

Operational Emissions

The project's operational GHG emissions and the existing land use GHG emissions were estimated using CalEEMod as described in Section 4.5.3.3. The project's net annual operational emissions would be the total project annual emissions for the first year of full buildout, after completion of both Phase 1 and Phase 2 in 2025, plus the amortized construction emissions (described above) and minus the existing land use emissions that would occur without implementation of the project. As shown in Table 4.5-5, *Net Operational GHG Emissions*, the project would result in approximately 6,385 MT CO_2e per year.

Table 4.5-5
NET OPERATIONAL GHG EMISSIONS

Project Phase and Source	Emissions (MT CO_2e/year)
Phase 1 Area	289.1
Phase 1 Energy	1,820.6
Phase 1 Vehicular (Mobile)	2,462.8
Phase 1 Solid Waste	117.9
Phase 1 Water and Wastewater	280.5
Phase 1 Subtotal[1]	*4,970.9*
Phase 2 Area	136.7
Phase 2 Energy	850.5
Phase 2 Vehicular (Mobile)	1,093.9
Phase 2 Solid Waste	52.9
Phase 2 Water and Wastewater	129.3
Phase 2 Subtotal[1]	*2,263.4*
Project Total (Phase 1 Subtotal + Phase 2 Subtotal)	7,234.3
Amortized Construction Emissions (from Table 4.5-4)	122.6
Less Existing Land Use Emissions (from Table 4.5-3	(971.9)
Net Emissions	**6,385.0**
Net Emissions Per Capita[2]	**2.25**
Threshold (MT CO_2e per capita per year)	*3.46*
Exceed Threshold?	***No***

Source: HELIX 2020b

[1] Totals may not sum due to rounding.

[2] Net emissions per capita = net emissions divided by the estimated future project population of 2,717 residents.

MT = metric tons; CO_2e = carbon dioxide equivalent

For comparison with the City's 2035 GHG reduction target from the CAP, the project's net operational emissions were divided by the project's estimated future population. Based on the emissions modeling, the CalEEMod default population density for high-rise multi-family apartments for San Diego County would be 2.86 persons per DU and the project's future residential population would be approximately 2,717 residents. As shown in Table 4.5-5, the project's per capita emissions would be approximately 2.25 MT CO_2e per year, below the City's GHG emissions target of 3.46 MT CO_2e per capita by the year 3035. Therefore, the project would not generate GHG emissions that may have a significant impact on the environment. Associated impacts would be less than significant.

4.5.5.2 Conflicts with GHG Reduction Plans, Policies, or Regulations

Threshold 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?

The City's CAP describes the 2010 GHG emissions baseline and forecasted emissions for 2020 and 2035, and identifies achievable, measurable strategies and actions for the City to implement to reduce emissions to 15 percent below 2010 levels by 2020 and 53 percent below 2010 levels by 2035 (City 2018). These CAP reduction goals were designed to enable the City to meet the 2020 GHG reduction mandates of AB 32, the 2030 GHG reduction mandates SB 32, and to be on-track to meet the 2050 of EO S-3-05 goal of GHG emissions 80 percent below 1990 levels by 2050.

The CAP contains reduction measures within the City's direct influence to achieve the City's 2020 and 2035 GHG reduction targets in five strategy areas: energy; transportation and land use; water; solid waste; and green infrastructure (urban forest). The project is within 0.5 mile of the 70th Street Trolley Station, which serves the MTS Green Line Trolley. Due the project's proposed high-density multi-family housing and proximity to a major transit stop, the project would be considered TOD. The project would also add pedestrian and bicycle lane/sidewalks on Alvarado Road and add pedestrian and bicycle access to the 70th Street Trolley Station. Therefore, the project would support the CAP Transportation and Land Use reduction strategies and measures T-1, *Bicycle and Pedestrian Infrastructure Development*, and T-4*, Mixed-Use and Transit-Oriented Development*. In addition, the project's conformance to the 2019 Title 24 Part 6 building energy efficiency code and Part 11 CALGreen code would ensure the project is consistent with the CAP building energy, water use, and solid waste diversion strategies and measures. In addition, the project would be consistent with the green infrastructure strategies and measures by implementing the 2019 CALGreen and City standards for public right of way and parking lot shade trees and by restoring the Alvarado Creek channel with native planting.

As discussed in Section 4.5.1.3, the transportation sector is the largest source of GHG emissions in the state and in the San Diego region. A project's GHG emissions from cars and light trucks are directly correlated to the project's VMT. A reduction of VMT through implementation of TOD projects is a key component of SANDAG's Regional Plan to mitigate the adverse effects of traffic congestion and reduce GHG emissions (SANDAG 2015). The TIS analyzed the project's VMT per capita and compared it to the San Diego regional VMT per capita. The regional VMT per capita is 15.3 miles and the project VMT per capita would be 13.5 miles, based primarily on proximity to the transit station (Kimley Horn 2020).

The TIA also includes estimated VMT reductions from SANDAG's Mobility Management VMT Reduction Calculator Tool that would further reduce the project's VMT. These features would further reduce the project's mobile source GHG emissions by reducing VMT. The VMT reductions include:

- 1D Employer Transit Pass Subsidy: 0.3-percent VMT reduction
- 2A Transit Oriented Development: 5.2-percent VMT reduction
- 3A Parking Pricing: 7.5-percent VMT reduction
- 4B Pedestrian Facility Improvement: 1.4-percent VMT reduction
- 4D Bike Facility Improvement: 0.1-percent VMT reduction

Note that the employer transit pass subsidy and the parking pricing measures would need to be implemented by the developer and are not guaranteed at this time. In addition, as described in Section 4.5.5.1, the project's estimated GHG emissions per capita would be below the City's GHG emissions per capita reduction target selected for the CAP. Therefore, the project would be consistent with the reduction strategies and GHG emissions per capita target and would be consistent with the CAP. The project would implement TOD near the 70th Street Trolley Station and reduce VMT per capita, consistent with SANDAG's Regional Plan. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Associated impacts would be less than significant.

4.5.6 Mitigation Measures

4.5.6.1 Generation of GHG Emissions

No significant impacts related to generation of direct or indirect GHG emissions would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.5.6.2 Conflicts with GHG Reduction Plans, Policies, or Regulations

No significant impacts related to conflicts with GHG reduction plans, policies, or regulations would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.5.7 Significance Determination

The significance of GHG emissions impacts before and after mitigation is summarized in Table 4.5-6, *Significance Determination Summary of GHG Emissions Impacts*. Implementation of the proposed project would not result in any significant GHG emissions impacts. Impacts related to generation of GHG emissions and conflicts with GHG reduction plans, policies, or regulations would be less than significant, and no mitigation is required.

Table 4.5-6
SIGNIFICANCE DETERMINATION SUMMARY OF GHG EMISSIONS IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Generation of GHG Emissions	Less than significant	None required	Less than significant
Conflicts with GHG Reduction Plans, Policies, or Regulations	Less than significant	None required	Less than significant

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section of the EIR evaluates potential impacts associated with hazards and hazardous materials resulting from implementation of the proposed project. The following discussion is based, in part, on the Phase I Environmental Site Assessment (ESA) prepared for the project (SCS Engineers 2018), which is included as Appendix H of this EIR.

4.6.1 Existing Conditions

4.6.1.1 Hazardous Materials Sites

Hazardous materials are substances with certain physical or chemical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are used for a variety of purposes, including service industries, various small businesses, medical uses, schools, and households. Many chemicals used in household cleaning, construction, dry cleaning, film processing, landscaping, and automotive maintenance and repair are considered hazardous. Small-quantity hazardous waste generators include facilities such as automotive repair, dry cleaners, and medical offices.

A search of federal, state, and local environmental regulatory agency databases was conducted to identify listed hazardous materials sites on and within up to a one-mile radius of the project site. A total of 89 reported facilities were identified in various databases within the search radius. Additional details on the databases searched and the search results are provided in Appendix H of this EIR.

The project site is listed on the following two regulatory databases:

- Historic Auto: The listing on this database is referred to as Wright Mobil Service 7407 Alvarado Road, listed to occupy the site from 2001 to 2005. The regulatory database report lists this facility as a gasoline service station; however, a gasoline service station has never been on the site. As such, this interpretation is considered erroneous.

- California Hazardous Material Incident Report System (CHMIRS): The CHMIRS contains information on reported hazardous material incidents (i.e., accidental releases or spills). Types of hazardous materials were not reported, and no violations were listed.

Off-site listed facilities were screened to six properties with potential to impact the project site from releases of hazardous materials, as identified in Table 4.6-1, *Listed Facilities in the Project Vicinity with Potential to Impact the Project Site*.

Table 4.6-1
LISTED FACILITIES IN THE PROJECT VICINITY WITH POTENTIAL TO IMPACT THE PROJECT SITE

Facility	Location	Distance/Direction from Project Site	Database	Potential Concern
Sid's Auto Body	7241 Alvarado Road	800 feet/West	SAM, CPS-SLIC	Cleanup site (soil and groundwater) – case closed
Sport and Import Auto Service	7243 Alvarado Road	680 feet/West	FINDS, RCRA-SQG, SWEEPS UST, HMMD, ECHO, Historic Auto	Hazardous waste generator
Southern Paint 7 Auto Body Shop	7245 Alvarado Road	680 feet/West	Historic Auto	Hazardous waste generator
Parkway Cleaners	7200 Alvarado Road	600 feet/ Northwest	Historic Cleaners	Hazardous waste generator
			UST	Registered UST
Alvarado Creek Redevelopment Site	8181 Alvarado Road	200 feet/East	SWRCB	Cleanup site (soil) – case closed
Bob Stall Chevrolet	7601 Alvarado Road	Adjacent	RCRA-SQG, AST, HMMD, FINDS, ECHO, SAM, LOP, LUST, Hist UST, SWEEPS UST, EMI, Hist CORTESE, HAZNET	Cleanup site (soils) Hazardous waste generator

Source: SCS 2018
SAM = Site Assessment and Mitigation Program, CPS-SLIC = Cleanup Program Sites -Spills, Leaks, Investigation, and Cleanup, FINDS = Facility Index System/Registry System, RCRA-SQR = Resource Conservation and Recovery Act-Small Quantity Generator, SWEEPS UST = Statewide Environmental Evaluation and Planning System Underground Storage Tank, HMMD = San Diego Hazardous Materials Management Division, ECHO = Enforcement and Compliance History Information, SWRCB = State Water Resources Control Board, AST = aboveground storage tank, LOP = Local Oversight Program, LUST = leaking underground storage tank; UST = underground storage tank, EMI = Emissions Inventory Data, HAZNET = Facility and Manifest Data

4.6.1.2 Aircraft Hazards

The State of California requires that the San Diego County Regional Airport Authority, as the Airport Land Use Commission, prepare an Airport Land Use Compatibility Plan (ALUCP) for each public-use airport and military air installation in San Diego County. An ALUCP contains policies and criteria that address compatibility between airports and future land uses that surround them by addressing noise, overflight, safety, and airspace protection concerns to minimize the public's exposure to excessive noise and safety hazards within the airport influence area (AIA) for each airport over a 20-year horizon.

The closest public airport to the project site is Gillespie Field, which is located approximately five miles northeast of the project site in the City of El Cajon. Gillespie Field is a general aviation reliever airport operated by the County of San Diego Department of Public Works. According to the Gillespie Field ALUCP, the project site is not located within the airport's AIA (SDCRAA 2010a). The next closest airports include Montgomery-Gibbs Executive Airport approximately seven miles to the northwest in the City of San Diego and Marine Corps Air Station (MCAS) Miramar approximately eight miles to the northwest in

the City of San Diego. Montgomery-Gibbs Executive Airport is a general aviation reliever airport operated by the City of San Diego. According to the Montgomery-Gibbs Executive Airport ALUCP, the project site is located within Review Area 2 of the airport's AIA (SDCRAA 2010b). The project site is not within the AIA of MCAS Miramar (SDCRAA 2008). The Grossmont Hospital heliport is located approximately 1.8 miles east of the project site in the City of La Mesa. The heliport is privately owned and operated by the Grossmont Hospital District.

4.6.2 Regulatory Setting

4.6.2.1 Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980 and provides federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Federal actions related to CERCLA are limited to sites on the National Priorities List (NPL) for cleanup activities, with NPL listings based on the USEPA Hazard Ranking System (HRS). The HRS is a numerical ranking system used to screen potential sites based on criteria such as the likelihood and nature of the hazardous material release, and the potential to affect people or environmental resources. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) 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.

Resources Conservation and Recovery Act

The federal Resources Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, provides for the management of hazardous wastes from generation to disposal to ensure that it is handled in a manner that protects human health and the environment. Under RCRA, the USEPA has established regulations and procedures for the generation, transportation, storage, and disposal activities of hazardous waste handlers, as well as technical standards for the design and safe operation of treatment, storage, and disposal facilities to minimize the release of hazardous waste into the environment. RCRA's corrective action program is designed to investigate and guide the cleanup of any contaminated air, groundwater, surface water, or soil from hazardous waste management of spills or releases into the environment as a result of the past and present activities at RCRA-regulated facilities.

Hazardous Materials Transportation Act

The U.S. Department of Transportation (DOT), the Federal Highway Administration (FHWA), and the Federal Railroad Administration are the three entities that regulate the transport of hazardous materials at the federal level. The Hazardous Materials Transportation Act (49 CFR 171, Subchapter C) governs the

transportation of hazardous materials. These regulations are promulgated by DOT and enforced by USEPA.

Federal Aviation Regulations Part 77

The Federal Aviation Administration (FAA) has primary responsibility for the safety of civil aviation. The FAA's major functions regarding hazards include the following: (1) developing and operating a common system of air traffic control and navigation for both civil and military aircraft; (2) developing and implementing programs to control aircraft noise and other environmental effects of civil aviation; (3) regulating U.S. commercial space transportation; and (4) conducting reviews to determine that the safety of persons and property on the ground are protected. Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions in navigable airspace; sets forth the requirements for notice to the FAA of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace; provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and provides for establishing antenna farm areas. FAA Form 7460-1, Notice of Proposed Construction or Alteration, must be filed with the FAA regional office prior to construction of buildings that are 200 feet or higher above the graded terrain. Minimum FAA safety standards include the marking or lighting of any structures 200 feet in height or greater from the graded terrain.

4.6.2.2 State

California Code of Regulations

Most state and federal regulations and requirements that apply to generators of hazardous waste are codified in CCR Title 22, Division 4.5. Title 22 contains detailed compliance requirements for hazardous waste generation, transportation, treatment, storage, and disposal facilities. Because California is a fully authorized state under RCRA, most RCRA regulations are integrated into Title 22. The CalEPA/California Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the USEPA through Title 22, which does not include as many exemptions or exclusions as the equivalent federal regulations. Title 22 also regulates a wider range of waste types and waste management activities than RCRA. The State has compiled a number of additional regulations from various CCR titles related to hazardous materials, wastes, and toxics into CCR Title 26 (Toxics), and provides additional related guidance in Titles 23 (Waters) and 27 (Environmental Protection), although California hazardous waste regulations are still commonly referred to as Title 22.

CCR Title 24, Part 9, the California Fire Code is based on the International Fire Code, with necessary California amendments. The purpose of the California Fire Code is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, as well as to provide safety and assistance to firefighters and emergency responders during emergency operations.

Additionally, CCR Title 8, Division 1, Chapter 4, Subchapter 4 regulates exposure to asbestos (Section 1529) and lead-based paint (Section 1532.1) during construction work.

Hazardous Materials Release Response Plans and Inventory Act

The Hazardous Materials Release Response Plans and Inventory Act requires facilities that handle hazardous materials in amounts above threshold quantities to establish and implement hazardous materials business plans. Pursuant to California Health and Safety Code Section 25504, hazardous materials business plans must contain a hazardous materials inventory disclosing the type, quantity, use, location, and health risks of every hazardous substance, chemical product, and waste handled by the facility; emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and provisions for employee training in safety procedures.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including CalEPA, the California Highway Patrol, CDFW, and RWQCB.

California Government Code Section 65962.5

The provisions of California Government Code Section 65962.5 are commonly referred to as the Cortese List, which refers to several government databases, compiled and updated by state regulatory agencies that identify potential hazardous materials sites, including sites that may have been subject to a release of hazardous substances and hazardous waste facilities. A site's presence on this list can affect the local permitting process and compliance with the CEQA. Data resources that provide information regarding the sites and facilities identified as meeting the Government Code Section 65962.5 list requirements include the following (CalEPA 2020):

- List of Hazardous Waste and Substances Sites from the DTSC EnviroStor database;
- List of Leaking Underground Storage Tank (LUST) Sites from the Water Resources Control Board (SWRCB) GeoTracker database;
- List of Solid Waste Disposal Sites identified by the 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 the SWRCB; and
- List of Hazardous Waste Facilities subject to corrective action pursuant to California Health and Safety Code Section 25187.5, identified by DTSC.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Emergency Management Agency, which coordinates the responses of other agencies, including CalEPA, the California Highway Patrol, CDFW, and RWQCB.

4.6.2.3 Local

San Diego County Multi-Jurisdictional Hazard Mitigation Plan

Long-term prevention, mitigation efforts, and risk-based preparedness for specific hazards within San Diego are addressed as a part of the 2018 San Diego County Multi-Jurisdictional Hazard Mitigation Plan (MHMP). It is intended to educate the public, help serve as a decision-making tool, supplement local policies regarding disaster planning, and improve multi-jurisdictional coordination. The MHMP identifies specific risks for San Diego County and provides methods to help minimize damage caused by natural and man-made disasters. The list of hazards profiled for San Diego County include climate change; sea level rise, coastal storms, erosion, and tsunami; dam failure; earthquake; flood; rain-induced landslide; liquefaction; structure/wildfire fire; extreme heat; drought/water supply; and manmade hazards. Hazardous materials (associated with transport, use, and storage) are identified in the Hazard Mitigation Plan as the top hazard in La Mesa (County of San Diego 2018)

San Diego County Regional Airport Authority

The San Diego County Regional Airport Authority (SDCRAA) serves as the region's Airport Land Use Commission, which is responsible for adopting ALUCPs for the County's 16 public-use and military airports. ALUCPs provide guidance on appropriate land uses surrounding airports to protect the health and safety of people and property within the vicinity of an airport, as well as the public in general. ALUCPs focus on a defined area around each airport known as the AIA, which is comprised of noise, safety, airspace protection, and overflight factors. The AIA is divided into the following areas:

- Review Area 1: Review Area 1 consists of locations where noise and safety concerns may necessitate limitations on the types of land use actions. Specifically, Review Area 1 encompasses locations exposed to aircraft noise levels of 60 dB CNEL or greater together with all of the safety zones.

- Review Area 2: Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and overflight notification 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 recordation of overflight notification documents is also required in locations within Review Area 2.

Once ALUCPs have been adopted, local agencies with land located within the AIA boundary for any of the airports must, by law, amend their planning documents to conform to the applicable ALUCP. By providing direction to local agencies in their land use decisions, ALUCPs help maintain the nation's air transportation infrastructure by protecting airports from encroachment by incompatible land uses that could restrict their operations.

San Diego County Site Assessment and Mitigation Program

The County of San Diego Department of Environmental Health (DEH) is the regional agency generally entrusted with the monitoring and enforcement of various laws and regulations governing the handling, use, transportation, storage, and disposal of hazardous materials. The DEH maintains the Site Assessment and Mitigation (SAM) list of contaminated sites that have previously or are currently undergoing environmental investigations and/or remedial actions. The SAM Program, within the Land and Water Quality Division of the DEH, has a primary purpose to protect human health, water resources,

and the environment within San Diego 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'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.

City of La Mesa Emergency Operations Plan

The La Mesa Emergency Operations Plan describes a comprehensive emergency management system for response to natural and man-made disasters. The Emergency Plan identifies lines of authority and operational responsibilities and outlines a framework for the continuity of government and maintenance of City services. The Emergency Plan provides City staff with the basis for an effective response in the event of a local or region-wide disaster.

City of La Mesa Fire Code

La Mesa Municipal Code Chapter 11.04, Fire Code, adopts the 2010 California Fire Code as the fire code of the City of La Mesa for regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices; and from conditions hazardous to life or property in the occupancy of buildings and premises, erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, equipment use, and maintenance of buildings and structures.

4.6.3 Methodology and Assumptions

The hazardous materials study prepared for the proposed project (see Appendix H) included a site reconnaissance; site research; a historical land use review; interviews with site personnel; and a search of relevant federal, State and local regulatory agency databases and records. The site reconnaissance was conducted on October 10, 2018 to observe and document existing site conditions. The interiors of the existing on-site buildings were observed, and the site grounds and perimeter were systematically traversed on foot. Available previous environmental reports and site records were reviewed, including those from the County DEH, La Mesa Building Department, and Regional Water Quality Control Board. Additionally, historic aerial photographs, City directories, Sanborn Fire Insurance maps, topographic maps, and geological maps were reviewed. The regulatory database search was conducted by Environmental Data Resources, Inc. (EDR) and included a comprehensive search of listed facilities on numerous federal and state agency databases within a radius of up to one mile from the project site.

Potential impacts related to aircraft hazards are based on a review of the ALUCPs for Montgomery-Gibbs Executive Airport.

4.6.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines a significant impact related to hazards or hazardous materials would occur if implementation of the proposed project would result in any of the following:

1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

3. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

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

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

6. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

4.6.5 Impact Analysis

4.6.5.1 Release of Hazardous Materials

Threshold 1: *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Threshold 2: *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Project construction would involve the on-site use and/or storage of hazardous materials/wastes such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. The location of material storage and construction staging areas would be dictated by a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the National Pollutant Discharge Elimination System General Construction Permit, which includes such measures as regular maintenance of construction equipment, and storage criteria for oil, gasoline, and other potential contaminants that commonly occur during construction activities. Based on compliance with regulatory requirements, potential impacts from use/storage of construction-related hazardous materials would be effectively avoided or addressed.

The project site contains six existing buildings, all constructed between 1954 and 1959, that would be demolished. Due to the age of these buildings, the potential exists for them to contain ACM and/or LBP and thus, demolition activities could potentially release these hazardous building materials into the environment. Associated construction-related impacts from demolition activities would be potentially significant.

As a residential development, the project would involve the limited use of household cleaning products, chemical pesticides and fertilizers required to maintain proposed landscaping, and chemicals associated with maintenance of the swimming pool. Any regulated materials would be properly handled, used, stored, transported, and/or disposed of in accordance with regulatory standards. Use of these common hazardous materials would not create a significant hazard to the public or the environment.

4.6.5.2 Hazards to Schools

Threshold 3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are five schools located within 0.25 mile of the project site, including the following:

- Maryland Avenue Elementary School, located at 5400 Maryland Avenue, which is approximately 0.23 mile north of the site;
- National University – La Mesa Campus, located at 7787 Alvarado Road, which is approximately 0.21 mile east of the project site;
- Taproot Montessori – La Mesa, located at 5173 Guava Avenue, which is approximately 0.25 mile east of the project site;
- St. Martin of Tours Academy, located at 7708 El Cajon Boulevard, which is 0.25 mile southeast of the project site; and
- AKA Head Start, located at 7520 El Cajon Boulevard, which is approximately 0.25 south of the project site.

The proposed project would involve the temporary use and/or storage of fuels, oils, and other potential hazardous materials during construction, and the limited use/storage of household cleaning products, landscaping pesticides, and pool chemicals during operation. The project's use of hazardous materials during construction would be handled in accordance with NPDES SWPPP requirements, as well as compliance with applicable federal, state, and local regulations associated with hazardous materials. Adherence to these applicable regulations would avoid exposure to construction-related and common residential hazardous materials from occurring to nearby schools.

As discussed in Section 4.6.5.2, however, the existing on-site buildings that would be demolished could potentially contain ACM and/or LBP. If present, people at nearby schools could potentially be exposed to emissions of these hazardous materials during demolition activities. Potential construction-related impacts on nearby schools from demolition activities would be potentially significant.

4.6.5.3 Listed Hazardous Materials Sites

Threshold 4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

A search of federal, state, and local environmental regulatory agency databases was conducted to identify listed hazardous materials sites on and within up to a one-mile radius of the project site.

Project Site Listings

The project site is listed on two hazardous materials databases, including the Historic Auto database and CHMIRS. The Historic Auto database lists the site as being occupied by Wright Mobil Service from 2001

to 2005, and the EDR lists this facility as a gasoline service station. However, based on a review of La Mesa Building Department records and historic photos, a gasoline service station has never been present on the site, so this listing is considered erroneous. The listed facility is likely related to a mobile car detailing or mobile auto repair service that used the project site as a hub or mailing address. No recorded cases, violations, or incident reports are associated with this listing. While the site is also listed on the CHMIRS database, types of hazardous materials were not reported and no violations were recorded. Therefore, neither of the project site listings on hazardous materials databases are considered to create a significant hazard to the public or the environment.

Off-site Listed Facilities

Off-Site listed facilities identified in the regulatory agency database search were evaluated as to their potential to impact the project site based on the following criteria:

- Reported distance of the facility to the project site;
- The nature of the database on which the facility is listed, and/or whether the facility is listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes;
- Reported case type (e.g., soil only, failed UST test only);
- Reported substance released (e.g., chlorinated solvents, gasoline, metals);
- Reported regulatory agency status (e.g., case closed, “no further action”); and
- Location of the facility with respect to the reported groundwater flow direction and depth to groundwater.

Based on these criteria, off-site listed facilities were screened to six facilities in the project vicinity with potential to impact the project site from releases of hazardous materials. The six facilities are described below, as well as an assessment of their potential to represent a recognized environmental condition to the project site.

Sid’s Auto Body (7241 Alvarado Road)

Sid’s Auto Body, located at 7241 Alvarado Road, is approximately 800 feet west of the project site and listed on the County SAM and Cleanup Program Sites Spills, Leaks, Investigation, and Cleanup (CPS-SLIC) databases for potential diesel contamination of the aquifer used for drinking water supply. Soils containing elevated concentrations of lead were mitigated in 2004 and the remaining contaminants in the soil and groundwater were either below contaminant levels or not detected above laboratory reporting limits. The DEH issued a case closure letter on October 18, 2005 indicating that the cleanup goals were met.

Based on the reported mitigation to below cleanup goals, the closure letter issued by the DEH, the distance from the project site, and the location of this facility with respect to the reported groundwater flow direction (i.e., downgradient from the project site), this facility is not considered to represent a recognized environmental condition to the project site.

Sport and Import Auto Service (7243 Alvarado Road)

Sport and Import Auto Service, located at 7243 Alvarado Road, is approximately 680 feet west of the project site and listed on the Facility Index System/Registry System (FINDS), Resource Conservation and Recovery Act – Small Quantity Generator (RCRA-SQG), Statewide Environmental Evaluation and Planning System (SWEEPS) Underground Storage Tanks (UST), San Diego Hazardous Materials Management Division (HMMD), Enforcement and Compliance History Information (ECHO), and Historic Auto databases. The facility was reported in 1985 as a RCRA small quantity generator (SQG) for more than 100 and less than 1,000 kilograms of hazardous waste during any calendar month and is listed as an automotive service. Types of hazardous materials were not reported, and no violations were listed.

Based on the lack of known and reported releases from this facility, the lack of reported violations, the location of this facility to the west of the project site and cross-to down-gradient position with respect to the groundwater flow direction, this facility is not considered to represent a recognized environmental condition to the project site.

Southern Paint 7 Auto Body Shop (7245 Alvarado Road)

Southern Paint 7 Auto Body Shop at 7245 Alvarado Road is approximately 680 feet west of the project site and listed on the Historic Auto database. The facility was reported in 1971 as an automobile repair shop. The DEH file includes compliance inspection reports (CIRs) for the period from 1991 through 2009. In addition, the September 2010 DEH HE-17 database of facilities storing hazardous materials, generating hazardous wastes, and discharging unauthorized releases was reviewed. Reported violations at the site include batteries recycled, hazardous waste recycled, missing labels, and two tanks removed.

Based on the types and quantities of hazardous materials and petroleum products used and stored and hazardous waste generated at this facility, the absence of disposal violations, and the lack of known and reported releases, the distance from the project site, and the location of this facility with respect to the reported groundwater flow direction (i.e., cross- to downgradient from the project site), there is a low likelihood that a recognized environmental condition exists at the project site in connection with the listing of the reported hazardous materials and petroleum products at this facility.

Parkway Cleaners (7200 Alvarado Road)

Parkway Cleaners at 7200 Alvarado Road is located approximately 600 feet northwest of the project site and is listed on the Historic Cleaners database. The facility was reported in 2004 to 2006 as a dry-cleaning plant, with no known reported releases or violations.

Based on the lack of known and reported releases from this facility, the lack of reported violations, the down-gradient position of this facility with respect to the project site, the facility only being in operation for four years, and the reported depth to groundwater, this facility is not considered to represent a recognized environmental condition to the project site.

Alvarado Creek Redevelopment Site (8181 Alvarado Road)

Alvarado Creek Redevelopment Site at 8181 Alvarado Road is located approximately 200 feet east of the project site and is listed on the State Water Resources Control Board GeoTracker database. Phase I and II site assessments conducted in 1996 show soils only surface spillage of waste petroleum and asphaltic debris. Soil sample analytical data indicates there is very limited surficial impact to the environment. In

addition, a stockpile of construction type material located adjacent to the concrete lined Alvarado Creek bed was determined to be non-hazardous. The DEH issued a case closure letter on August 7, 1996 indicating that the cleanup goals established for this project were met. Based on the closure letter issued by the DEH, and the distance from the Site, this facility is not considered to represent a recognized environmental condition to the project site.

Bob Stall Chevrolet (7601 Alvarado Road)

The Bob Stall Chevrolet car dealership at 7601 Alvarado Road is located adjacent to the east of the project site and is listed on several regulatory databases, including the RCRA-SQG, Aboveground Storage Tank (AST), HMMD, FINDS, ECHO, SAM, LOP, LUST, Hist UST, SWEEPS UST, EMI, Hist CORTESE, and HAZNET databases. The facility was reported in 1986 to 1996 in the Local Oversite Program (LOP), DEH Site Assessment and Mitigation agency, with a soils-only case that was closed July 26, 1996. The facility was also reported in 1996 as a RCRA SQG for more than 100 and less than 1,000 kilograms of hazardous waste during any calendar month and is listed as an automotive service. Types of hazardous materials were not reported, and no violations were listed. The DEH file includes CIRs for the period from 1991 through 2010. In addition, the September 2010 DEH HE-17 database of facilities storing hazardous materials, generating hazardous wastes, and discharging unauthorized releases was reviewed. The reported violations at the site include missing labels, inadequate training, records keeping, not properly drained, hazardous waste recycled, waste container not closed, improper management, improperly contaminated, unauthorized disposal, disposal or causing the disposal to an unauthorized point, generator of waste not determined, waste determination not made, waste on site greater than 90/180/270 days, second containment not kept empty, and missing daily tank inspection. Details of the unauthorized disposal incident were not reported.

Based on the types and quantities of hazardous materials and petroleum products used and stored and hazardous waste generated at this facility, and the distance of auto repair bays at this facility from the project site (200 feet away or greater), there is a low likelihood that a recognized environmental condition exists at the project site in connection with the various hazardous materials related permit listings of this facility.

This property is also listed in the LUST database. Four USTs were removed in 1988, including one 550-gallon used oil UST, two 550-gallon new oil USTs, and one 2,000-gallon regular gasoline UST. Samples indicated that groundwater was not impacted—only soils with total petroleum hydrocarbons (TPH) and total recoverable petroleum hydrocarbons (TRPH). In 1992, soil excavated from the area of the former USTs were confirmed to have TPH and TRPH concentrations. In 1996, the groundwater monitoring wells were monitored, purged, and sampled, and results indicate that no TPH or TRPH were present. The SWRCB GeoTracker database shows the LUST case as closed as of July 26, 1996.

Based on the reported removal of the tanks and impacted soil, confirmation from the soil samples that the extent of the release was limited to 30 feet from the area of the former USTs and that groundwater was not impacted, and that the case was closed by DEH, there is a low likelihood that a recognized environmental condition exists at the project site as a result of this known and reported release.

Conclusion

Although the project site is identified on two hazardous materials databases, neither listing represents a recognized environmental condition at the project site. Additionally, there are no off-site listed facilities that would represent a recognized environmental condition to the project site. Therefore, the project

site is not located on a listed hazardous materials site compiled pursuant to Government Code Section 65962.5 that would create a significant hazard to the public or the environment. Impacts associated with hazardous materials sites would be less than significant.

4.6.5.4 Airport Safety Hazards

Threshold 5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

As stated in Section 4.6.1.3 above the project site is located approximately five miles from Gillespie Field airport, approximately seven miles from Montgomery-Gibbs Executive Airport, approximately eight miles from MCAS Miramar, and approximately 1.8 miles from the Grossmont Hospital heliport. The project site is not located within the AIA for Gillespie Field or MCAS Miramar, which is the area in which airport-related noise, safety, airspace protection, and overflight notification factors may affect or necessitate restrictions on land uses (SDCRAA 2010a, 2008). Thus, the project site would not be subject to safety hazards associated with Gillespie Field or MCAS Miramar operations. However, the project site is located within Review Area 2 of the Montgomery-Gibbs Executive Airport AIA, which consists of locations beyond the noise and safety zones, but within the airspace protection and overflight notification areas (SDCRAA 2010b). Specifically, the project site lies within the airspace surfaces of Montgomery-Gibbs Executive Airport, which depict areas that should be kept free of obstruction and protected for the safe and efficient use of navigable airspace by aircraft. The proposed project would not include any structures that would exceed the Federal Air Regulations Part 77 height restrictions for the airspace protection area (200 feet) and thus, the project site would not be subject to safety hazards associated with Montgomery-Gibbs Executive Airport operations. Furthermore, due to the distance from the Grossmont Hospital heliport and the relatively low number of flights from this facility, the project site would not be subject to safety hazards associated with related heliport operations. Therefore, implementation of the proposed project would not result in airport safety hazards for people residing or working in the project area. Impacts would be less than significant.

4.6.5.5 Emergency Response and Evacuation Plans

Threshold 6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The La Mesa Emergency Operations Plan is the adopted emergency response plan for the City. During construction of the project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). Additionally, construction of the project could require temporary detours and/or lane closures that could temporarily disrupt travel along Alvarado Road for a period of time within the construction zone. Emergency access to all surrounding properties, however, would be maintained throughout the construction period. Furthermore, Alvarado Road is not a major corridor that would be used as an evacuation route. As a result, the project's construction-related impacts would be less than significant.

The project would construct improvements to Alvarado Road along the project site frontage, including road right-of-way dedication and a public access easement to provide for a shoulder, parking lane, curb

and gutter, a shared pedestrian/bicycle path, and street-side landscaping. Additionally, the project site access points along Alvarado Road would be designed to provide for adequate site distances for both directions. These roadway improvements would provide improved circulation along the roadway, including for emergency vehicles.

The project would provide adequate emergency access within the site. Access for emergency vehicles would be provided along the proposed perimeter road. Fire lanes would also be provided on site to accommodate emergency response vehicles such that Alvarado Road would not be obstructed for public safety vehicle movement as well as local traffic both to the east and west in the event of an emergency.

Therefore, implementation of the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

4.6.6 Mitigation Measures

4.6.6.1 Release of Hazardous Materials

Implementation of the proposed project could result in a potentially significant hazards impact during demolition activities associated with release of ACM and/or LBP. Implementation of mitigation measure HAZ-1 would reduce this impact to below a level of significance.

HAZ-1 Asbestos-Containing Materials and Lead-Based Paint Survey and Disposal. Prior to issuance of a demolition or grading permit, an asbestos and lead survey shall be conducted on the project site by a licensed asbestos/lead contractor. If the survey identifies hazardous building materials, the owner/permittee shall complete the necessary remediation identified in the survey prior to commencement of demolition activities in accordance with applicable laws, including Occupational Safety and Health Administration (OSHA) guidelines, to ensure that no hazards to the demolition crew, adjacent residents, or others are created by exposure to hazardous building materials. The owner/permittee shall provide a letter to the City's Community Development Department stating that a licensed asbestos/lead contractor has been retained at the owner/permittee's expense to conduct the asbestos and lead survey, and a letter report summarizing the conclusions and recommendations of the asbestos and lead survey shall be prepared and submitted to the City's Community Development Department.

4.6.6.2 Hazards to Schools

Implementation of the proposed project could result in a potentially significant hazards impact to people at nearby schools during demolition activities associated with release of ACM and/or LBP. Implementation of mitigation measure HAZ-1 identified above would reduce this impact to below a level of significance.

4.6.6.3 Listed Hazardous Materials Sites

No significant impacts associated with listed hazardous materials sites would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.6.6.4 Airport Safety Hazards

No significant impacts associated with airport safety hazards would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.6.6.5 Emergency Response and Evacuation Plans

No significant impacts associated with adopted emergency response and evacuation plans would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.6.7 Significance Determination

The significance of impacts related to hazards and hazardous materials before and after mitigation is summarized in Table 4.6-2, *Significance Determination Summary of Hazards and Hazardous Materials Impacts.* Implementation of the proposed project would not result in significant impacts related to listed hazardous materials sites, airport safety hazards, and emergency response and evacuation plans. Implementation of the proposed project, however, would result in potentially significant impacts related to the release of hazardous materials and hazards to schools. With implementation of mitigation measure HAZ-1, these impacts would be reduced to below a level of significance.

Table 4.6-2
SIGNIFICANCE DETERMINATION SUMMARY OF HAZARDS AND HAZARDOUS MATERIALS IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Release of Hazardous Materials	Potentially significant	HAZ-1	Less than significant
Hazards to Schools	Potentially significant	HAZ-1	Less than significant
Listed Hazardous Materials Sites	Less than significant	None required	Less than significant
Airport Safety Hazards	Less than significant	None required	Less than significant
Emergency Response and Evacuation Plans	Less than significant	None required	Less than significant

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4.7 HYDROLOGY AND WATER QUALITY

This section of the EIR evaluates potential impacts associated with hydrology and water quality resulting from implementation of the proposed project. The following discussed is based, in part, on the Preliminary Drainage Study and Floodplain Analysis for the Alvarado Specific Plan (Fuscoe Engineering, Inc. [Fuscoe] 2020a) and Storm Water Quality Management Plan (SWQMP; Fuscoe 2018) prepared for the project, which are included as Appendices I and J of this EIR.

4.7.1 Existing Conditions

4.7.1.1 Hydrologic Setting

In California, the regulation, protection, and administration of water quality are carried out by the SWRCB. Due to the statewide variations in water quality and quantity, California is divided into nine regions for the purposes of regional administration of California's water quality control program, and each region has a RWQCB and Water Quality Control Plan. The project site is located in Region 9, the San Diego Region. The San Diego Region encompasses approximately 3,900 square miles that extend from the Pacific Ocean east to the Laguna Mountains. The northern boundary of the Region starts near Laguna Beach, and the southern boundary is the border between the United States and Mexico (RWQCB 2016).

The San Diego Region is divided into 11 hydrologic units. The project site is located within the San Diego Hydrologic Unit (HU), which is an elongated, triangular-shaped area encompassing approximately 440 square miles drained by the San Diego River. The San Diego HU includes four hydrologic areas (HA), including the Lower San Diego HA, San Vicente HA, El Capitan HA, and Boulder Creek HA. Each hydrologic area is further divided into hydrologic subareas (HSA). The project site lies within the Mission San Diego HSA (Basin 907.11) of the Lower San Diego HA. The main receiving water body in this HSA is the San Diego River. The San Diego River is located approximately 3.2 mile north of the project site; however, Alvarado Creek bisects the project site and drains into the San Diego River downstream of the site.

4.7.1.2 Water Quality

Surface Waters

Storm flows are subject to variations in water quality due to local conditions such as runoff rates/ amounts and land use. The main surface water occurring in the vicinity of the project is Alvarado Creek, which runs through the project site and drains into the San Diego River downstream before eventually discharging into the Pacific Ocean. Typical pollutant sources and loadings for various land use types provided in Table 4.7-1, *Summary of Typical Pollutant Sources for Urban Storm Water Runoff*, and Table 4.7-2, *Typical Loadings for Selected Pollutants in Runoff from Various Land Uses*.

Table 4.7-1
SUMMARY OF TYPICAL POLLUTANT SOURCES FOR URBAN STORM WATER RUNOFF

Pollutants	Pollutant Sources
Sediment and Trash/Debris	Streets, landscaping, driveways, parking areas, rooftops, construction activities, atmospheric deposition, drainage channel erosion
Pesticides and Herbicides	Landscaping, roadsides, utility rights-of-way, soil wash-off
Organic Compounds	Landscaping, streets, parking areas, animal wastes, recreation areas
Oxygen Demanding Substances	Landscaping, animal wastes, leaky sanitary sewer lines, recreation areas
Heavy Metals	Automobiles, bridges, atmospheric deposition, industrial areas, soil erosion, corroding metal surfaces, combustion processes
Oil and Grease/Hydrocarbons	Roads, driveways, parking lots, vehicle maintenance areas, gas stations, illicit dumping to storm drains
Bacteria and Viruses	Landscaping, roads, leaky sanitary sewer lines, sanitary sewer cross-connections, animal wastes, recreation areas
Nutrients (Nitrogen and Phosphorus)	Rooftops, landscaping, atmospheric deposition, automobile exhaust, soil erosion, animal wastes, detergents, recreation areas

Source: USEPA 1999

Table 4.7-2
TYPICAL LOADINGS FOR SELECTED POLLUTANTS IN RUNOFF FROM VARIOUS LAND USES
(lbs/acre/year)

Land Use	TSS	TP	TKN	NH_3 - N	NO_2 + NO_3 - N	BOD	COD	Pb	Zn	Cu
Commercial	1000	1.5	6.7	1.9	3.1	62	420	2.7	2.1	0.4
Parking Lot	400	0.7	5.1	2	2.9	47	270	0.8	0.8	0.04
HDR	420	1	4.2	0.8	2	27	170	0.8	0.7	0.03
MDR	190	0.5	2.5	0.5	1.4	13	72	0.2	0.2	0.14
LDR	10	0.04	0.03	0.02	0.1	N/A	N/A	0.01	0.04	0.01
Freeway	880	0.9	7.9	1.5	4.2	N/A	N/A	4.5	2.1	0.37
Industrial	860	1.3	3.8	0.2	1.3	N/A	N/A	2.4	7.3	0.5
Park	3	0.03	1.5	N/A	0.3	N/A	2	0	N/A	N/A
Construction	6000	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Source: USEPA 1999
HDR = High Density Residential; MDR = Medium Density Residential; LDR = Low Density Residential
N/A = Not available; insufficient data to characterize; TSS = Total Suspended Solids; TP = Total Phosphorus; TKN = Total Kjeldahl Nitrogen;
NH_3 – N = Ammonia - Nitrogen; NO_2 + NO_3 – N = Nitrite + Nitrate - Nitrogen; BOD = Biochemical Oxygen Demand;
COD = Chemical Oxygen Demand; Pb = Lead; Zn = Zinc; Cu = Copper

Beneficial Uses

The Basin Plan establishes beneficial uses for surface waters in the Region. Beneficial uses are defined in the Basin Plan as "the uses of water necessary for the survival or well-being of man, plus plants and wildlife." Identified existing and potential beneficial uses for applicable receiving waters near and downstream from the project site are summarized below:

- Alvarado Creek: Agricultural Supply (AGR), Industrial Service Supply (IND), Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), and Wildlife Habitat (WILD). Alvarado Creek is excluded from the MUN beneficial use.

- San Diego River: AGR, IND, REC-1, REC-2, WARM, WILD, and Rare Threatened or Endangered Species (RARE). The San Diego River is excluded from the MUN beneficial use.

- Pacific Ocean: IND, Navigation (NAV), REC-1, REC-2, Commercial and Sport Fishing (COMM), Preservation of Biological Habitats of Special Significance (BIOL), WILD, RARE, Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

Clean Water Act Section 303(d) Impaired Water Bodies and Total Maximum Daily Loads

Under Section 303(d) of the Clean Water Act, states, territories and authorized tribes are required to develop a list of water quality limited segments. Waters on the list do not meet water quality standards even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires establishment of priority rankings for water on the lists and develop action plans, called Total Maximum Daily Loads (TMDLs), to improve water quality. The San Diego RWQCB is responsible for developing the 303(d) list in the San Diego region.

The receiving waters for the CPU area that are currently listed as impaired (based on the 2014 – 2016 303[d] List) include Alvarado Creek for nitrogen and selenium; San Diego River (lower) for enterococcus, fecal chloroform, low dissolved oxygen, manganese, nitrogen, phosphorus, total dissolved solids, and toxicity; and the Pacific Shoreline at the San Diego River Outlet at Dog Park for enterococcus and total coliform.

4.7.1.3 Groundwater

Groundwater is defined as subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated. Groundwater bearing formations sufficiently permeable to transmit and yield substantial quantities of water are called aquifers. A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers. The principal groundwater basins in the San Diego region are relatively small in area and usually shallow. Although these groundwater basins are limited in size, the groundwater yield from the basins has been historically important to the development of the region. Nearly all of the local groundwater basins have been intensively developed for municipal and agricultural supply purposes.

Groundwater within the Mission San Diego HSA of the Lower San Diego HA of the San Diego HU has identified existing beneficial uses of AGR, IND, and Industrial Process Supply (PROC). MUN is a potential beneficial use.

According to the Geotechnical Investigation Update prepared for the project, groundwater was encountered at a depth of three feet along the southern perimeter of the project site, adjacent to Alvarado Creek (Geotechnical Exploration, Inc. 2019). As such, it is anticipated that groundwater would be encountered during grading operations in these areas of the project site.

4.7.1.4 Drainage

The existing site can be divided into two major basins. Basin 1 encompasses approximately 4.5 acres and consists of the portion of the site east of where Alvarado Creek bisects the site, while Basin 2 consists of the portion of the site to the west of where Alvarado Creek bisects the site. Topographically, Basin 1 is generally very flat, with the exception of the slopes along the southerly end of the basin. The trolley tracks and the associated storm drain lines intercept all drainage to south of the trolley line. Basin 1 also accepts drainage from a portion of Alvarado Road. This drainage enters the site through the two

entrances from Alvarado Road. The on-site drainage collects in the RV resort streets and flows over the Alvarado Creek bank in several locations.

Basin 2 encompasses approximately 7.7 acres and consists of the portion of the project site that is to the west and north of Alvarado Creek. This basin generally slopes to the west at an approximately 1.5 percent grade. Runoff from the site flows along the RV resort streets, and roughly parallels Alvarado Creek. Basin 2 also accepts drainage from a small section of Alvarado Road immediately to the west of the creek overcrossing. Drainage from Basin 2 exits the western end of the project site and is intercepted by a storm drain system constructed as part of the 70th Street trolley station.

The existing drainage conditions within the project site and adjacent areas are shown on the *Existing Hydrology Exhibit* included as Exhibit B of the project Drainage Study in Appendix I of this EIR. Peak flows under existing drainage pattern conditions total 15.28 cubic feet per second (cfs) for the 100-year storm within Basin 1 and 18.13 cfs within Basin 2 (Fuscoe 2020a).

4.7.1.5 Flood Hazards

The Federal Emergency Management Agency (FEMA) has mapped flood hazards within the project site and vicinity. The majority of the project site is designated as “Zone AE,” which means it is within a 100-year floodplain and is considered a special flood hazard area with a one percent annual chance of flooding (FEMA 2020, 2012). Alvarado Creek and the immediate surrounding areas are specifically classified as a Regulatory Floodway, which is defined as an area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (FEMA 2019). The base flood elevations for the project site are listed as approximately 409 feet AMSL at the western end of the site and gradually increase to approximately 425 feet AMSL at the eastern boundary of the site. Most of the eastern portion of the project site located east of Alvarado Creek is designated as “Zone X,” which means these areas are outside of identified 100-year floodplains and are considered minimal flood hazard areas.

4.7.2 Regulatory Setting

4.7.2.1 Federal

Clean Water Act/National Pollutant Discharge Elimination System Requirements

The project is subject to applicable elements of the CWA, including the NPDES. Specific NPDES requirements associated with the project include conformance with the following: (1) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit, NPDES No. CAS000002, SWRCB Order 2009-0009-DWQ; as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ); (2) General Groundwater Extraction Discharges to Surface Waters Permit (Groundwater Permit; NPDES No. CAG919003, Order No. R9-2015-0013); (3) Waste Discharge Requirements for MS4 Permit (Municipal Permit, NPDES No. CAS 0109266, Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100). In California, USEPA has delegated authority for implementing NPDES requirements to the SWRCB and RWQCB, with these permits described below under state standards.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. This Act also required the identification of all floodplain areas and the establishment of flood-risk zones within those areas. The Flood Disaster Protection Act of 1973 expanded the National Flood Insurance Program by substantially increasing limits of coverage authorized under the program, and by requiring known flood-prone communities to participate in the program and to adopt adequate flood plan ordinances. This Act also made the purchase of flood insurance mandatory for property owners who are being assisted by federal programs, agencies, or institutions in the acquisition or improvement of land or facilities located in identified areas having special flood hazards. The National Flood Insurance Program has been further amended by subsequent reform acts. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps, which delineate both the special flood hazard areas and the risk premium zones applicable to the community.

4.7.2.2 State

NPDES Construction General Permit

Construction activities exceeding one 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 USEPA. Specific conformance requirements include implementing a SWPPP, an associated Construction Site Monitoring Program (CSMP), employee training, and minimum BMPs, as well as a Rain Event Action Plan (REAP) 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 storm water 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 (ATS). Specific pollution control measures require the use of best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT) 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 Storm Water Phase II – Construction*, and California Stormwater Quality Association (CASQA) *Storm Water Best Management Practices Handbooks*. Specific requirements for the project under this permit would be determined during SWPPP development, after completion of site development plans and application submittal to the SWRCB.

NPDES Groundwater Permit

Shallow groundwater is expected to occur on site as previously described. 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. 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 co-permittees 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 co-permittees 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 (WLAs), and numeric water quality-based effluent limitations (WQBELs). Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable (MEP) 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 LID measures, to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification[1] 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 below under local standards.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the principal California legal and regulatory framework for water quality control. The Porter-Cologne Water Quality Control Act is embodied in the California Water Code. The California Water Code authorizes the SWRCB to implement the provisions of the federal CWA. The State of California is divided into nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The City is located within the purview of the San Diego RWQCB (Region 9). The Porter-Cologne Act also provides for the development and periodic review of Basin Plans that designate beneficial uses of California's major rivers and other surface waters and groundwater basins and establish water quality objectives for those waters.

[1] Hydromodification is generally defined in the Municipal Permit as the change in natural watershed hydrologic processes and runoff characteristics (interception, infiltration and overland/groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport.

4.7.2.3 Local

Water Quality Control Plan for the San Diego Basin

The San Diego Basin encompasses approximately 3,900 square miles, including most of San Diego County and portions of southwestern Riverside and Orange Counties. The basin is composed of 11 major hydrologic units, 54 hydrologic areas, and 147 hydrologic subareas, extending from Laguna Beach southerly to the United States/Mexico border. Drainage from higher elevations in the east flow to the west, ultimately into the Pacific Ocean. The RWQCB prepared the Water Quality Control Plan for the Basin Plan (Basin Plan), which defines existing and potential beneficial uses and water quality objectives for coastal waters, groundwater, surface waters, imported surface waters, and reclaimed waters in the basin. Water quality objectives seek to protect the most sensitive of the beneficial uses designated for a specific water body.

City of La Mesa Storm Water BMP Manual

The City's Storm Water BMP Manual was developed to meet the JURMP and SUSMP requirements of the NPDES Municipal Permit (described above). The purpose of the Storm Water BMP Manual is to: (1) reduce discharges from the MS4 to the maximum extent practicable; (2) prevent discharges of pollutants from the MS4 from causing or contributing to a violation of water quality standards; and (3) manage increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. Part I of the Storm Water BMP Manual contains the BMP requirements for industrial and commercial facilities, municipal facilities, and residences (City 2010). Part II of the Storm Water BMP Manual contains both construction BMP requirements and post-construction SUSMP requirements, including Low Impact Development (LID) design guidelines and other permanent BMPs (City 2011).

City of La Mesa Watercourse Protection, Storm Water Management, and Discharge Control Ordinance

La Mesa Municipal Code Chapter 7.18, Storm Water Management and Discharge Control, regulates all discharges into the storm water conveyance system and the waters of the State in order to preserve and enhance water quality for beneficial uses by:

a) Prohibiting non-storm water discharges to the storm water conveyance system;

b) Eliminating pollutants in storm water to the maximum extent practicable, including pollutants from both point and non-point sources;

c) Prohibiting activities which cause, or contribute to, exceeding state and federal receiving water quality objectives; and

d) Protecting watercourses from disturbance and pollution.

The ordinance requires all dischargers to implement, install, use, and maintain all applicable BMPs and to comply with the City's Storm Water BMP Manual, which is incorporated by reference, in order to reduce pollutants to the maximum extent practicable.

4.7.3 Methodology and Assumptions

Potential hydrology and water quality impacts resulting from implementation of the proposed project were evaluated based on relevant information from Appendices I and J, as well as a review of relevant hydrology and water quality plans and maps. Runoff calculations were conducted using the design criteria contained in the County Department of Public Works Flood Control Division Hydrology Manual and based on the 100-year storm frequency. Floodplain analysis was conducted using the HEC-RAS model.

4.7.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines a significant impact related to hydrology and water quality would occur if implementation of the proposed project would result in any of the following:

1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or impede or redirect flood flows?

4. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.7.5 Impact Analysis

4.7.5.1 Water Quality

Threshold 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Potential project-related water quality impacts are associated with both short-term construction activities and long-term operation and maintenance, as described below.

Construction Impacts

Potential water quality impacts related to project construction include erosion/sedimentation, the use and storage of construction-related hazardous materials (e.g., fuels, etc.), generation of debris from demolition activities, and disposal of extracted groundwater (if required).

Erosion and Sedimentation

Project-related excavation, grading, and construction activities could potentially result in associated erosion and sedimentation effects. Construction activities would involve the removal of surface stabilizing features such as structure, paved surfaces, and vegetation; excavation of existing compacted materials from cut areas, redeposition of excavated material as fill in development areas, and potential erosion from disposal of extracted groundwater (if required). Project-related erosion could result in the deposition of sediment into downstream receiving waters, with associated water quality effects such as turbidity and transport of other pollutants that tend to adhere to sediment particles (e.g., hydrocarbons).

While graded, excavated, and filled areas associated with construction activities would be stabilized through efforts such as compaction and installation of hardscape and landscaping, erosion potential would be higher in the short-term than for existing conditions. Proposed development areas would be especially susceptible to erosion between the beginning of grading/construction and the installation of structures/pavement or establishment of permanent cover in landscaped areas.

Although it is anticipated that the proposed project would be constructed in two phases, grading of the entire project site may occur during the first phase with the development of the second phase improvements (Building 4 and associated improvements on the portion of the site east of Alvarado Creek) occurring much later, thereby leaving graded areas exposed during the interim period. All graded areas that would not be developed immediately would remain subject to the SDACPD Rule 55, NPDES Construction General Permit, and City's Storm Water BMP Manual until permanently stabilized in accordance with the standards contained within these regulations.

Erosion and sedimentation are not considered to be long-term concerns for the project, as developed areas would be stabilized through installation of hardscape or landscaping as noted. The project would also incorporate long-term water quality controls pursuant to City and NPDES guidelines, including (among other efforts) measures that would avoid or reduce off-site sediment transport. This would include efforts such as the use of water quality (detention and filtration) facilities and drainage facility maintenance (e.g., to remove accumulated sediment).

Short-term water quality effects from project-related erosion and sedimentation could potentially affect downstream waters and associated wildlife habitats. These potential impacts would be addressed through conformance with City storm water standards and the related NPDES Construction General Permit. This would include implementing an authorized SWPPP for proposed construction, including (but not limited to) erosion and sedimentation BMPs.

The SWQMP prepared for the project identifies construction-related requirements for implementing a SWPPP and related BMPs, including efforts related to erosion/sedimentation. While project-specific BMPs would be determined during the SWPPP process based on site characteristics, they would include standard industry measures and guidelines from the City Storm Water BMP Manual and NPDES Construction General Permit. Typical erosion and sediment control BMPs that may be required in the

project SWPPP include: (1) seasonal grading restrictions during the rainy season; (2) preparation and implementation of a CSMP and, if applicable, a REAP to provide enhanced erosion and sediment control measures prior to predicted storm events; (3) use of erosion control/stabilizing measures such as geotextiles, mats, fiber rolls, or soil binders; (4) use of sediment controls to protect the site perimeter and prevent off-site sediment transport, including measures such as inlet protection, silt fencing, fiber rolls, gravel bags, temporary sediment basins, street sweeping, stabilized construction access points and sediment stockpiles, and use of properly fitted covers for sediment transport vehicles; (5) compliance with local dust control measures; (6) appropriate BMP performance monitoring and as-needed maintenance; and (7) implementation of additional BMPs as necessary to ensure adequate erosion/sediment control and regulatory conformance.

Construction-related Hazardous Materials

Project construction would involve the on-site use and/or storage of hazardous materials such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. The accidental discharge of such materials during construction could potentially result in significant impacts if these pollutants reach downstream receiving waters, particularly materials such as petroleum compounds that are potentially toxic to aquatic species in low concentrations. As described in Section 4.7.1.2, identified impairments in downstream receiving waters include toxicity and metals, with pollutants affecting these impairments to potentially be generated during construction from sources such as vehicle and equipment operations. Implementation of a SWPPP would be required under City and NPDES guidelines as previously described and would include d measures to avoid potential impacts related to the use and potential discharge of construction-related hazardous materials.

As noted above under the discussion of erosion and sedimentation, the Project SWQMP identifies requirements for implementing a SWPPP and related BMPs. While detailed BMPs would be determined as part of the NPDES/SWPPP process based on project-specific parameters, they are likely to include standard industry measures and guidelines from sources including the City Storm Water Manual and Construction General Permit. Typical BMPs associated with construction-related hazardous materials that may be required in the project SWPPP include the following: (1) minimizing and properly locating (e.g., away from drainages/storm drains) hazardous material use/storage areas; (2) providing appropriate covers/enclosures, secondary containment (e.g., berms), monitoring/maintenance, and inventory control (e.g., delivery logs/labeling) for hazardous material use/storage areas; (3) restricting paving operations during wet weather and providing appropriate sediment control downstream of paving activities; (4) utilizing properly designed and contained washout areas for materials including concrete, drywall, and paint; (5) properly maintaining all construction equipment and vehicles, and providing appropriate containment for associated fueling and maintenance operations; (6) providing training to applicable construction employees on the proper use, handling, storage, disposal, and notification/cleanup procedures for construction-related hazardous materials; (7) storing appropriate types and quantities of containment and cleanup materials on site; (8) implementing appropriate solid waste containment, disposal, and recycling efforts; and (9) properly locating, maintaining, and containing portable wastewater facilities.

Demolition-related Debris Generation

Implementation of the project would involve the demolition of existing on-site facilities including structures and pavement. These activities would generate construction debris, potentially including particulates (e.g., from pavement removal), concrete, asphalt, glass, metal, drywall, paint, insulation,

fabric, and wood. The introduction of demolition-related debris into local drainages or storm drain systems could result in downstream water quality impacts, potentially including pollutants contributing to identified downstream water quality impairments.

Project construction would be subject to a number of regulatory controls related to demolition, including City storm water standards and related NPDES/SWPPP requirements as previously described. While detailed BMPs would be determined as part of the NPDES/SWPPP process based on project-specific parameters, they are likely to include the following types of standard industry measures and guidelines from sources including the City Storm Water BMP Manual and Construction General Permit: (1) recycle appropriate (i.e., non-hazardous) construction debris for on- or off-site use whenever feasible; (2) properly contain and dispose of construction debris to avoid contact with storm water; (3) use dust-control measures such as watering to reduce particulate generation for pertinent locations/activities (e.g., concrete removal); and (4) implement appropriate erosion prevention and sediment control measures downstream of all demolition activities.

Disposal of Extracted Groundwater

Shallow groundwater is expected to occur in the project site and vicinity and thus, construction dewatering could potentially be required during construction. Disposal of groundwater extracted during construction activities into local drainages and/or storm drain facilities could potentially generate significant water quality impacts through erosion/sedimentation or the possible occurrence of pollutants in local aquifers (including pollutants associated with impaired waters). Project construction would require conformance with NPDES Groundwater Permit criteria prior to disposal of extracted groundwater.

Operational Impacts

Based on analysis in the project SWQMP (Fuscoe 2018), the project is identified as a Priority Development Project. As a result, project development would require the implementation of applicable pollutant (treatment) and hydromodification control BMPs, in addition to site design and source control BMPs.

Urban pollutants accumulate in areas such as streets, parking areas, and drainage facilities, and are picked up in runoff during storm events. Runoff within the project site would be generated from construction of impervious surfaces as previously described, with corresponding pollutant loading potential. Because the site is currently developed, existing runoff also includes associated pollutant loading, and due to the date of existing site development (1950s) it is anticipated that standard pollutant control BMPs required by current regulatory criteria are not present. Accordingly, long-term operation could result in the on- and off-site transport of urban pollutants and associated effects per current regulatory standards, such as increased turbidity, oxygen depletion, and toxicity to attendant species in downstream receiving waters. As a result, based on the described conditions and related CWA Section 303(d) impaired water listings outlined in Section 4.7.1.2, implementation of the project could potentially result in long-term water quality impacts under current regulatory standards. The project SWQMP identifies measures to address potential long-term pollutant generation from implementation of the project, based on procedures identified in the City storm water standards and related NPDES Municipal Permit. Specifically, the project design would conform to applicable City and NPDES storm water standards to address these concerns, with such conformance to include the use of appropriate post-construction LID site design, source control, pollutant (treatment) control, and hydromodification

management BMPs. Specific proposed BMPs are identified in the project SWQMP (Appendix J) and include applicable requirements from the City Storm Water BMP Manual and the NPDES Municipal Permit. These measures are summarized below, followed by a discussion of associated monitoring and maintenance activities.

Source Control BMPs

Source control BMPs are intended to avoid or minimize the introduction of pollutants into storm drains and natural drainages to the MEP by reducing on-site pollutant generation and off-site pollutant transport. Specific source control BMPs are identified in the project SWQMP, based on requirements in the City Storm Water BMP Manual. These include efforts to prevent illicit discharges; provide appropriate "no dumping" signs/stencils at storm drain system inlets/catch basins; protect outdoor material storage areas from rainfall, run-on, runoff, and wind dispersal; properly design/contain trash storage areas (e.g., by providing containment); protect storm drain inlets; provide interior floor drains and elevator shaft sump pumps; provide interior parking structures; implement non-chemical pest control measures; and provide applicable pollutant controls for pools, water features, plazas, sidewalks, and parking lots, refuse areas, and fire sprinkler test water. All of the proposed source control BMPs would help to improve long-term water quality within and downstream from the project site by avoiding or minimizing pollutant generation and exposure to storm flows at the source.

LID Site Design BMPs

LID site design BMPs are intended to avoid, minimize, and/or control post-development runoff, erosion potential and pollutant generation to the MEP. The LID process employs design practices and techniques to effectively capture, filter, store, evaporate, detain, and infiltrate runoff close to its source. Specific LID site design BMPs are identified in the project SWQMP, based on requirements in the City Storm Water BMP Manual. These strategies/measures include efforts to maintain natural drainage pathways and hydrologic features, minimize impervious areas, collect runoff, and use native and/or drought-tolerant landscaping. All of the proposed LID site design BMPs would help reduce long-term urban pollutant generation by minimizing runoff rates and amounts, retaining permeable areas, increasing on-site filtering, and reducing erosion/sedimentation potential.

Pollutant Control BMPs

Pollutant control BMPs are designed to remove pollutants from urban runoff for a design storm event to the MEP through means such as filtering or treatment. Pollutant control BMPs are required to address applicable pollutants of concern for Priority Development Projects and must provide medium or high levels of removal efficiency for these pollutants (per applicable regulatory requirements). Pursuant to Chapter 5 of the City Storm Water BMP Manual (Part 1), preliminary pollutant control BMPs identified in the project SWQMP include biofiltration modular wetland units and two detention basins.

The selection and design of the proposed BMPs was based on applicable site-specific conditions and City requirements, including the identification of associated Drainage Management Areas (DMAs) within the site. Specifically, four DMAs (were identified on site). The proposed pollutant control BMPs would operate as part of a "treatment train" in concert with the LID site design and source control BMPs described above. Summary descriptions of proposed pollutant control BMPs are provided below.

Runoff from Alvarado Road would be conveyed through a series of roadside proprietary filtration devices (Bioclean Modular Wetlands or equivalent approved facilities) and then discharged to

Alvarado Creek. On-site runoff would be conveyed via a series of roof drains, area drains, and storm drain pipes to two, on-site drainage basins: one in the eastern portion of the site west of Building 4, and one in the western portion of the site adjacent to Building 1. These basins would include a shallow 6-inch ponding layer of mulch, 18 inches of biofiltration soil media, and a 12-inch to 36-inch storage layer. Following treatment within the basins, runoff would be discharged to Alvarado Creek.

Hydromodification Management Facilities

The proposed biofiltration basins also would be designed to address potential hydromodification impacts. Specifically, discharge from the hydromodification storage facility would be subject to appropriate flow regulation to meet applicable hydromodification requirements, prior to discharging to Alvarado Creek. As a result, the project would comply with applicable hydromodification requirements.

Post-construction BMP Monitoring/Maintenance Schedules and Responsibilities

Identified BMPs include physical structures such as biofiltration basins, modular wetlands, and signs/stencils that require ongoing monitoring and maintenance. Pursuant to requirements in the City Storm Water BMP Manual and the related NPDES Municipal Permit (as outlined in Attachment 3 of the project SWQMP), the owner/permittee would be required to enter into a written Maintenance Agreement with the City for applicable facilities and implement an associated Operation and Maintenance Plan. Specifically, this process would entail identifying and documenting maintenance responsibilities, funding sources, activities, and schedules to ensure proper BMP function in perpetuity.

Conclusion

Based on the implementation of the project design elements, construction and post-construction BMPs, related maintenance efforts, and required conformance with City storm water standards (including the NPDES Construction General, Municipal and Groundwater permits), the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Water quality impacts would be less than significant.

4.7.5.2 Groundwater

Threshold 2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site is developed and almost the entirely paved or otherwise contains impervious surfaces. There are some pervious areas associated with landscaping and Alvarado Creek, but groundwater recharge is minimal as runoff drains as surface flow over the paved areas and into Alvarado Creek. The project would include landscaped areas and two biofiltration basins but would result in a net increase in impervious areas of approximately 30,000 square feet (Fuscoe 2018). This would be an approximately 10-percent increase over the existing condition but would not substantially interfere with groundwater recharge at the site since it is currently minimal given existing drainage patterns and characteristics.

The groundwater table within the project area is shallow and it is anticipated that during construction, dewatering would be required. The City would be required to obtain a dewatering permit from the RWQCB. Dewatering permits are used to approve short-term discharges of groundwater to the sewer system and would include appropriate measures to safeguard against temporary adverse effects to

groundwater recharge. The project does not propose the long-term use of groundwater, as potable water service would be provided by the Helix Water District. Thus, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Water quality impacts related to groundwater would be less than significant.

4.7.5.3 Drainage Pattern Alteration

Threshold 3: *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or impede or redirect flood flows?*

Drainage Patterns

As discussed in Section 4.7.1.4, the project site is currently divided into two major drainage basins. Basin 1 encompasses approximately 4.5 acres and consists of the portion of the site east of where Alvarado Creek bisects the site. Basin 2 encompasses approximately 7.7 acres and consists of the portion of the site to the west of where Alvarado Creek bisects the site. The existing on-site drainage pattern within Basin 1 flows northerly and westerly within the existing RV resort streets and into Alvarado Creek. Basin 1 also accepts drainage from a portion of Alvarado Road, which flows from the two site entrances within the RV resort streets and then westerly into Alvarado Creek. Within Basin 2, on-site drainage flows southerly and westerly along the RV resort streets and discharges into Alvarado Creek at the west end of the project site. Basin 2 also accepts some drainage from Alvarado Road.

Project implementation would result in modification of the existing on- and off-site drainage patterns and directions through proposed grading and construction. While Basins 1 and 2 would be the same upon project development, these two major basins would include a total of four sub basins. Basin 1 would include Sub Basins 100 and 300, and Basin 2 would include Sub Basins 200 and 400. With implementation of the project, Alvarado Road would no longer drain into the site due to the raising of the project site and proposed improvements along Alvarado Road. The proposed drainage conditions within the project site and adjacent areas are shown on the *Proposed Hydrology Exhibit* included as Exhibit B of the project Drainage Study in Appendix I of this EIR.

With implementation of the project, Sub Basin 100 would encompass the area of the project site to the east of Alvarado Creek, excluding Alvarado Road. Drainage from the building roofs and project streets would be directed to grass-lined swales or area drains. The swales would lead to storm drain catch basins. From the catch basins, drainage would be directed to a treatment/detention system for water quality treatment and detention of the peak flow from the project site. This treatment system would be in the southwesterly corner of Sub Basin 100, just west of Building 4. A storm drain line from the detention basin would outlet to Alvarado Creek through a headwall.

Sub Basin 200 would consist of the portion of the project site to the west of Alvarado Creek, excluding Alvarado Road. A system of grass-lined swales, catch basins, and storm drainpipes would be used to

collect drainage from the project facilities. A treatment/detention system would be located at the westerly end of the project site and would outlet through the retaining wall into Alvarado Creek to the south.

Sub Basin 300 would only encompass the area of the Alvarado Road site frontage to the east of Alvarado Creek. Drainage from the road would be directed to proposed gutters and drain to a biofiltration system for water quality treatment located at the southwest corner of Sub Basin 300. Drainage would then be discharged into Alvarado Creek.

Sub Basin 400 would only encompass the area of the Alvarado Road to the west of Alvarado Creek. Drainage from the road would be directed to proposed gutters and drain to two biofiltration system for water quality treatment located at the southwest corner and midway entrance of Sub Basin 400. Drainage would then be discharged into Alvarado Creek.

On-site flows would continue to be directed to Alvarado Creek and after leaving the site, all project-related flows would continue to the San Diego River and ultimately to the Pacific Ocean, similar to existing conditions. Based on the described considerations, overall post-development drainage patterns would be similar to existing conditions.

Watercourse Alteration

Improvements are proposed to the Alvarado Creek channel that traverses the site to control flood and storm water flows within the channel, as well as to enhance the creek as an open space amenity and natural feature. Most sections of the existing trapezoidal concrete-lined banks along the channel would be removed and replaced with retaining walls to increase the width of the channel bottom. The improved creek would accommodate 100-year storm events to resolve the existing flooding conditions that occur on the project site during large storm events. These improvements would not alter the existing general alignment of Alvarado Creek or impede or redirect flood flows within Alvarado Creek, nor would they alter existing on-site drainage patterns, which would continue to be directed to Alvarado Creek. Associated drainage impacts would be less than significant.

Drainage Rates

Peak discharge rates and times of concentrations[2] were calculated for the 100-year storms under the existing and proposed drainage patterns on the project site to determine potential impacts related to surface runoff. The results of the calculations are shown in Table 4.7-3, *Drainage Discharge Under Existing and Proposed Conditions*.

[2] Time of concentration is a concept used in hydrology to measure the response of a watershed to a rain event. It is defined as the time needed for water to flow from the most remote point in a watershed to the watershed outlet and is a function of the topography, geology, and land use within the watershed.

Table 4.7-3
DRAINAGE DISCHARGE UNDER EXISTING AND PROPOSED CONDITIONS

Drainage Basin	Area (acres)	Existing Conditions Q (cfs)	Existing Conditions T_C (min)	Proposed Conditions Q (cfs)	Proposed Conditions T_C (min)
Basin 1	4.5	15.28	9.57	12.74	12.48
Basin 2	7.7	18.13	15.00	23.39	13.10

Source: Fuscoe 2020a
Q = discharge; cfs = cubic feet per second; TC = time of concentration; min = minutes

With implementation of the proposed project, the peak discharge under the 100-year storm event would decrease in Basin 1 from 15.28 cfs with a T_C of 9.57 minutes to 12.74 cfs with a T_C of 12.48 minutes. The decreased discharge in Basin 1 is due to the increased time of concentration. The peak discharge from Basin 2, however, would increase from 18.13 cfs with a T_C of 15.00 minutes to 23.39 cfs with a T_C of 13.10 minutes. The increased discharge in Basin 2 is primarily due to the slight increase in impervious surfaces and the decreased time of concentration. To minimize drainage impacts, the project would incorporate hydrologic features into the project design. A detention basin would be provided in Basin 2 to limit the peak discharge to existing conditions for the 100-year storm. Additionally, flow throughout the project site would be collected by a system of grass-lined swales, catch basins, and storm drains that have been sized for the 100-year storm (refer to Figure 3-1). Therefore, the design of the storm drain system for the project would have sufficient capacity to convey the 100-year storm event without causing flooding of the proposed streets and development. Impacts related to drainage rates and storm drain system capacity would be less than significant.

Increase in Impervious Areas

Development of the project would result in the construction of impervious surfaces such as structures and pavement, which can increase both the rate and amount of runoff within and from a site by reducing infiltration capacity and concentrating flows. Such conditions can potentially generate impacts related to local flooding hazards (e.g., if storm drain capacities are exceeded), erosion and sedimentation (e.g., if increased runoff rates or amounts occur in local receiving waters), and/or local groundwater recharge rates if impervious areas are increased. The site is currently developed and largely impervious and as discussed in Section 4.7.5.2, implementation of the project would result in a net increase in impervious areas of approximately 30,000 square feet (Fuscoe 2018). This would be an approximately 10-percent increase over the existing condition. However, as discussed above, the storm drain system designed for the project would have sufficient capacity to convey the 100-year storm event. Thus, associated drainage impacts related to an increase in impervious areas would be less than significant.

Conclusion

Based on the above analysis, the proposed project would not substantially alter the existing drainage pattern of the site or area that would result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional resources of polluted runoff or impeded or redirect flood flows. Impacts related to drainage pattern alteration would be less than significant.

4.7.5.4 Flood, Tsunami, and Seiche Zones

Threshold 4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As previously discussed, FEMA has mapped the majority of the project site as a special flood hazard area within a 100-year floodplain and a small portion in the eastern end of the site as a minimal flood hazard area. Additionally, the portion of Alvarado Creek that bisects the project site is classified as a Regulatory Floodway. The project site also has a history of experiencing flood conditions during large storm events.

Because most of the site is located within a floodplain, the project would raise the existing grade to be above the base floodplain elevation. The top of bank elevation, ground floor finished floor, and garage entry elevations would all be elevated at least one foot above the 100-year flood elevation. Improvements would also be made to Alvarado Creek to contain the 100-year flood within the creek channel. Most sections of the existing trapezoidal concrete-lined banks along the channel would be removed and replaced with retaining walls to increase the width of the channel bottom. To analyze the impacts of the proposed improvements on the water surface elevation, floodplain analysis using HEC-RAS model was conducted. The water surface elevations were then compared to the existing conditions model. Based on the results of the HEC-RAS model, the proposed improvements would fully contain the 100-year flow within the creek channel, with no adverse impacts to the water surface elevations upstream of the project site. Additionally, the proposed on-site storm drain system for the project has been designed with sufficient capacity to convey the 100-year storm event without causing flooding of the proposed streets and development, as discussed in Section 4.7.5.1. By incorporating the project site improvements, water quality impacts related to flooding would be less than significant.

Tsunamis are series of ocean waves generated by sudden displacements of a large volume of water due to earthquakes, landslides, or volcanic activity. The project site is located approximately 12.5 miles east of the Pacific Ocean and sits at an elevation ranging from 408 to 425 feet AMSL. Due to the distance from the ocean and high elevation, the project site would not be subject to inundation by tsunami. Therefore, water quality impacts associated with tsunamis would not occur as a result of the proposed project.

Seiches are standing waves caused by resonances in an enclosed or partially enclosed body of water (lake, reservoir, bay, harbor) that has been disturbed by meteorological effects (wind and atmospheric pressure variations). The project site is located approximately 0.7 mile southeast of Lake Murray and approximately 2.9 miles west of Mount Helix Reservoir, which are the nearest inland bodies of water. Due to the distance from these bodies of water, the project site would not be subject to inundation by seiche. Therefore, no water quality impacts associated with seiches would occur as a result of the proposed project.

4.7.5.5 Water Quality Plans

Threshold 5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is located within the San Diego River Watershed (907.11) as identified in the Basin Plan (RWQCB 2016). Alvarado Creek traverses the site and is listed as impaired on the Section 303(d) List for nitrogen and selenium. Runoff from the project site would be collected by the on-site storm drain system, treated in accordance with the water quality regulations, and then discharged into Alvarado

Creek. The proposed project would implement a site-specific SWPPP pursuant to the NPDES Construction General Permit and the City's Storm Water BMP Manual and would adhere to applicable requirements outlined in the project SWQMP, as described in Section 4.7.5.3. The project would also comply with all storm water quality standards during construction and operation, as detailed in Section 4.7.5.1. Conformance with the Basin Plan water quality objectives would be demonstrated through compliance with applicable regulations and implementation of construction and post-construction BMPs. Thus, the project would be consistent with the Basin Plan.

The project would not directly involve groundwater use, as no wells are proposed on-site and the project would not significantly alter groundwater percolation relative to the existing conditions, as discussed in Section 4.7.5.2. The site is also not within an alluvial groundwater basin identified by the San Diego County Water Authority (San Diego County Water Authority 2020) and the Basin Plan does not identify municipal groundwater or groundwater as a beneficial use for the Alvarado Creek area (RWQCB 2016). Therefore, implementation of the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

4.7.6 Mitigation Measures

4.7.6.1 Water Quality

No significant impacts related to water quality would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.7.6.2 Groundwater

No significant impacts related to groundwater would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.7.6.3 Drainage Patterns

No significant impacts related to drainage patterns would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.7.6.4 Flood, Tsunami, and Seiche Zones

No significant impacts related to flood, tsunami, or seiche zones would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.7.6.5 Water Quality Plans

No significant impacts related to water quality plans would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.7.7 Significance Determination

The significance of hydrology and water quality impacts before and after mitigation is summarized in Table 4.7-4, *Significance Determination Summary of Hydrology and Water Quality Impacts*. Implementation of the proposed project would not result in any significant impacts to hydrology and

water quality. Impacts related to water quality, groundwater, drainage pattern alterations, flood/tsunami/seiche zones, and water quality plans would be less than significant with adherence to applicable regulatory/industry standards and codes, including NPDES requirements and the hydrologic design measure incorporated into the project. No mitigation is required.

Table 4.7-4
SIGNIFICANCE DETERMINATION SUMMARY OF HYDROLOGY AND WATER QUALITY IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Water Quality	Less than significant	None required	Less than significant
Groundwater	Less than significant	None required	Less than significant
Drainage Pattern Alteration	Less than significant	None required	Less than significant
Flood, Tsunami, and Seiche Zones	Less than significant	None required	Less than significant
Water Quality Plans	Less than significant	None required	Less than significant

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4.8 LAND USE

This section of the EIR discusses applicable land use policies and evaluates potential land use impacts associated with implementation of the proposed project. It references planning and environmental information contained in other sections of this EIR, as applicable.

4.8.1 Existing Conditions

4.8.1.1 On-site Land Uses

The 12-acre site is entirely developed with a combination of six existing buildings, paved surfaces, and ornamental landscaping. The site is currently occupied by the San Diego RV Resort, which contains 174 full-hookup RV spaces and serves a combination of short-term and extended stay visitors. On-site buildings include two one-story laundry/bathroom buildings and a two-story office/apartment complex consisting of four buildings. Ornamental landscaping predominantly consists a stand of approximately 155 Mexican fan palm trees that are scattered throughout the project site. Alvarado Creek bisects the eastern portion of the project site and extends along the southern site boundary until it enters an underground storm drainage facility near the western boundary. The creek supports vegetation including native and non-native species at varying vegetative cover, and water regularly flows through portions of Alvarado Creek. Three large billboard signs are located within the project site along the Alvarado Road frontage. Overhead utility lines connect to 15 utility poles located throughout the site.

4.8.1.2 Surrounding Land Uses

The existing land uses surrounding the project site include Alvarado Road and I-8 to the north, the double-track Green Line Trolley corridor to the south, a car dealership and motel to the east, and the 70th Street Trolley Station to the west of the site.

Other surrounding land uses in the project vicinity include single-family and multi-family residential uses north of I-8 and south of the Green Line Trolley corridor. A motel (Motel 6) and the commercial fleet sales and service departments of the car dealership are located to the east. West of the trolley station is an automobile repair business and a multi-tenant office building.

Nearby institutional uses include the National University La Mesa campus and Taproot Montessori school east of the site, as well as Maryland Avenue Elementary School to the north across I-8. The Montgomery-Gibbs Executive Airport is located approximately six miles northwest of the project site; the site is within the AIA of this airport. The project site is located within the boundaries of the City's MSCP Subarea Plan but is not located within a designated preserve area.

4.8.2 Regulatory Setting

Land use plans applicable to the proposed project that include goals and policies intended to reduce or avoid environmental effects include the General Plan, Zoning Ordinance, CAP, Montgomery-Gibbs Executive Airport ALUCP, RAQS, and the Water Quality Control Plan for the San Diego Basin. In addition, the regional planning context is provided in San Diego Forward: The Regional Plan. The project also is subject to compliance with all other applicable local, state, and federal environmental regulations. The applicable plans, ordinances, and regulations are described below.

4.8.2.1 Federal

Federal Aviation Administration Noticing Requirements

FAA, under CFR Title 14, Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace, requires submittal of a Notice of Construction or Alteration for applicable projects within identified airport Noticing Surface Areas. Specific requirements for such notices include structures more than 200 feet above the ground surface, construction or alteration that extends within identified (theoretical) slopes projecting from airport runways (or other applicable locations), all airport projects, and certain other transportation projects. After submittal of the required notice, the FAA conducts an aeronautical review prepared under the provisions of 49 US Code Section 44718 and, if applicable, Title 14 of CFR, Part 77. Objects determined to be an obstruction or hazard by Part 77 or Terminal Instruction Procedures, or create change to flight operations, approach minimums, or departure routes would be considered incompatible. Proposed developments may be incompatible and would require evaluation if they would generate other obstructions, such as release of any substance that would impair visibility (e.g., dust, smoke, or steam); emit or reflect light that could interfere with air crew vision; produce emissions that would interfere with aircraft communication systems, navigation systems or other electrical systems; or attract birds or waterfowl. Upon completion of the aeronautical review, the FAA issues either a Determination of Hazard to Navigation (i.e., if a project would exceed an obstruction standard and result in a “substantial aeronautical impact”) or a Determination of No Hazard to Navigation. In the latter case, the FAA may include site-specific conditions or limitations to ensure that potential hazards are avoided (e.g., noticing requirements or lighting restrictions).

4.8.2.2 State Regulations

California Government Code

California Government Code Sections 65450 through 65457 establish the procedures and standards for specific plans and define both the contents and methods by which a specific plan must be locally adopted.

Government Code Section 65302.3 further requires that general plans and any applicable specific plan be consistent with ALUCPs prepared in accordance with Public Utilities Code Section 21675. In addition, general plans and applicable specific plans must be amended to reflect amendments to the ALUCP.

4.8.2.3 Local Regulations

San Diego Forward: The Regional Plan

The Regional Plan (SANDAG 2015) is an update of the Regional Comprehensive Plan (RCP) for the San Diego Region and the 2050 RTP and SCS, combined into one document. The Regional Plan provides a blueprint for San Diego’s regional transportation system to effectively serve existing and projected workers and residents within the San Diego region. In addition to long-term projections, the Regional Plan includes an SCS, in compliance with SB 375. The SCS aims to create sustainable, mixed-use communities conducive to public transit, walking, and biking by focusing future growth in the previously developed, western portion of the region along the major existing transit and transportation corridors. The purpose of the SCS is to help the San Diego region meet the GHG emissions reductions set by the CARB. The Regional Plan has a horizon year of 2050, and projects regional growth and the construction

of transportation projects over this time period. The project site and vicinity are identified as being in a Smart Growth Area and Potential Transit Priority Area (TPA).

City of La Mesa General Plan

The adopted La Mesa General Plan (City 2012a) is a long-term planning document that guides growth and development in La Mesa by establishing goals, policies, and objectives that reflect the City's vision for the future. The General Plan is required to include a Land Use and Urban Design Element, which designates the proposed general location and distribution of land uses for housing, business, industry, open space, education, public buildings and grounds, and other public and private uses of land. Other elements of the General Plan include Land Use and Urban Design, Circulation, Conservation and Sustainability, Recreation and Open Space, Historic Preservation, Noise, Safety, Public Services and Facilities, Health and Wellness, and Housing. The following discussion summarizes each element that is relevant to the project. In addition, applicable goals within each element pertaining to the project are evaluated in detail as presented in Table 4.8-1*, General Plan Goals, Objectives, and Policies Consistency Evaluation*. Because of its length, Table 4.8-1 is placed at the end of this section.

Land Use and Urban Design Element

The Land Use and Urban Design Element addresses the major issues that affect the physical form and development of the City. It offers policy guidance to help preserve and enhance the quality of life in the City and accommodate anticipated growth by balancing the preservation of established neighborhoods and new developments. The goals and policies of the Land Use and Urban Design Element emphasize the following five concepts:

- The City's neighborhoods and facilities should be preserved and improved.
- New development and redevelopment should exhibit high quality design and fit the characteristics of the City's neighborhoods and districts.
- Land use decisions should support sustainability by conserving valuable resources and planning for future generations.
- Promote local job creation and retention by encouraging new business opportunities.
- Land Use and Urban Design are integrated in this Element to ensure that the physical forms, patterns, and aesthetics of future development advance La Mesa's goals for high quality of life and a more sustainable future.

The Land Use and Urban Design Element serves as a guide for the ultimate pattern of development for the City. This Element's policies provide the context for short-term actions involving development, public works, and zoning decisions, as well as the long-term vision. It contains a Land Use Map that sets the City's vision for growth. The Land Use Map designates the project site as Regional Serving Commercial. This land use designation is assigned to those areas of the City that are suitable for more intense urban activities, such as high-volume retail sales and other sales and services expected to draw local and regional customers. Areas with this designation are served by convenient freeway access and public transportation.

Circulation Element

The Circulation Element establishes goals and policies for a complete transportation system, incorporating all travel modes, including motor vehicle, transit, walking, and cycling. The Circulation Element plans for the coordinated movement of people and goods within the City's network of streets and transportation services. It examines the existing transportation network and provides policy direction for implementing the City's future transportation network. A key feature of the Circulation Element is the classification of the streets based on function. The classification system is a statement of policy and design criteria that guide decisions related to street improvements and future development. The Circulation Element addresses streets and highways, public transit, and non-motorized transportation, including pedestrian and bicycle facilities.

Conservation and Sustainability Element

The Conservation and Sustainability Element establishes goals, objectives, and policies that address the conservation and enhancement of the City's resources, safeguard human health and the environment, maintain a healthy and diverse economy, and improve the livability and quality of life for La Mesa residents. This Element examines the City's conservation and sustainability efforts and then provides policy direction for enhancing these efforts. Major topics addressed in the Conservation and Sustainability Element include resource conservation, environmental and public health, economic development, transportation, and waste management.

Recreation and Open Space Element

The purpose of the Recreation and Open Space Element is to guide the comprehensive and long-range preservation and conservation of open space. This Element also outlines the City's intentions for recreational facilities to improve the quality of life of residents. The Recreation and Open Space Element outlines the City's existing park amenities and their classifications; includes discussion of public opportunities provided by the Community Services Department, as well as private recreational facilities; and covers the City's natural open space amenities. This Element includes goals, objectives, and policies addressing public parks, natural open space areas, and private open space areas.

Historic Preservation Element

The purpose of the Historic Preservation Element is to provide a long-range blueprint to guide the process of historic preservation in the City, including the identification and treatment of historical and cultural resources, to support program management and decision-making, and to integrate preservation planning into the comprehensive urban planning and development process. The Historic Preservation Element contains goals, objectives, and policies intended to sustain and improve the quality of the City's built and cultural environment, and to promote awareness and enthusiasm for the unique identity and heritage that La Mesa possesses.

Noise Element

The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels and provides a mechanism for including noise considerations in the planning process. The Noise Element contains goals, objectives, and policies to guide compatible land uses and the incorporation of noise attenuation measures for new development and redevelopment to protect people living and working in the City from an excessive noise environment. The Noise Element identifies the existing and future noise

environment within the City and quantifies the community noise environment in terms of noise exposure contours for future transportation activities. These contours serve as the basis for the noise-land use compatibility guidelines (refer to Table 4.9-3 in this EIR) to ensure that new development and redevelopment are protected from unwarranted noise and do not contribute to unacceptable levels of noise within the community. Where noise sensitive uses are proposed in areas exposed to high noise levels, the Noise Element outlines policies and noise attenuating measures, including building placement, type of construction and materials selections.

Safety Element

The purpose of the Safety Element is to minimize the impact on the community from hazardous conditions and emergency situations. The Safety Element identifies existing local conditions within the City relative to specific hazards, including flood hazards, seismic hazards, landslides, fire hazards, and hazardous materials. Existing conditions are described along with the goals, objectives, and policies to minimize the risks associated with these conditions.

Public Services and Facilities Element

The Public Services and Facilities Element provides policy guidance for the provision of adequate public services and facilities for the City. The goals, objectives, and policies contained in this Element emphasize the following six concepts:

- Provide a balance of City services at a level that attempts to meet or exceed public expectations;
- Provide a safe community through police and fire protection;
- Maintain, expand, and improve the City's public infrastructure to sustain the quality of life;
- Provide the citizens with a range of recreation services;
- Provide oversight and program administration for the physical and economic development of the community; and
- Provide a financial plan for the repair and replacement of capital facilities.

Health and Wellness Element

The Health and Wellness Element describes the measures La Mesa will take to make the health of the community a priority and achieve its vision of being the healthiest and most livable city in the San Diego Region. It offers policy guidance that will enable La Mesa's residents to achieve an active lifestyle, have access to healthy food choices, enjoy a safe, livable community, and raise healthy, active children.

Housing Element

The Housing Element serves as a policy guide to address the comprehensive needs of the City and guide the City's commitment to provide for the housing needs of all economic segments of the community. The purpose of the Housing Element is to provide the City with a coordinated and comprehensive strategy for promoting the production of safe, decent, and affordable housing within the City. It provides an assessment of both current and future housing needs and constraints in meeting such

needs, as well as a strategy that establishes housing goals, policies, and programs. The Housing Element contains the following goals:

- Maintain and enhance the quality of existing residential neighborhoods in La Mesa;
- Encourage adequate provision of a wide range of housing by location, type of unit, and price to meet the existing and future needs of La Mesa residents;
- Provide increased opportunities for home ownership;
- Provide housing support services to address the needs of the City's low- and moderate-income residents; and
- Promote equal opportunity for all residents to reside in the housing of their choice.

Zoning Ordinance

The City or La Mesa Zoning Ordinance, Title 24 of the La Mesa Municipal Code, serves as the primary implementation tool of the General Plan. Whereas the General Plan is a policy document and sets forth direction for development decisions, the Zoning Ordinance is a regulatory document that establishes specific standards for the use and development of all properties in the City. The Zoning Ordinance regulates development intensity using a variety of methods, such as specific regulations regarding the use of land; the minimum lot size for subdivisions; limitations on location, height, and bulk of buildings on lots; and other regulations such as off-street parking standards. According to state law, the Zoning Ordinance must be consistent with the General Plan. In addition to development regulations established by the City's base zones, several overlay zones have been applied to particular areas of the City where supplemental permitted use and development standards are merited.

The existing zone classification for the project site is Light Industrial and Commercial Service - Flood Overlay Zone – Urban Design Overlay Zone. The Light Industrial and Commercial Service zone (CM) is applied in areas that are generally removed from residential uses such as along Alvarado Road. The CM zone is intended to include heavy commercial activity and light industrial services.

The Floodway Overlay Zone (Overlay Zone F) is intended for application in those areas of the City within floodways or water courses in which flood control structures and facilities are either required or planned to be installed or improved. The construction of buildings and structures within areas in Overlay Zone F are prohibited until adequate flood protection facilities are constructed or guaranteed to be constructed and temporary alternate arrangements are made to protect persons and property.

New development and major renovations or remodeling of property within the Urban Design Overlay Zone (Overlay Zone D) is subject to the requirements of the Urban Design Program and approval by the Design Review Board and City Council. This overlay zone is used to supplement the required land use regulations that are reviewed under the standard provisions of the Zoning Ordinance. Projects developed within Overlay Zone D are evaluated on their compliance with both the unique design criteria that pertain to the visually sensitive areas and the general development guidelines established by the Urban Design Program. The proposed Specific Plan however would include site-specific design recommendations and criteria for development within the project site that would supersede those required by the Urban Design Program.

City of La Mesa Climate Action Plan

The General Plan calls for the City to reduce its carbon footprint through actions including adopting new or amended regulations, programs, and incentives. The City adopted its CAP in March 2018 to outline the actions to be taken by the City to achieve its proportional share of GHG emission reductions (City 2018). The CAP establishes a long-range roadmap to decrease energy and water waste, create safer streets for bicyclists and pedestrians, increase recycling, promote clean renewable energy, reduce vehicle trips, and increase the urban tree canopy. These efforts help drive down harmful emissions and support La Mesa's vision of a community with a safe and healthy environment. The CAP establishes two community-wide GHG reduction goals to inform the City's actions: 15 percent reduction from 2010 emissions by 2020 and 53 percent reduction from 2010 emissions by 2035. The CAP describes the 2010 GHG emissions baseline and forecasted emissions for 2020 and 2035, and identifies the achievable, measurable strategies and actions that the City will implement to reduce emissions.

Montgomery Field Airport Land Use Compatibility Plan

As discussed in Chapter 2, *Environmental Setting*, of this EIR, the ALUC is an agency that is required by state law to exist in counties in which there is a commercial and/or a general aviation airport. The purpose of the ALUC is to protect public health, safety, and welfare by ensuring the orderly development of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses. The ALUC is responsible for preparation of the ALUCPs for each airport in the region. ALUCPs establish land use compatibility policies and development criteria for new development to protect the airports from incompatible land uses. The policies and criteria contained in applicable ALUCPs are addressed in the City of La Mesa's General Plan (Land Use and Urban Design Element).

The SDCRAA serves as the ALUC for Montgomery-Gibbs Executive Airport, which is approximately six miles northwest of the project site. The Montgomery-Gibbs Executive Airport ALUCP is the fundamental tool used by the SDCRAA to promote land use compatibility between airports and the surrounding land uses in the air station vicinity. The ALUCP is intended to (1) provide for the orderly growth of the airport and area surrounding the airport; and (2) safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The ALUCP contains compatibility criteria, maps, and other policies to carry out these objectives (SDCRAA 2010b).

The site is within the AIA for Montgomery-Gibbs Executive Airport. The AIA is defined as "the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission" (SDCRRA 2010b). The AIA for Montgomery-Gibbs Executive Airport serves as the planning boundary for the ALUCP and is divided into two review areas: (1) Review Area 1 includes the noise contours, safety zones, airspace protection surfaces, and overflight areas; and (2) Review Area 2 comprises the airspace protection surfaces and overflight areas. The project site is located within Review Area 2 for the airport.

To preclude incompatible development from intruding into areas of significant risk resulting from aircraft takeoff and landing patterns, the ALUCP identifies areas of significant risk as "Safety Zones." The Safety Zones are used for evaluating safety compatibility for new development and are located adjacent

to the ends of the runway's primary surfaces, over which all aircraft using the airport must pass on either arrival or departure. The project site is not located within any designated Safety Zones.

As described in Section 4.8.2.1, the project site is located within the FAA Part 77 Noticing Area for Montgomery-Gibbs Executive Airport. Building height and obstruction restrictions apply around the airport to ensure that no object would interfere with the safe operation of aircraft or impact airport 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, as well as notifying SDCRAA.

Regional Air Quality Strategy (RAQS)

The SDAPCD and 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 San Diego County RAQS was updated most recently in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for ozone. The SDAPCD has also developed the air basin's input to the SIP, which is required under the federal CAA for areas that are out of attainment of air quality standards. The SIP, approved by the USEPA in 1996, includes the SDAPCD's plans and control measures for attaining the ozone national standard.

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, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The SIP also includes rules and regulations that have been adopted by the SDAPCD to control emissions from stationary sources. These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the national air quality standard for ozone.

Water Quality Control Plan for the San Diego Basin

The RWQCB adopted the Basin Plan in 1994 (updated in 2016) that recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems (RWQCB 1994). The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters.

4.8.3 Methodology and Assumptions

Potential land use impacts resulting from implementation of the proposed project were evaluated based on consistency of the proposed project with the applicable environmental goals and policies contained in the Regional Plan, General Plan, Zoning Ordinance, CAP, Montgomery-Gibbs Executive Airport, RAQS, Basin Plan, and other relevant land use plans, policies, and regulations.

4.8.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant land use impact would occur if implementation of the proposed project would result in any of the following:

1. Would the project physically divide an established community?

2. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

4.8.5 Impact Analysis

4.8.5.1 Community Division

Threshold 1: Would the project physically divide an established community?

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area.

The project site is currently developed with an existing RV resort and is located between two regional transportation corridors, I-8 and the MTS Green Line Trolley corridor, that bisect the City and create physical barriers for intracity travel. While these existing transportation corridors will remain and continue to divide the City, the project would not introduce any new roads or other linear features that would create new or exacerbate existing physical barriers. The project would improve mobility and connectivity within the project area. The proposed multi-modal improvements would create new connections and enhance existing connections between the various uses present in the project area that could be accessed without relying on cars. Consequently, the proposed project would reduce the amount of division that exists in the project area by improving walkability and bicycle opportunities within the project area and near the 70th Street Trolley Station. Therefore, implementation of the proposed project would not physically divide an established community. Impacts would be less than significant.

4.8.5.2 Consistency with Environmental Policies of Adopted Land Use Plans

Threshold 2: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Consistency with San Diego Forward: The Regional Plan

The project would increase the intensity of uses in a previously developed area identified in the Regional Plan as a Smart Growth Area and Potential TPA (and subsequently confirmed by the City of San Diego as a TPA). The site is located adjacent to the 70th Street Trolley Station, which would provide access to the regional transportation network. In addition, the proposed project would enhance pedestrian and bicycle connectivity to the adjacent trolley station. The proposed residential and resident-serving commercial uses would intensify uses and provide a mix of uses in this transit-oriented area, thus providing access to these transit facilities without reliance upon the automobile. This would be consistent with the intent of the Regional Plan to create sustainable, mixed-use communities conducive to public transit, walking, and biking by focusing future growth in the previously developed portion of the region along the major existing transit and transportation corridors. As such, the project would not result in a conflict with or create inconsistencies with the Regional Plan.

Consistency with General Plan

The project would be consistent with applicable environmental goals, objectives, and policies contained in the General Plan as described below and outlined in Table 4.8-1, *General Plan Goals, Objectives, and Policies Consistency Evaluation*.

The General Plan designates the project site Regional Serving Commercial. As described in the Land Use and Urban Design Element, this land use designation is assigned to those areas that are suitable for more intense urban activities, such as high-volume retail sales, and other sales and services which are expected to draw local and regional customers, and are also served by convenient freeway access and public transportation. Grossmont Center, Fletcher Parkway, and Alvarado Road are examples of areas where this designation is applied. Examples of intended uses in the Regional Serving Commercial designation include retail shopping centers, large office complexes, restaurants, service stations, hotels, and motels. Entertainment uses such as movie theaters and nightclubs may be conditionally permitted. The Land Use and Urban Design Element specifies that within larger areas of the City that have been designated Regional Serving Commercial, "there may be areas suitable for mixed-use or high-density residential developments. The appropriate mix of uses permitted within these areas will be determined on a case-by-case review or by the amendment or adoption of a specific plan, which will also establish the appropriate residential density" (City 2012a).

Consistent with this description, the project includes a specific plan to guide the development of the project site with residential and resident-serving commercial uses. A specific plan is a land use planning and regulatory tool authorized by the State to local governments as a means to implement the broad goals and policies of the local General Plan. A specific plan provides the link between the policies within a local General Plan and the more precise development plans for a defined area. State law requires that specific plans must be consistent with the adopted local General Plan.

Furthermore, specific plans must comply with Government Code Sections 65450 through 65457, which define the content of a specific plan and the methods by which the plan must be locally adopted. Government Code Section 65451 requires that a specific plan must clearly define the objectives of the plan in text and diagrams which outline:

- the distribution, location, and intensity of land uses, including open space within the specific plan area;
- the distribution, location, and intensity of major infrastructure components;
- design standards and criteria for development and use of natural resources; and
- a program of implementation measures, including regulations, programs, public works projects, and financing measures necessary to carry out the specific plan.

The specific plan must also include a section to state in detail the relationship of the Specific plan to the locally adopted General Plan and how implementation of the specific plan would assist in implementing the goals and policies of the General Plan. The proposed Specific Plan has been prepared to meet these State requirements outlined above. Additionally, the Land Use and Urban Design Element of General Plan recognizes the use of specific plans as a tool to implement the General Plan for particular geographic areas or individual development sites. The City has utilized this General Plan implementation tool and adopted four specific plans.

General Plan goals, objectives, and policies aimed at reducing or avoiding environmental effects applicable to the proposed project are contained in various Elements. As shown in Table 4.8-1, the project would be consistent with applicable goals, objectives, and policies from the General Plan Land Use and Urban Design Element; Circulation Element; Conservation and Sustainability Element; Recreation and Open Space Element; Historic Preservation Element; Noise Element; Safety Element; Public Services and Facilities Element; Health and Wellness Element; and Housing Element. Accordingly, the project would not result in a conflict with or create inconsistencies with the General Plan.

Consistency with the Zoning Ordinance

Zoning classifications are generally aligned with General Plan land use designations that are linked to a General Plan land use map. In turn, the zoning ordinance typically defines the development standards for properties within the classification. The Alvarado Specific Plan has been established as a planning tool to bridge this relationship between the General Plan and Zoning Ordinance. Adoption of a specific plan that is consistent with the goals and policies of the General Plan provides more flexibility for the land uses and development standards that are prescribed for the Specific Plan area based on the underlying zone. The development regulations to implement the Specific Plan, in lieu of standard zoning classifications, are established by the proposed Specific Plan. As such, although the site is located within the Light Industrial and Commercial Service zone (CM), land uses on site would be governed by the proposed Specific Plan through the establishment of a new overlay zone, the Alvarado Specific Plan Overlay Zone. In cases where development standards are not specifically expressed in the Specific Plan, the existing policies and standards of General Plan and Zoning Ordinance would apply. As the project would conform to the applicable policies and development standards of the Specific Plan that would implement the Alvarado Specific Plan Overlay Zone, the project would not result in a conflict with or create inconsistencies with the Zoning Ordinance.

Consistency with Climate Action Plan

The CAP contains reduction measures within the City's direct influence to achieve the City's 2020 and 2035 GHG reduction targets in five strategy areas: energy; transportation and land use; water; solid waste; and green infrastructure (urban forest). The project site is located within and designated TPA and within 0.5 mile of the 70th Street Trolley Station, which serves the MTS Green Line Trolley. Due the project's proposed high-density multi-family housing and proximity to a major transit stop, the project would be considered TOD. The project would also add pedestrian and bicycle lane/sidewalks on Alvarado Road and add pedestrian and bicycle access to the 70th Street Trolley Station. Therefore, the project would be consistent with the CAP transportation and land use reduction strategies. In addition, the project's conformance to the 2019 Title 24 Part 6 building energy efficiency code and Part 11 CALGreen code would ensure the project is consistent with the CAP building energy, water use, and solid waste diversion strategies and measures. Furthermore, the project would be consistent with the green infrastructure strategies and measures by implementing the 2019 CALGreen and City standards for public right of way and parking lot shade trees and by restoring the Alvarado Creek channel with native planting. Thus, the project would not result in a conflict with or create inconsistencies with the CAP.

Consistency with the Montgomery-Gibbs Executive Airport ALUCP

Montgomery-Gibbs Executive Airport is located approximately six miles from the project site. The project site is located within Review Area 2 of this airport's AIA, which consists of locations that are

within the airspace protection and/or overflight areas on the associated maps in the Montgomery-Gibbs Executive Airport ALUCP (SDCRAA 2010b). Since the site is within the overflight area for the airport, the project would be subject to review under FAA Part 77 Noticing Area requirements. Specifically, all projects that require notification to the FAA would be required to submit an FAA Determination of No Hazard to Air Navigation to the City prior to recommendation of discretionary approval of the project. Depending on the results of this review, the project may be required to implement appropriate measures to maintain compatibility with airport operations and ensure that potential hazards are avoided.

Issues in Review Area 2 requiring review include projects that create objects in a High Terrain Zone,[1] projects that create electrical or visual hazards to airplanes in flight, and projects that have the potential to cause an increase in birds or wildlife. The project site is not located within a High Terrain Zone. The project also 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. The project does not include large water features or propose uses that would attract wildlife such as birds that would interfere with aircraft operations. The site is not located within any Safety Zone designated in the ALUCP. In addition, the project site is located outside of the 60 CNEL noise contour as shown on the Compatibility Policy Map: Noise of the ALUCP.

Implementation of the proposed project would be consistent with the Montgomery-Gibbs Executive Airport ALUCP as development within the Specific Plan area would be subject to the requirements of the ALUCP and associated FAA requirements. Therefore, the project would not result in a conflict with or create inconsistencies with the Montgomery-Gibbs Executive Airport ALUCP.

Consistency with Regional Air Quality Strategy

Although the SDAB is in non-attainment with the federal standard for ozone and the state standards for ozone and particulate matter, emissions associated with both project construction and operation would be below the SDAPCD significance criteria, as demonstrated in the Air Quality Technical Report prepared for the project (HELIX 2020a). The project would also not affect the SDAB's ability to attain and maintain ambient air quality standards or result in adverse human health effects. Refer to Section 4.1, *Air Quality*, of this EIR for additional details. Therefore, the project would not result in a conflict with or create inconsistencies with the RAQS.

Consistency with Water Quality Control Plan for the San Diego Basin

The project would comply with applicable City and related water quality standards and requirements. Conformance would be demonstrated through the use of appropriate low impact development (LID) site design, source control, and storm water control BMPs. Refer to the Section 4.9, *Hydrology/Water Quality*, in this EIR for additional details. Therefore, the project would not result in a conflict with or create inconsistencies with the Basin Plan.

Conclusion

The proposed project would be consistent with existing applicable local and regional land use plans, policies, and regulations as discussed above. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the

[1] This zone is an area of land that penetrates a specific elevation defined by the FAA that radiates from an airport.

purpose of avoiding or mitigating an environmental effect. Impacts related to consistency with environmental policies of adopted land use plans would be less than significant.

4.8.6 Mitigation Measures

4.8.6.1 Community Division

No significant land use impacts related to the physical division of an established community would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.8.6.2 Consistency with Environmental Policies of Adopted Land Use Plans

No significant land use impacts related to consistency with environmental policies of adopted land use plans would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.8.7 Significance Determination

The significance of land use impacts before and after mitigation is summarized in Table 4.8-2, *Significance Determination Summary of Land Use Impacts*. Implementation of the proposed project would not result in any significant land use impacts. Impacts related to community division and consistency with environmental goals of adopted land use plans would be less than significant, and no mitigation is required.

Table 4.8-2
SIGNIFICANCE DETERMINATION SUMMARY OF LAND USE IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Community Division	Less than significant	None required	Less than significant
Consistency with Environmental Goals of Adopted Land Use Plans	Less than significant	None required	Less than significant

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Table 4.8-1
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN		
Land Use and Urban Design Element		
Goal LU-1: A safe and healthy community.	The project would establish a safe and healthy community for future residents and the public by complying with applicable federal, state, and local regulations. The project would provide shared use pedestrian/bicycle pathways designed to meet all safety requirements.	Yes
Policy LU-1.2.2: As part of the development review process, City departments will review all future development to ensure that safety requirements are met, including building and fire codes, accessibility standards and crime prevention techniques.	The project would comply with applicable federal, state, and local regulations related to safety, including building and fire codes, accessibility standards, and crime prevention techniques.	Yes
Policy LU-1.2.3: Encourage the use of wider sidewalks where higher levels of pedestrian activity occur and the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic.	The project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road within a public use easement. The primary on-site pedestrian facilities would include 20- to 26-feet wide pedestrian promenades.	Yes
Policy LU-1.3.1: Seek opportunities to provide pedestrian and bicycle connections between neighborhoods and activity centers along easements and other areas where vehicles are not permitted.	The project includes a shared pedestrian/bicycle facility that would connect to the project's on-site roadways and planned future bicycle facilities along Alvarado Road. The project would also include a pedestrian/bicycle connection from the project site to the 70th Street Trolley Station.	Yes
Goal LU-2: Residential neighborhoods with strong character and cohesion.	The project would have a coordinated and unifying overall architectural style or theme yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design with strong character and cohesion.	Yes
Policy LU-2.2.1: Create a superior living environment for multi-family dwellings.	The project would construct four multi-family residential buildings with an integrated design and cohesive architectural treatments. The project would also construct interior project amenity facilities and active outdoor spaces to serve future residents.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Land Use and Urban Design Element (cont.)		
Policy LU-2.2.2: All new development, redevelopment, and rehabilitation within residential neighborhoods shall be constructed to fit within the context of its neighborhood.	The project would be visually compatible with the surrounding neighborhood by following the architectural design guidelines contained in the proposed Specific Plan. Refer to Section 4.14, *Visual Resources*.	Yes
Goal LU-4: An equitable community that meets the needs of all residents.	All aspects of project development, including structures, roadway improvements, and pedestrian/bicycle pathways, would be designed and constructed in compliance with ADA requirements, and therefore the project facilities would be accessible to individuals of all abilities.	Yes
Policy LU-4.1.1: Opportunities for affordable housing should exist in all residential areas to support the policies and programs for the City's Housing Element.	The project could serve as off-campus housing to provide an affordable housing choice to help meet the student housing demands for local colleges and the nearby university.	Yes
Policy LU-4.1.2: Ensure that development meets the needs of the aging and disabled population.	All aspects of project development, including structures, roadway improvements, and pedestrian/bicycle pathways, would be designed and constructed in compliance with ADA requirements, and therefore the project facilities would be accessible to individuals of all abilities.	Yes
Policy LU-4.2.3: New development shall provide adequate parking. For projects located in the Downtown area or near transit, parking requirements may be reduced. Additionally, differing land uses on the same subject property may utilize shared parking provisions.	The project is located adjacent to the 70th Street Trolley Station; therefore, the project is a TOD and parking requirements are reduced. Still, the project involves the construction of multiple parking garages to provide adequate parking for the development.	Yes
Circulation Element		
Goal CE-1: A comprehensive, flexible transportation system that is functional, safe, accessible, and attractive.	The project would be considered a TOD because the site is adjacent to the 70th Street Trolley Station. The project would improve accessibility to the transit station by incorporating a public pedestrian/bicycle connection to the station. Additionally, the project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to on-site roadways and planned future bicycle facilities. Lighting and landscaping would be provided along Alvarado Road to improve safety and visual quality, respectively.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Circulation Element (cont.)		
Policy CE-1.1.2: Streets will be configured and constructed according to the City's standards. Where the streets standards show flexible width and optional improvements, a determination shall be in made in accordance with the Street Design Manual, the Bicycle Facilities and Alternative Transportation Plan, and the Sidewalk Master Plan.	The project includes improvements to Alvarado Road, including the addition of a 16-foot-wide public access easement along the south side of the Alvarado Road frontage to provide for a 4-foot-wide landscape parkway and a 12-foot-wide shared pedestrian/bicycle path. The pathway would be designed in compliance with the Bicycle Facilities and Alternative Transportation Plan and the Sidewalk Master Plan.	Yes
Policy CE-1.1.3: Require new developments to provide for on- and off-street improvements directly related to the project, found to be needed to meet the City's policies regarding street function, design, and safety and that advance the City's "Complete Streets" objectives.	The project would provide on- and of-street improvements directly related to the project. Improvements to Alvarado Road would include a shared pedestrian/bicycle path, curb and gutter, streetlights, street trees, an on-street parking lane, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station.	Yes
Policy CE-1.1.13: Work with San Diego Gas and Electric Company and other utilities, to place overhead utility lines underground along transportation corridors and in residential neighborhoods as funding becomes available.	The project includes the relocation of overhead utilities. The existing communications and 12-kilovolt power lines that extend across the site would be relocated underground within the western portion of the project site.	Yes
Goal CE-3: A diverse transit system offering a safe, time-efficient, and cost-effective transportation choice that reduces traffic congestion and improves air quality.	The project would be considered a TOD because it is adjacent to the 70th Street Trolley Station. The project would improve accessibility to the 70th Street Trolley Station by incorporating a pathway from the western end of the project site to the transit stop. The use of the existing transit system as an alternative to the automobile would reduce traffic and improve air quality.	Yes
Policy CE-3.1.5: Develop and apply Design Standards applicable to future developments that improve access to public transit.	The project includes the construction of a public connection to from the western end of the project site to the adjacent 70th Street Trolley Station to improve access to public transit. The project would also include a pedestrian/bicycle pathway along Alvarado Road, which would further improve access to the trolley station.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Circulation Element (cont.)		
Goal CE-4: Local and regional facilities that accommodate the unique needs of bicycle travelers.	The project includes the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to the on-site roadways and planned future bicycle facilities along Alvarado Road. Additionally, the project's connection to the adjacent 70th Street Trolley Station would also accommodate bicycles. The pathways would be constructed in compliance with the Bicycle Facilities and Alternative Transportation Plan. Furthermore, the project would provide bicycle storage facilities to promote bicycling.	Yes
Policy CE-4.2.1: Design bicycle facilities in accordance with Caltrans design criteria.	The project includes the construction of a Class I 12-foot-wide shared pedestrian/bicycle pathway along the south side of the Alvarado Road frontage. The pathway would be designed in accordance with Caltrans design criteria.	Yes
Goal CE-5: Provide opportunities that encourage safe pedestrian travel.	The project includes the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road. The project would also include a pedestrian/bicycle connection from the western end of the project site to the adjacent 70th Street Trolley Station. Lighting would be provided along the pedestrian pathways for safety. Additionally, the pathway along Alvarado Road would be separated from the roadway for safe pedestrian/bicycle travel.	Yes
Policy CE-5.1.3: Within a quarter mile of transit services, the needs of pedestrians will be a priority for future capital investment.	The project is located within a quarter mile of a major transit station, and the project incorporates pedestrian facilities into the project design. The project would provide a shared pedestrian/bicycle pathway from the project site to the 70th Street Trolley Station. Additionally, the project would construct a 12-foot-wide shared pedestrian/bicycle pathway along the south side of the Alvarado Road frontage.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Conservation and Sustainability Element (cont.)		
Goal CS-1: The sustainable use of natural resources and land.	The project would not result in an excessive use of, or adverse impacts to natural resources. The project would improve water quality and restore and enhance natural resources at the site by incorporating improvements to Alvarado Creek. Additionally, the project would comply with applicable federal, state, and local regulations relating to natural resources and land.	Yes
Policy CS-1.3.1: Support regional water conservation efforts, water reclamation, and prevention of water quality degradation.	The project would implement construction BMPs and require conformance with City storm water standards and associated requirements (including the NPDES Construction General, Municipal and Groundwater permits), minimizing potential water quality impacts during construction. During project operation, the development would require the implementation of applicable pollutant (treatment) and hydromodification control BMPs, in addition to site design and source control BMPs. Furthermore, the project design would conform to applicable City and NPDES storm water standards. Water-efficient fixtures would be provided in the residential units, and project landscaping incorporate drought-tolerant species with low-drip irrigation systems to conserve water.	Yes
Policy CS-1.4.1: Facilitate savings-by-design and address energy-efficient building and site design in the retrofit or renovation of new, and existing, developments.	The project would incorporate an energy-efficient features to comply with the 2019 Title 24 Part 6 building energy efficiency code and the Part 11 CALGreen code.	Yes
Policy CS-2.1.1: Encourage composting, recycling, and other appropriate techniques to reduce waste by the City and its residents.	A minimum of 75 percent of construction and demolition debris generated by the proposed project would be diverted from the landfill by on-site reuse, recycling, salvage, or donation. Additionally, the project would divert at least 75 percent of operational waste from landfills through reuse and recycling.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Conservation and Sustainability Element (cont.)		
Goal CS-3: Safe mobility and access for all without compromising our ability to protect public health and safety.	The project would improve accessibility to the 70th Street Trolley Station by incorporating a public pedestrian/bicycle connection to the station. Additionally, the project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to on-site roadways and planned future bicycle facilities. Lighting would be provided along pedestrian/bicycle pathways to improve safety. Additionally, the pathway along Alvarado Road would be separated from the roadway by curb and landscaping for safety.	Yes
Recreation and Open Space Element		
Goal RO-1: A network of public parks throughout the City that will be convenient and beneficial to all segments of the community.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements throughout the City that would be beneficial to all segments of the community.	Yes
Policy RO-1.1.1: Use standards established within the Parks Master Plan for improvements to existing and proposed park facilities.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements.	Yes
Policy RO-1.1.4: Continue to collect park in-lieu fees from developers to fund needed park improvements.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements.	Yes
Goal RO-2: A City that values areas of native vegetation for their open space and biological habitat.	The project includes improvements to Alvarado Creek, including the removal of non-native vegetation and debris and the restoration of native riparian vegetation, including broad-leaved cattail, Olney's three-square bulrush, and southern bulrush. The enhanced creek would function as a major open space feature of the project and would provide ecologically valuable areas of native vegetation for the City.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Recreation and Open Space Element (cont.)		
Policy RO-2.1.2: Consider opportunities to restore open space and natural areas where feasible.	The project includes improvements to the Alvarado Creek channel that traverses the site to enhance the creek as an open space amenity and natural feature. Alvarado Creek would also be enhanced and restored with riparian vegetation.	Yes
Goal RO-3: Open space areas within private developments that supplement and complement the City's public open spaces.	The project would provide outdoor recreation areas including a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas such as seating and/or interpretive signage at Alvarado Creek overlook areas.	Yes
Policy RO-3.1.1: Planned residential developments, mixed-use projects, and multiple-family residential projects shall provide usable on-site open space areas as a supplement to the public parks and open space system.	The project would include interior project amenity facilities and active outdoor spaces for the project residents. Building amenities are anticipated to include clubhouses, pools, and gymnasiums, while outdoor recreation areas would include a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas.	Yes
Historic Preservation Element		
Goal HP-2: Safeguarded heritage by preserving those elements that reflect our cultural, social, economic, and architectural history so that community residents will have a foundation upon which to measure and direct physical change.	Project implementation would not impact any historical structures. The existing on-site buildings to be demolished were evaluated for historical significance. It was determined that the buildings do not meet the State or local criteria for designation as a historic landmark. Additionally, no known archaeological or tribal cultural resources occur on the project site. Mitigation consisting of an archaeological monitoring program would ensure that impacts to resources inadvertently encountered during excavation activities would be avoided or minimized. Refer to Section 4.3, *Cultural and Tribal Cultural Resources*.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Noise Element		
Goal NS-1: A community where noise and the effects of noise are minimized.	The project would not result in substantial temporary or permanent increases in ambient noise levels in excess of applicable noise standards. The project would not generate or be subject to excess noise, groundborne vibration, or groundborne noise levels. Additionally, the project would not experience significant impacts related to airport noise. Refer to Section 4.9, *Noise*.	Yes
Policy NS-1.1.2: Discourage development of noise-sensitive land uses in areas exposed to existing or future noise levels exceeding 65 dBA CNEL.	The project would experience noise levels exceeding 65 CNEL, primarily from vehicle traffic on I-8 and Alvarado Road, in addition to trolley traffic on the adjacent MTS Green Line trolley corridor. However, the project would incorporate noise reduction design features as part of the project design to reduce noise levels to below 65 CNEL. Refer to Section 4.9, *Noise.*	Yes
Policy NS-1.1.3: Incorporate noise reduction features during site planning to ensure that areas intended for frequent outdoor use are subjected to 60 CNEL or less for single-family land uses and 65 CNEL or less for multi-family residential land uses and multi-family residential land uses within mixed-use developments.	The project would incorporate noise reduction features including sound-attenuating architectural treatments on exterior walls and the incorporation of sound walls as part of the project design. The sound walls would consist of solid masonry, acrylic glass, or a combination thereof. The noise reduction features would reduce noise levels at the outdoor use areas to below the 65 CNEL threshold for multi-family residential land uses. Refer to Section 4.9, *Noise.*	Yes
Policy NS-1.2.1: Enforce the California Noise Insulation Standards (California Code of Regulations, Title 24). Title 24 requires that an acoustical analysis be performed for all new multi-family residences in areas where the exterior sound level exceeds 60 CNEL. The analysis shall ensure that the building design limits the interior noise environment to 45 CNEL or below.	A project-specific noise analysis was performed for the project. The noise analysis found that the project would comply with the interior noise compatibility standards of 45 CNEL or less with the incorporation of noise reduction design features that are part of the project design standards. Refer to Section 4.9, *Noise.*	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Safety Element		
Goal SE-1: Protection from the adverse effects of flooding.	The project would minimize the existing flood hazard risks by providing improvements to Alvarado Creek and the portion of the Alvarado Creek channel that traverses the site. The improved creek would accommodate 100-year storm events to resolve the existing flooding conditions that occur on the project site during high storm events. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Policy SE-1.1.4 Require that all proposed development be designed to minimize the volume and velocity of surface runoff and to prevent adverse downstream effects.	The volume and velocity of surface runoff associated with the project would be minimized through the implementation of construction and post-construction BMPs, related maintenance efforts, and compliance with the City's storm water standards, NPDES standards, and the project SWQMP. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Policy SE-1.2.1: Continue to require that all new development in flood prone areas be elevated to or above the level of a 100-year flood.	Because most of the site is located within a floodplain, the project would raise the existing grade to be above the base floodplain elevation. The top of bank elevation, ground floor finished floor, and garage entry elevations would all be elevated at least one foot above the 100-year flood elevation. Improvements would also be made to Alvarado Creek to contain the 100-year flood within the creek channel. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Goal SE-2: Protection from risks associated with landslides and other geologic hazards.	The project site is underlain by generally flat bedding and lacks steep slopes. The project would follow the construction recommendations provided by the Geotechnical Investigation and CBC requirements to avoid potential landslides or other geologic hazards. Refer to Section 4.4, *Geology and Soils*.	Yes
Goal SE-3: Protection from adverse effects caused by earthquakes and other seismic hazards.	The project site is not underlain by a known active or potentially active fault. Still, the project would be designed and constructed in compliance with the CBC, which contains specific structural requirements for seismic safety. Refer to Section 4.4, *Geology and Soils*.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Safety Element (cont.)		
Policy SE-3.1.1: Apply and enforce seismic design standards and building construction codes for new development.	Pursuant to La Mesa Municipal Code Title 14, the proposed project would be designed and constructed in compliance with the CBC, which contains specific structural requirements for seismic safety. Refer to Section 4.4, *Geology and Soils*.	Yes
Goal SE-4: Protection from risks associated with fire.	The project is located in a developed area where the risk of wildland fire risk is minimal. The project would adhere with the City's Fire Code, including all applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards. Additionally, the existing fire facilities and staffing are capable of serving the project.	Yes
Policy SE-4.1.1: Continue to enforce fire codes involving new construction.	The project would comply with applicable fire codes, including the City's Fire Code. Specifically, the project would include applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards.	Yes
Goal SE-5: Protection from exposure to hazardous materials and waste.	Exposure to hazardous materials resulting from project implementation would most likely occur during demolition activities due to the potential for the building materials to contain asbestos and/or lead. The project would minimize potential exposure by conducting an asbestos and lead survey prior to demolition of existing on-site buildings. Other exposures of hazardous materials would be minimized through compliance with the project's SWPPP pursuant to the NPDES General Construction Permit. Refer to Section 4.6, *Hazards and Hazardous Materials*.	Yes
Policy SE-5.1.8: Participate in local and regional programs that facilitate the proper disposal of hazardous household waste.	As a residential development, the project would involve the limited use of household cleaning products, chemical pesticides, and fertilizers required to maintain proposed landscaping, and chemicals associated the swimming pool. Any regulated materials would be properly handled, used, stored, transported, and/or disposed of in accordance with regulatory standards.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Public Services and Facilities Element		
Goal PSF-5: A community where fire risk is minimal.	The project is located in a developed area where the risk of wildland fire risk is minimal. The project would adhere with the City's Fire Code, including all applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards. Additionally, the existing fire facilities and staffing are capable of serving the project.	Yes
Goal PSF-6: Infrastructure of streets, sewers, and storm drains that sustains a high quality of life.	The project involves improvements to Alvarado Road, including a shared pedestrian/bicycle path, curb and gutter, streetlights, street trees, an on-street parking lane, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station. The project also involves sewer system improvements, including relocating an existing sewer trunk line within Alvarado Creek out of the channel and under the proposed internal access road, raising and capping an existing manhole, removal of portions of existing on-site sewer lines, and construction of new on-site sewer lines. Site drainage for the project site would be collected in a proposed private, on-site storm drain system consisting of detention basins, grass-lined swales, catch basins, and storm drains that would be directed to Alvarado Creek.	Yes
Policy PSF-6.2.2: A condition of approval of future development will include construction of improvements to the Storm Water System as appropriate.	The project includes improvements to Alvarado Creek to contain the 100-year flood within the creek channel. The project would include compliance with a SWPPP pursuant to the NPDES General Construction Permit. The project would also comply with the City's Storm Water BMP Manual and the guidelines outlined in the project's SWQMP.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Public Services and Facilities Element (cont.)		
Policy PSF-6.3.1: The Sidewalk Master Plan and Bicycle Facilities and Alternative Transportation Plan shall be utilized for guidance in the design and construction of street improvements.	The project involves the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road. The project would also construct a pedestrian/bicycle connection from the western portion of the project site to the adjacent 70th Street Trolley Station. The pathways would comply with the Sidewalk Master Plan and Bicycle Facilities and Alternative Transportation Plan.	Yes
Policy PSF-6.5.2: The City will provide enforcement activities to ensure recycling for single-family, multi-family and commercial properties, and construction and demolition sites to reduce the amount of solid waste diverted to local landfills.	A minimum of 75 percent of construction and demolition debris generated by the proposed project would be diverted from the landfill by reuse on site, recycling, salvage, or donation. Additionally, the proposed project would divert at least 75 percent of operational waste from landfills through reuse and recycling in accordance with AB 341.	Yes
Policy PSF-6.5.3: New construction and remodeling projects are required to provide space for recycling containers.	The project would provide adequate space for recycling containers. The areas for collection of recyclables and yard waste would be in accordance with 2019 Title 24 Part 11 CALGreen Standards.	Yes
Policy PSF-8.1.1: Give careful attention to the building permit process, as well as Urban Design Standards related to building scale, architectural materials, landscaping, and other elements to emphasize attractive and safe building and site design in new development projects.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design. Landscaping and improvements to Alvarado Creek would also be provided, which would improve visual quality at the site. The project would ensure safe building design by complying with applicable federal, state, and local building regulations.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Health and Wellness Element		
Goal HW-1: A community where residents are healthy and feel safe and secure.	Heartland Fire and the La Mesa Police Department would have adequate capacity to support the project. The pathways proposed by the project would be physically separated from roadways for safety. Additionally, the project would provide lighting throughout the project site and along all proposed pathways to ensure residents feel safe and secure.	Yes
Policy HW-1.1.1: Encourage developers to incorporate building and site design techniques that reduce crime, such as utilizing Crime Prevention through Environmental Design (CPTED) design strategies.	The project would incorporate lighting throughout the project site and along all proposed pedestrian/bicycle pathways for safety. Lighting within the site would be provided along the internal access roads, pedestrian promenade, and pathways; within recreation areas and public outdoor spaces; on buildings, and at the project entry monument signs.	Yes
Policy HW-1.2.2: Continue to develop and implement Safe Routes to Schools and Safe Routes to Transit.	The project would assist with the implementation of Safe Routes to Transit by construction a pedestrian/bicycle connection between the western end of the project site to the 70th Street Trolley Station. The pathway would have lighting and would be constructed in compliance with all applicable regulations. Additionally, the proposed shared pedestrian/bicycle path would provide pedestrian facilities that would connect to existing sidewalk and planned future bicycle facilities in support of the Safe Routes to School program.	Yes
Policy HW-1.2.3: Improve pedestrian and bicycle safety through implementation of La Mesa's Walkability Plan and Bicycle Master Plan, and evaluate and implement other plans and programs, as appropriate.	The project would construct shared pedestrian/bicycle pathways pursuant to La Mesa's Walkability Plan and Bicycle Master Plan.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Housing Element		
Goal HE-1: High-quality and well-maintained residential neighborhoods.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design. The project would also incorporate landscaping and would include upgrades to Alvarado Creek to improve storm water drainage and enhance the site's existing visual quality.	Yes
Policy HE-1.2.2: Encourage developers to provide street planting, landscaping, lighting, and underground utilities as part of any subdivision.	The project would provide improvements to Alvarado Road, including streetlights and landscaping. The landscaping would consist of street trees with mixed heights and species, in addition to a series of bulb-outs in the parking lane.	Yes
Policy HE-1.2.3: Continue to implement design review criteria that encourage high quality standards of design and materials in all residential developments.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design.	Yes
Policy HE-1.2.4: Encourage cost effective energy efficient housing, including the use of passive systems, to decrease energy use.	The project would comply with the 2019 Title 24 Part 6 building energy efficiency code and the Part 11 CALGreen code, minimizing energy usage.	Yes
Goal HE-2: Availability of a wide range of housing by location, type of unit, and price to meet the existing and future needs of La Mesa residents.	The project would add a mix of housing units to the City to help meet the existing and future needs of La Mesa residents to address the current shortfall of housing stock within the City.	Yes
Policy HE-2.1.1: Provide a variety of residential development opportunities in the City, including single-family homes, townhomes, apartments, condominiums, and residential mixed use to fulfill regional housing needs.	The project involves the construction of multi-family residences to help fulfill regional housing needs.	Yes

Table 4.8-1
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN		
Land Use and Urban Design Element		
Goal LU-1: A safe and healthy community.	The project would establish a safe and healthy community for future residents and the public by complying with applicable federal, state, and local regulations. The project would provide shared use pedestrian/bicycle pathways designed to meet all safety requirements.	Yes
Policy LU-1.2.2: As part of the development review process, City departments will review all future development to ensure that safety requirements are met, including building and fire codes, accessibility standards and crime prevention techniques.	The project would comply with applicable federal, state, and local regulations related to safety, including building and fire codes, accessibility standards, and crime prevention techniques.	Yes
Policy LU-1.2.3: Encourage the use of wider sidewalks where higher levels of pedestrian activity occur and the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic.	The project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road within a public use easement. The primary on-site pedestrian facilities would include 20- to 26-feet wide pedestrian promenades.	Yes
Policy LU-1.3.1: Seek opportunities to provide pedestrian and bicycle connections between neighborhoods and activity centers along easements and other areas where vehicles are not permitted.	The project includes a shared pedestrian/bicycle facility that would connect to the project's on-site roadways and planned future bicycle facilities along Alvarado Road. The project would also include a pedestrian/bicycle connection from the project site to the 70th Street Trolley Station.	Yes
Goal LU-2: Residential neighborhoods with strong character and cohesion.	The project would have a coordinated and unifying overall architectural style or theme yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design with strong character and cohesion.	Yes
Policy LU-2.2.1: Create a superior living environment for multi-family dwellings.	The project would construct four multi-family residential buildings with an integrated design and cohesive architectural treatments. The project would also construct interior project amenity facilities and active outdoor spaces to serve future residents.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Land Use and Urban Design Element (cont.)		
Policy LU-2.2.2: All new development, redevelopment, and rehabilitation within residential neighborhoods shall be constructed to fit within the context of its neighborhood.	The project would be visually compatible with the surrounding neighborhood by following the architectural design guidelines contained in the proposed Specific Plan. Refer to Section 4.14, *Visual Resources*.	Yes
Goal LU-4: An equitable community that meets the needs of all residents.	All aspects of project development, including structures, roadway improvements, and pedestrian/bicycle pathways, would be designed and constructed in compliance with ADA requirements, and therefore the project facilities would be accessible to individuals of all abilities.	Yes
Policy LU-4.1.1: Opportunities for affordable housing should exist in all residential areas to support the policies and programs for the City's Housing Element.	The project could serve as off-campus housing to provide an affordable housing choice to help meet the student housing demands for local colleges and the nearby university.	Yes
Policy LU-4.1.2: Ensure that development meets the needs of the aging and disabled population.	All aspects of project development, including structures, roadway improvements, and pedestrian/bicycle pathways, would be designed and constructed in compliance with ADA requirements, and therefore the project facilities would be accessible to individuals of all abilities.	Yes
Policy LU-4.2.3: New development shall provide adequate parking. For projects located in the Downtown area or near transit, parking requirements may be reduced. Additionally, differing land uses on the same subject property may utilize shared parking provisions.	The project is located adjacent to the 70th Street Trolley Station; therefore, the project is a TOD and parking requirements are reduced. Still, the project involves the construction of multiple parking garages to provide adequate parking for the development.	Yes
Circulation Element		
Goal CE-1: A comprehensive, flexible transportation system that is functional, safe, accessible, and attractive.	The project would be considered a TOD because the site is adjacent to the 70th Street Trolley Station. The project would improve accessibility to the transit station by incorporating a public pedestrian/bicycle connection to the station. Additionally, the project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to on-site roadways and planned future bicycle facilities. Lighting and landscaping would be provided along Alvarado Road to improve safety and visual quality, respectively.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Circulation Element (cont.)		
Policy CE-1.1.2: Streets will be configured and constructed according to the City's standards. Where the streets standards show flexible width and optional improvements, a determination shall be in made in accordance with the Street Design Manual, the Bicycle Facilities and Alternative Transportation Plan, and the Sidewalk Master Plan.	The project includes improvements to Alvarado Road, including the addition of a 16-foot-wide public access easement along the south side of the Alvarado Road frontage to provide for a 4-foot-wide landscape parkway and a 12-foot-wide shared pedestrian/bicycle path. The pathway would be designed in compliance with the Bicycle Facilities and Alternative Transportation Plan and the Sidewalk Master Plan.	Yes
Policy CE-1.1.3: Require new developments to provide for on- and off-street improvements directly related to the project, found to be needed to meet the City's policies regarding street function, design, and safety and that advance the City's "Complete Streets" objectives.	The project would provide on- and of-street improvements directly related to the project. Improvements to Alvarado Road would include a shared pedestrian/bicycle path, curb and gutter, streetlights, street trees, an on-street parking lane, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station.	Yes
Policy CE-1.1.13: Work with San Diego Gas and Electric Company and other utilities, to place overhead utility lines underground along transportation corridors and in residential neighborhoods as funding becomes available.	The project includes the relocation of overhead utilities. The existing communications and 12-kilovolt power lines that extend across the site would be relocated underground within the western portion of the project site.	Yes
Goal CE-3: A diverse transit system offering a safe, time-efficient, and cost-effective transportation choice that reduces traffic congestion and improves air quality.	The project would be considered a TOD because it is adjacent to the 70th Street Trolley Station. The project would improve accessibility to the 70th Street Trolley Station by incorporating a pathway from the western end of the project site to the transit stop. The use of the existing transit system as an alternative to the automobile would reduce traffic and improve air quality.	Yes
Policy CE-3.1.5: Develop and apply Design Standards applicable to future developments that improve access to public transit.	The project includes the construction of a public connection to from the western end of the project site to the adjacent 70th Street Trolley Station to improve access to public transit. The project would also include a pedestrian/bicycle pathway along Alvarado Road, which would further improve access to the trolley station.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Circulation Element (cont.)		
Goal CE-4: Local and regional facilities that accommodate the unique needs of bicycle travelers.	The project includes the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to the on-site roadways and planned future bicycle facilities along Alvarado Road. Additionally, the project's connection to the adjacent 70th Street Trolley Station would also accommodate bicycles. The pathways would be constructed in compliance with the Bicycle Facilities and Alternative Transportation Plan. Furthermore, the project would provide bicycle storage facilities to promote bicycling.	Yes
Policy CE-4.2.1: Design bicycle facilities in accordance with Caltrans design criteria.	The project includes the construction of a Class I 12-foot-wide shared pedestrian/bicycle pathway along the south side of the Alvarado Road frontage. The pathway would be designed in accordance with Caltrans design criteria.	Yes
Goal CE-5: Provide opportunities that encourage safe pedestrian travel.	The project includes the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road. The project would also include a pedestrian/bicycle connection from the western end of the project site to the adjacent 70th Street Trolley Station. Lighting would be provided along the pedestrian pathways for safety. Additionally, the pathway along Alvarado Road would be separated from the roadway for safe pedestrian/bicycle travel.	Yes
Policy CE-5.1.3: Within a quarter mile of transit services, the needs of pedestrians will be a priority for future capital investment.	The project is located within a quarter mile of a major transit station, and the project incorporates pedestrian facilities into the project design. The project would provide a shared pedestrian/bicycle pathway from the project site to the 70th Street Trolley Station. Additionally, the project would construct a 12-foot-wide shared pedestrian/bicycle pathway along the south side of the Alvarado Road frontage.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Conservation and Sustainability Element (cont.)		
Goal CS-1: The sustainable use of natural resources and land.	The project would not result in an excessive use of, or adverse impacts to natural resources. The project would improve water quality and restore and enhance natural resources at the site by incorporating improvements to Alvarado Creek. Additionally, the project would comply with applicable federal, state, and local regulations relating to natural resources and land.	Yes
Policy CS-1.3.1: Support regional water conservation efforts, water reclamation, and prevention of water quality degradation.	The project would implement construction BMPs and require conformance with City storm water standards and associated requirements (including the NPDES Construction General, Municipal and Groundwater permits), minimizing potential water quality impacts during construction. During project operation, the development would require the implementation of applicable pollutant (treatment) and hydromodification control BMPs, in addition to site design and source control BMPs. Furthermore, the project design would conform to applicable City and NPDES storm water standards. Water-efficient fixtures would be provided in the residential units, and project landscaping incorporate drought-tolerant species with low-drip irrigation systems to conserve water.	Yes
Policy CS-1.4.1: Facilitate savings-by-design and address energy-efficient building and site design in the retrofit or renovation of new, and existing, developments.	The project would incorporate an energy-efficient features to comply with the 2019 Title 24 Part 6 building energy efficiency code and the Part 11 CALGreen code.	Yes
Policy CS-2.1.1: Encourage composting, recycling, and other appropriate techniques to reduce waste by the City and its residents.	A minimum of 75 percent of construction and demolition debris generated by the proposed project would be diverted from the landfill by on-site reuse, recycling, salvage, or donation. Additionally, the project would divert at least 75 percent of operational waste from landfills through reuse and recycling.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Conservation and Sustainability Element (cont.)		
Goal CS-3: Safe mobility and access for all without compromising our ability to protect public health and safety.	The project would improve accessibility to the 70th Street Trolley Station by incorporating a public pedestrian/bicycle connection to the station. Additionally, the project would provide a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road that would connect to on-site roadways and planned future bicycle facilities. Lighting would be provided along pedestrian/bicycle pathways to improve safety. Additionally, the pathway along Alvarado Road would be separated from the roadway by curb and landscaping for safety.	Yes
Recreation and Open Space Element		
Goal RO-1: A network of public parks throughout the City that will be convenient and beneficial to all segments of the community.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements throughout the City that would be beneficial to all segments of the community.	Yes
Policy RO-1.1.1: Use standards established within the Parks Master Plan for improvements to existing and proposed park facilities.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements.	Yes
Policy RO-1.1.4: Continue to collect park in-lieu fees from developers to fund needed park improvements.	The project would submit payment of the Residential Park Improvement Impact Fee. Such fees would be used to fund needed park improvements.	Yes
Goal RO-2: A City that values areas of native vegetation for their open space and biological habitat.	The project includes improvements to Alvarado Creek, including the removal of non-native vegetation and debris and the restoration of native riparian vegetation, including broad-leaved cattail, Olney's three-square bulrush, and southern bulrush. The enhanced creek would function as a major open space feature of the project and would provide ecologically valuable areas of native vegetation for the City.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Recreation and Open Space Element (cont.)		
Policy RO-2.1.2: Consider opportunities to restore open space and natural areas where feasible.	The project includes improvements to the Alvarado Creek channel that traverses the site to enhance the creek as an open space amenity and natural feature. Alvarado Creek would also be enhanced and restored with riparian vegetation.	Yes
Goal RO-3: Open space areas within private developments that supplement and complement the City's public open spaces.	The project would provide outdoor recreation areas including a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas such as seating and/or interpretive signage at Alvarado Creek overlook areas.	Yes
Policy RO-3.1.1: Planned residential developments, mixed-use projects, and multiple-family residential projects shall provide usable on-site open space areas as a supplement to the public parks and open space system.	The project would include interior project amenity facilities and active outdoor spaces for the project residents. Building amenities are anticipated to include clubhouses, pools, and gymnasiums, while outdoor recreation areas would include a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas.	Yes
Historic Preservation Element		
Goal HP-2: Safeguarded heritage by preserving those elements that reflect our cultural, social, economic, and architectural history so that community residents will have a foundation upon which to measure and direct physical change.	Project implementation would not impact any historical structures. The existing on-site buildings to be demolished were evaluated for historical significance. It was determined that the buildings do not meet the State or local criteria for designation as a historic landmark. Additionally, no known archaeological or tribal cultural resources occur on the project site. Mitigation consisting of an archaeological monitoring program would ensure that impacts to resources inadvertently encountered during excavation activities would be avoided or minimized. Refer to Section 4.3, *Cultural and Tribal Cultural Resources*.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Noise Element		
Goal NS-1: A community where noise and the effects of noise are minimized.	The project would not result in substantial temporary or permanent increases in ambient noise levels in excess of applicable noise standards. The project would not generate or be subject to excess noise, groundborne vibration, or groundborne noise levels. Additionally, the project would not experience significant impacts related to airport noise. Refer to Section 4.9, *Noise*.	Yes
Policy NS-1.1.2: Discourage development of noise-sensitive land uses in areas exposed to existing or future noise levels exceeding 65 dBA CNEL.	The project would experience noise levels exceeding 65 CNEL, primarily from vehicle traffic on I-8 and Alvarado Road, in addition to trolley traffic on the adjacent MTS Green Line trolley corridor. However, the project would incorporate noise reduction design features as part of the project design to reduce noise levels to below 65 CNEL. Refer to Section 4.9, *Noise.*	Yes
Policy NS-1.1.3: Incorporate noise reduction features during site planning to ensure that areas intended for frequent outdoor use are subjected to 60 CNEL or less for single-family land uses and 65 CNEL or less for multi-family residential land uses and multi-family residential land uses within mixed-use developments.	The project would incorporate noise reduction features including sound-attenuating architectural treatments on exterior walls and the incorporation of sound walls as part of the project design. The sound walls would consist of solid masonry, acrylic glass, or a combination thereof. The noise reduction features would reduce noise levels at the outdoor use areas to below the 65 CNEL threshold for multi-family residential land uses. Refer to Section 4.9, *Noise.*	Yes
Policy NS-1.2.1: Enforce the California Noise Insulation Standards (California Code of Regulations, Title 24). Title 24 requires that an acoustical analysis be performed for all new multi-family residences in areas where the exterior sound level exceeds 60 CNEL. The analysis shall ensure that the building design limits the interior noise environment to 45 CNEL or below.	A project-specific noise analysis was performed for the project. The noise analysis found that the project would comply with the interior noise compatibility standards of 45 CNEL or less with the incorporation of noise reduction design features that are part of the project design standards. Refer to Section 4.9, *Noise.*	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Safety Element		
Goal SE-1: Protection from the adverse effects of flooding.	The project would minimize the existing flood hazard risks by providing improvements to Alvarado Creek and the portion of the Alvarado Creek channel that traverses the site. The improved creek would accommodate 100-year storm events to resolve the existing flooding conditions that occur on the project site during high storm events. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Policy SE-1.1.4 Require that all proposed development be designed to minimize the volume and velocity of surface runoff and to prevent adverse downstream effects.	The volume and velocity of surface runoff associated with the project would be minimized through the implementation of construction and post-construction BMPs, related maintenance efforts, and compliance with the City's storm water standards, NPDES standards, and the project SWQMP. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Policy SE-1.2.1: Continue to require that all new development in flood prone areas be elevated to or above the level of a 100-year flood.	Because most of the site is located within a floodplain, the project would raise the existing grade to be above the base floodplain elevation. The top of bank elevation, ground floor finished floor, and garage entry elevations would all be elevated at least one foot above the 100-year flood elevation. Improvements would also be made to Alvarado Creek to contain the 100-year flood within the creek channel. Refer to Section 4.7, *Hydrology and Water Quality*.	Yes
Goal SE-2: Protection from risks associated with landslides and other geologic hazards.	The project site is underlain by generally flat bedding and lacks steep slopes. The project would follow the construction recommendations provided by the Geotechnical Investigation and CBC requirements to avoid potential landslides or other geologic hazards. Refer to Section 4.4, *Geology and Soils*.	Yes
Goal SE-3: Protection from adverse effects caused by earthquakes and other seismic hazards.	The project site is not underlain by a known active or potentially active fault. Still, the project would be designed and constructed in compliance with the CBC, which contains specific structural requirements for seismic safety. Refer to Section 4.4, *Geology and Soils*.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Safety Element (cont.)		
Policy SE-3.1.1: Apply and enforce seismic design standards and building construction codes for new development.	Pursuant to La Mesa Municipal Code Title 14, the proposed project would be designed and constructed in compliance with the CBC, which contains specific structural requirements for seismic safety. Refer to Section 4.4, *Geology and Soils*.	Yes
Goal SE-4: Protection from risks associated with fire.	The project is located in a developed area where the risk of wildland fire risk is minimal. The project would adhere with the City's Fire Code, including all applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards. Additionally, the existing fire facilities and staffing are capable of serving the project.	Yes
Policy SE-4.1.1: Continue to enforce fire codes involving new construction.	The project would comply with applicable fire codes, including the City's Fire Code. Specifically, the project would include applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards.	Yes
Goal SE-5: Protection from exposure to hazardous materials and waste.	Exposure to hazardous materials resulting from project implementation would most likely occur during demolition activities due to the potential for the building materials to contain asbestos and/or lead. The project would minimize potential exposure by conducting an asbestos and lead survey prior to demolition of existing on-site buildings. Other exposures of hazardous materials would be minimized through compliance with the project's SWPPP pursuant to the NPDES General Construction Permit. Refer to Section 4.6, *Hazards and Hazardous Materials*.	Yes
Policy SE-5.1.8: Participate in local and regional programs that facilitate the proper disposal of hazardous household waste.	As a residential development, the project would involve the limited use of household cleaning products, chemical pesticides, and fertilizers required to maintain proposed landscaping, and chemicals associated the swimming pool. Any regulated materials would be properly handled, used, stored, transported, and/or disposed of in accordance with regulatory standards.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Public Services and Facilities Element		
Goal PSF-5: A community where fire risk is minimal.	The project is located in a developed area where the risk of wildland fire risk is minimal. The project would adhere with the City's Fire Code, including all applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards. Additionally, the existing fire facilities and staffing are capable of serving the project.	Yes
Goal PSF-6: Infrastructure of streets, sewers, and storm drains that sustains a high quality of life.	The project involves improvements to Alvarado Road, including a shared pedestrian/bicycle path, curb and gutter, streetlights, street trees, an on-street parking lane, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station. The project also involves sewer system improvements, including relocating an existing sewer trunk line within Alvarado Creek out of the channel and under the proposed internal access road, raising and capping an existing manhole, removal of portions of existing on-site sewer lines, and construction of new on-site sewer lines. Site drainage for the project site would be collected in a proposed private, on-site storm drain system consisting of detention basins, grass-lined swales, catch basins, and storm drains that would be directed to Alvarado Creek.	Yes
Policy PSF-6.2.2: A condition of approval of future development will include construction of improvements to the Storm Water System as appropriate.	The project includes improvements to Alvarado Creek to contain the 100-year flood within the creek channel. The project would include compliance with a SWPPP pursuant to the NPDES General Construction Permit. The project would also comply with the City's Storm Water BMP Manual and the guidelines outlined in the project's SWQMP.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Public Services and Facilities Element (cont.)		
Policy PSF-6.3.1: The Sidewalk Master Plan and Bicycle Facilities and Alternative Transportation Plan shall be utilized for guidance in the design and construction of street improvements.	The project involves the construction of a 12-foot-wide shared use pedestrian/bicycle path along the south side of Alvarado Road. The project would also construct a pedestrian/bicycle connection from the western portion of the project site to the adjacent 70th Street Trolley Station. The pathways would comply with the Sidewalk Master Plan and Bicycle Facilities and Alternative Transportation Plan.	Yes
Policy PSF-6.5.2: The City will provide enforcement activities to ensure recycling for single-family, multi-family and commercial properties, and construction and demolition sites to reduce the amount of solid waste diverted to local landfills.	A minimum of 75 percent of construction and demolition debris generated by the proposed project would be diverted from the landfill by reuse on site, recycling, salvage, or donation. Additionally, the proposed project would divert at least 75 percent of operational waste from landfills through reuse and recycling in accordance with AB 341.	Yes
Policy PSF-6.5.3: New construction and remodeling projects are required to provide space for recycling containers.	The project would provide adequate space for recycling containers. The areas for collection of recyclables and yard waste would be in accordance with 2019 Title 24 Part 11 CALGreen Standards.	Yes
Policy PSF-8.1.1: Give careful attention to the building permit process, as well as Urban Design Standards related to building scale, architectural materials, landscaping, and other elements to emphasize attractive and safe building and site design in new development projects.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design. Landscaping and improvements to Alvarado Creek would also be provided, which would improve visual quality at the site. The project would ensure safe building design by complying with applicable federal, state, and local building regulations.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Health and Wellness Element		
Goal HW-1: A community where residents are healthy and feel safe and secure.	Heartland Fire and the La Mesa Police Department would have adequate capacity to support the project. The pathways proposed by the project would be physically separated from roadways for safety. Additionally, the project would provide lighting throughout the project site and along all proposed pathways to ensure residents feel safe and secure.	Yes
Policy HW-1.1.1: Encourage developers to incorporate building and site design techniques that reduce crime, such as utilizing Crime Prevention through Environmental Design (CPTED) design strategies.	The project would incorporate lighting throughout the project site and along all proposed pedestrian/bicycle pathways for safety. Lighting within the site would be provided along the internal access roads, pedestrian promenade, and pathways; within recreation areas and public outdoor spaces; on buildings, and at the project entry monument signs.	Yes
Policy HW-1.2.2: Continue to develop and implement Safe Routes to Schools and Safe Routes to Transit.	The project would assist with the implementation of Safe Routes to Transit by construction a pedestrian/bicycle connection between the western end of the project site to the 70th Street Trolley Station. The pathway would have lighting and would be constructed in compliance with all applicable regulations. Additionally, the proposed shared pedestrian/bicycle path would provide pedestrian facilities that would connect to existing sidewalk and planned future bicycle facilities in support of the Safe Routes to School program.	Yes
Policy HW-1.2.3: Improve pedestrian and bicycle safety through implementation of La Mesa's Walkability Plan and Bicycle Master Plan, and evaluate and implement other plans and programs, as appropriate.	The project would construct shared pedestrian/bicycle pathways pursuant to La Mesa's Walkability Plan and Bicycle Master Plan.	Yes

Table 4.8-1 (cont.)
GENERAL PLAN GOALS, OBJECTIVES, AND POLICIES CONSISTENCY EVALUATION

Applicable Elements, Goals, and Policies	Consistency Evaluation	Consistent (Yes/No)
CITY OF LA MESA GENERAL PLAN (cont.)		
Housing Element		
Goal HE-1: High-quality and well-maintained residential neighborhoods.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design. The project would also incorporate landscaping and would include upgrades to Alvarado Creek to improve storm water drainage and enhance the site's existing visual quality.	Yes
Policy HE-1.2.2: Encourage developers to provide street planting, landscaping, lighting, and underground utilities as part of any subdivision.	The project would provide improvements to Alvarado Road, including streetlights and landscaping. The landscaping would consist of street trees with mixed heights and species, in addition to a series of bulb-outs in the parking lane.	Yes
Policy HE-1.2.3: Continue to implement design review criteria that encourage high quality standards of design and materials in all residential developments.	The project would have a coordinated and unifying overall architectural style yet express an individual character. The project would be subject to the City's Urban Design Program. The Design Review Application process would ensure high quality site and architectural design.	Yes
Policy HE-1.2.4: Encourage cost effective energy efficient housing, including the use of passive systems, to decrease energy use.	The project would comply with the 2019 Title 24 Part 6 building energy efficiency code and the Part 11 CALGreen code, minimizing energy usage.	Yes
Goal HE-2: Availability of a wide range of housing by location, type of unit, and price to meet the existing and future needs of La Mesa residents.	The project would add a mix of housing units to the City to help meet the existing and future needs of La Mesa residents to address the current shortfall of housing stock within the City.	Yes
Policy HE-2.1.1: Provide a variety of residential development opportunities in the City, including single-family homes, townhomes, apartments, condominiums, and residential mixed use to fulfill regional housing needs.	The project involves the construction of multi-family residences to help fulfill regional housing needs.	Yes

4.9 NOISE

This section of the PEIR addresses potential noise and vibration impacts that could result from implementation of the proposed project. The analysis in this section is based, in part, on a Noise Analysis prepared for the project (RECON 2018b), which is included as Appendix K of this EIR.

4.9.1 Existing Conditions

4.9.1.1 Fundamentals of Noise and Sound Level Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound, which interferes with normal activities, causes physical harm, or has adverse health effects.

Sound levels are described in units called decibels (dB). Because decibels are logarithmic units, sound levels cannot be added or subtracted through simple addition. Under the decibel scale, a doubling of sound energy corresponds to a three-dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three dBA higher than one source under the same conditions.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To account for this phenomenon, the A-scale is used, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the “A-weighted” noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dBA.

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, there are a variety of noise descriptors for time-averaged noise levels. The noise descriptors used herein include the one-hour equivalent noise level (L_{EQ}), the community noise equivalent level (CNEL), and the sound exposure level (SEL). The CNEL is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added five dBA weighting, and sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. The increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night. The SEL is a noise level over a stated period of time or event and normalized to one second. These metrics are used to express noise levels for both measurement and municipal regulations, as well as for land use guidelines and enforcement of noise ordinances.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver contribute to the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Sound from a small, localized source (approximating a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of six dBA for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The drop-off rate for a line source is three dBA for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dBA per doubling of distance. Thus, a point source over a soft site would attenuate at 7.5 dBA per doubling of distance.

Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, for most receivers, a three-dBA change in noise levels is clearly noticeable, a three-dBA change is typically the smallest increment that is perceivable, and one to two dBA changes are generally not detectable.

4.9.1.2 Fundamentals of Vibration

Vibration is defined as any oscillatory motion induced in a structure or mechanical device as a direct result of some type of input excitation. Vibration is transmitted through solid material such as the ground by wave motion, which is known as groundborne vibration. Sources of ground-borne vibration include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or manufactured (explosions, trains, machinery, traffic, construction equipment, etc.). Vibration sources may be transient, steady-state (continuous), or pseudo steady-state. Examples of transient construction vibrations are those that occur from blasting with explosives, impact pile driving, demolition, and wrecking balls.

Groundborne vibration propagates from sources through the ground into nearby structures and buildings. Soil properties affect the propagation of ground-borne vibration. The vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. When groundborne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as the rattling of windows or items on shelves or the motion of building surfaces. Vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise.

Vibration effects can be described by its peak and root mean square (RMS) amplitudes. Building damage is often discussed in terms of peak velocity, or peak particle velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is related to the stresses that are experienced by buildings; it is often used in monitoring of blasting vibration and to discuss construction vibration. Although PPV is appropriate for evaluating the potential for building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibration signals, and as a result, the best metric to assess human response is average (as opposed to peak) vibration amplitude.

The RMS amplitude is useful for assessing human annoyance, while peak vibration is most often used for assessing the potential for damage to buildings and structures. Because the net average of a vibration signal is zero, the RMS amplitude is used to describe the "smoothed" vibration amplitude. The RMS amplitude is always less than the PPV and is always positive. The RMS average is typically calculated over a one-second period.

Decibel notation (VdB) is also commonly used for vibration. The background vibration velocity level in residential areas is usually 50 VdB or lower; this is well below the level perceptible by humans, which is approximately 65 VdB. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

4.9.1.3 Existing Noise Environment

Noise Sources

The primary noise source in the project vicinity consists of vehicular traffic noise on I-8 and Alvarado Road. Additional noise is generated by trolleys on the adjacent San Diego MTS Green Line trolley corridor and trolleys and buses at the 70th Street Trolley Station to the west.

Noise and Vibration Sensitive Land Uses

Noise Sensitive Land Uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise, such as residential dwellings, schools, transient lodging (hotels), hospitals, educational facilities, and libraries. Industrial and commercial land uses are generally not considered sensitive to noise. NSLUs in the project area include multi-family residences (La Cuesta Apartments, Comanche Hills Apartments, Fleetwood Apartment Homes), a mobile home community, and single-family residences located south of the project site (across Alvarado Creek and the MTS Green Line); a motel approximately 0.13 mile east of the project site, and an educational facility (National University campus) approximately 0.2 mile southeast of the site. Additional residential uses are located north of the project site across I-8; however, construction and operational noise associated with the project would not be anticipated to exceed ambient traffic noise at these residences.

Land uses in which ground-borne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations, are considered "vibration-sensitive" (Federal Transit Administration [FTA] 2018). The degree of sensitivity depends on the specific equipment that would be affected by the ground-borne vibration. In addition, excessive levels of ground-borne vibration of either a regular or an intermittent nature can result in annoyance to residential uses or schools. Vibration-sensitive land uses in the project area include the nearby single- and multi-family residences, motel, and educational facility, as well as the existing on-site RV resort.

Existing Ambient Noise Levels

Existing ambient noise levels were measured in the project area to provide a characterization of the existing noise environment. Short-term (15-minute) daytime noise measurements were conducted at three locations within the project area: one on the project site and two at adjacent locales. Measurement location 1 was located in the central portion of the site adjacent to Alvarado Creek. Measurement location 2 was located along Alvarado Road where Alvarado Creek crosses under the

roadway. Measurement location 3 was located at the eastern end of the 70th Street Trolley Station. Noise measurement locations are shown on Figure 4.9-1, *Ambient Noise Measurement Locations*. Table 4.9-1, *Noise Measurements*, summarizes the measured existing noise levels at these selected locations.

Table 4.9-1
NOISE MEASUREMENTS

Measurement Location No.	Location	Time	Noise Sources	Measured Noise Level (dBA L_{EQ})
1	In the central portion of the project site adjacent to Alvarado Creek	11:44 a.m. to 11:59 p.m.	Vehicular traffic on I-8, trolleys	64.1
2	Along Alvarado Road where Alvarado Creek crosses under the roadway	12:16 a.m. to 12:31 p.m.	Vehicular traffic on I-8 and Alvarado Road	72.4
3	East end of the 70th Street Trolley Station	12:50 p.m. to 1:05 p.m.	Vehicular traffic on I-8, trolleys, buses	70.2

Source: RECON 2018b
dBA = A-weighted decibel; L_{EQ} = one-hour average sound level

The measured average noise levels ranged from 64.1 to 72.4 dBA L_{EQ}. The sources of noise varied between sites, but the primary noise generator was vehicular traffic. Secondary sources included trolley pass-bys and trolley horns, trolley crossing bells, and buses.

4.9.2 Regulatory Setting

4.9.2.1 Federal

Federal Transit Administration and Federal Railroad Administration Standards

Although the Federal Transit Administration (FTA) standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the Transit Noise and Vibration Impact Assessment Manual (FTA 2018) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration (FRA) have published guidelines for assessing the impacts of groundborne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects.

Table 4.9-2, *Groundborne Vibration and Groundborne Noise Impact Criteria*, presents vibration impact criteria that account for variation in receptor types as well as the frequency of events. The project would be considered a Category 2 land use, and the adjacent MTS Green Line trolley corridor involves frequent events, which are defined by the FTA as more than 70 vibration events of the same source per day.

Table 4-9-2
GROUNDBORNE VIBRATION AND GROUNDBORNE NOISE IMPACT CRITERIA

Land Use Category	Groundborne Vibration Impact Levels Frequent Events[1]	Groundborne Vibration Impact Levels Occasional Events[2]	Groundborne Vibration Impact Levels Infrequent Events[3]	Groundborne Noise Impact Levels Frequent Events[1]	Groundborne Noise Impact Levels Occasional Events[2]	Groundborne Noise Impact Levels Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]	N/A[5]	N/A[5]	N/A[5]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

Source: FTA 2018

1 Frequent Events is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.

2 Occasional Events is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.

3 Infrequent Events is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.

4 This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

5 Vibration-sensitive equipment is generally not sensitive to groundborne noise.

VdB = decibel notation; N/A = not applicable; dBA = A-weighted decibel

Federal Aviation Administration Standards

Code of Federal Regulations Title 14, Part 150, which is enforced by the Federal Aviation Administration, regulates airport noise compatibility planning. This regulation prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. This regulation also identifies those land uses which are normally compatible with various levels of exposure to noise by individuals. The Federal Aviation Administration considers all land uses to be compatible with exterior noise levels less than 65 dBA L_{DN} (or CNEL).

4.9.2.2 State

California Noise Control Act

California Health and Safety Code Sections 46000 through 46080, also known as the California Noise Control Act of 1973, state that excessive noise is a serious hazard to the public health and welfare, and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The Act also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of

the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Code of Regulations

CCR Title 24, California Noise Insulation Standards, requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise levels, with windows closed, attributable to exterior sources shall not exceed 45 CNEL in any habitable room. A habitable room is a room used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable rooms for this regulation. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building structure may be exposed to exterior noise levels of 60 CNEL or greater. The acoustical analysis must demonstrate that the residences have been designed to limit intruding noise to a maximum interior noise level of 45 CNEL.

Division 2.5, Chapter 6, Section 5012 of Title 21 establishes that 65 CNEL is the acceptable level of aircraft noise for persons living near an airport.

4.9.2.3 Local

City of La Mesa General Plan

The Noise Element of the City's General Plan is intended to identify noise-sensitive land uses and noise sources, define areas of noise impacts, establish policies and programs to protect the community from excessive noise, and reduce negative impacts from those noise sources (City 2012a). The Noise Element establishes acceptable noise compatibility noise levels for various land uses. For multi-family residential uses, exterior noise levels up to 65 CNEL are considered "normally acceptable" and noise levels up to 70 CNEL are considered "conditionally acceptable." According to the Noise Element, in conditionally acceptable areas, "new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design." It further states that "conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice" (City 2012a). The Noise Element similarly states that exterior noise levels between 70 and 75 CNEL are considered "normally unacceptable" and that noise levels above 75 CNEL are considered "clearly unacceptable." Where exterior noise levels are normally unacceptable, "a detailed analysis of noise reduction requirements must be made and needed noise insulation features must be included in the design." The Noise Element also specifies an interior noise standard of 45 CNEL for multi-family uses.

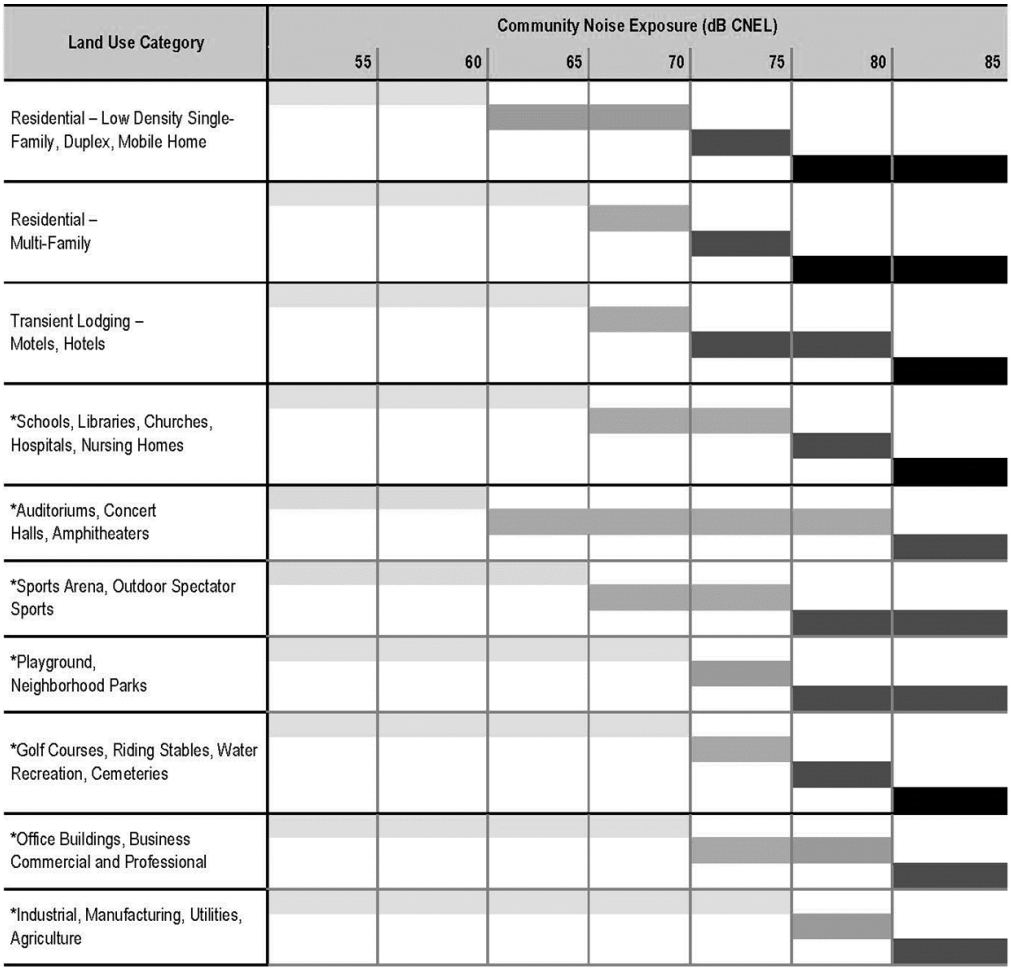
Furthermore, Policy NS-1.1-3 clarifies that the noise compatibility standards also require that new developments minimize the effects of noise by incorporating noise reduction features to reduce exterior noise levels at multi-family outdoor use areas[1] to 65 CNEL or less (i.e., to within the normally acceptable range of the noise compatibility guidelines).

Table 4.9-3, *City of La Mesa Noise – Land Use Compatibility Guidelines*, summarizes the City's noise – land use compatibility guidelines contained in the Noise Element. These guidelines are intended to guide

[1] Outdoor use areas associated with multi-family residential buildings typically include active recreation and public gathering spaces such as community swimming pools, clubhouses, private parks/tot lots, courtyards, and common patio/deck areas.

the design and location of future development and serve as a target for the reduction of noise in existing development.

Table 4.9-3
CITY OF LA MESA NOISE – LAND USE COMPATIBILITY GUIDELINES



* Denotes facilities used for part of the day; therefore, an hourly standard (L_{eq}) would be used rather than CNEL.

Source: City 2012a

La Mesa Municipal Code

Stationary Noise

La Mesa Municipal Code Chapter 10.80, Noise Regulation, prohibits unnecessary, excessive, and annoying noises in the City of La Mesa. Section 10.80.040 establishes noise limits for on-site generated noise at adjacent properties and is based on zone or land use designation. The noise limits for each zone classification are summarized in Table 4.9-4, *La Mesa Municipal Code Noise Limits*. These standards apply when the ambient noise level does not already exceed the noise limit. In cases where the ambient noise level already exceeds the noise limit, the ambient noise level is the applicable noise limit.

Table 4.9-4
LA MESA MUNICIPAL CODE NOISE LIMITS

Zone or Land Use Designation	Noise Level (dBA L_{EQ}) Daytime (7 AM to 10 PM)	Noise Level (dBA L_{EQ}) Nighttime (10 PM to 7 AM)
R1 (Urban Residential) and R2 (Medium Low Density Residential)	55	50
R3 (Multiple Unit Residential) and RB (Residential Business)	60	55
C (General Commercial), CN (Neighborhood Commercial), CD (Downtown Commercial), and CM (Light Industrial and Commercial Service)	65	60
M (Industrial Service and Manufacturing)	70	70

Source: La Mesa Municipal Code Section 10.80.040
dBA = A-weighted decibel; L_{EQ} = one-hour average sound level

The project includes a Specific Plan that outlines a development concept for multi-family housing on the project site. The development intensity of proposed multi-family in-fill development does not fit into the existing land use zoning categories. For the purposes of this analysis, the closest equivalent zoning category was used for the proposed project, which would be Multiple Unit Residential (R3).

The zoning designations for adjoining properties to the south include Urban Residential (R1) and Multiple Unit Residential (R3). The zoning designation for the adjoining properties to the west and east is Light Industrial and Commercial Service (CM). Adjoining property to the south consists of Alvarado Road right-of-way, which is not assigned a zone classification.

Construction Noise

Municipal Code Section 10.80.100 regulates construction noise, and states that it is unlawful for any person within a residential zone or CN (neighborhood commercial) zone, or within 500 feet of these zones, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction-type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day or on Sundays unless a special permit authorizing the activity has been duly obtained from the chief building official.

4.9.3 Methodology and Assumptions

Noise Modeling

Noise level predictions and contour mapping were developed using noise modeling software, SoundPlan Essential (SoundPLAN), version 4.1. SoundPLAN calculates noise propagation based on algorithms and reference levels published by various government agencies, such as the FTA, Federal Highway Administration (FHWA), and the International Standards Organization. The model uses various input parameters, such as distances between sources, barriers, and receivers; and shielding provided by intervening terrain, barriers, and structures. Receivers, sources, and barriers were input into the model using three-dimensional coordinates. The model outputs include noise level contours and noise levels at specific receivers. In all cases, receivers were modeled at five feet above ground or floor elevation, which represents the average height of the human ear.

Construction Noise

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, building construction, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the soils from excavation. Construction equipment with a diesel engine typically generates maximum noise levels from 80 to 90 dBA L_{EQ} at a distance of 50 feet (FTA 2018). Table 4.9-5, *Typical Construction Equipment Noise Levels*, summarizes typical construction equipment noise levels.

Table 4.9-5
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Typical Noise Level [dBA at 50 feet from source]
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane, Derrick	88
Dozer	85
Grader	85
Jack Hammer	88
Loader	85
Paver	89
Pump	76
Roller	74
Scraper	89
Truck	88

Source: RECON 2018b
dBA = A-weighted decibel

During excavation, grading, and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for non-equipment tasks. Although maximum noise levels may be 85 to 90 dBA at a distance of 50 feet during most construction activities, hourly average noise levels from the grading phase of construction would be 82 dBA L_{EQ} at

50 feet from the center of construction activity when assessing the loudest pieces of equipment working simultaneously. Noise propagation was modeled based on ISO 9613-2–Acoustics, Attenuation of Sound During Propagation Outdoors.

Vehicle Traffic Noise

Noise generated by future traffic was modeled using FHWA's Traffic Noise Model algorithms and reference levels. The model uses various input parameters, such as projected hourly average traffic rates; vehicle mix, distribution, and speed; roadway lengths and gradients; distances between sources, barriers, and receivers; and shielding provided by intervening terrain, barriers, and structures. Receivers, roadways, and barriers were input into the model using three-dimensional coordinates. The locations of future buildings were obtained from project drawings.

The main source of traffic noise at the project site is vehicle traffic on I-8. For the purpose of the future traffic noise compatibility analysis, the noisiest condition is represented as the maximum level of service (LOS) C/minimum LOS D traffic volume. This condition represents a condition where the maximum number of vehicles are using the roadway at the maximum speed. LOS A and B categories allow full travel speed but do not have as many vehicles, while LOS E and F have a greater number of vehicles, but due to the traffic volume travel at reduced speeds, thus generating less noise. Eastbound I-8 has four mainline lanes and one auxiliary lane, and westbound I-8 has four mainline lanes. Using a capacity of 1,800 vehicles per lane per hour for mainlines and 1,200 vehicles per hour for auxiliary lines, it was calculated that I-8 has a capacity of 15,600 vehicles per hour. The maximum LOS C/minimum LOS D volume is 80 percent of the total capacity, or 12,480 vehicles per hour.

Additional traffic noise would be generated by Alvarado Road. Based on SANDAG Traffic Forecast Information Center data, Alvarado Road has a future year 2035 annual average daily traffic (ADT) volume of 6,300 vehicles and a speed limit of 35 mph (SANDAG 2013a). Peak hour traffic volumes on I-8 were modeled as 10 percent of the total ADT.

The vehicle classification mix for I-8 was obtained from Caltrans truck counts. Based on these truck counts, I-8 carries 96.8 percent automobiles, 2.0 percent medium trucks, and 1.2 percent heavy trucks (Caltrans 2015). Truck counts are not available for local roadways; Alvarado Road was also modeled with the same vehicle classification mix as I-8.

Trolley Noise

The MTS Green Line trolley corridor is located south of the project site, adjacent to the south side of Alvarado Creek. Noise generated by the trolley was modeled using the SoundPLAN program. SoundPLAN calculates trolley noise levels based on trolley speed, length, and the number of pass-bys that occur during the daytime, evening, and nighttime hours. The trolleys were modeled at a speed of 30 mph. This speed is based on the distances between trolley stations and the average timing between stations obtained from published trolley schedules. Adjacent to the project site, there are 96 daytime pass-bys, 18 evening pass-bys, and 23 nighttime pass-bys on weekdays. There are fewer trolley pass-bys on Saturdays and Sundays, therefore, the conservative weekday scenario was modeled.

On-site Generated Noise

The noise sources on the project site after completion of construction are anticipated to be those that would be typical of a multi-family residential development, such as vehicles arriving and leaving,

children at play, and landscape maintenance machinery. None of these noise sources is anticipated result in a substantial permanent increase in existing noise levels and thus were not modeled.

The project would include heating, ventilation, and air conditioning (HVAC) units with a roof-mounted condenser unit for each dwelling unit. It is not known at this time which manufacturer, brand, or model of unit or units would be selected for use in the project. For the purposes of this analysis, to determine what general noise levels the HVAC units would generate, it was assumed that the rooftop units would be similar to a five-ton Carrier 25HHA4 units with a sound power level of 72 dBA. Roof-mounted condenser units would be clustered on the roof; with each condenser unit array having between 6 and 52 units (most commonly 8 units per array). Each condenser unit array was modeled as a point source 0.5 meter above the rooftop height with a composite sound power level between 79.8 and 89.3 dBA, depending on the number of units in the array. Rooftop features such as parapet walls typically provide noise attenuation. As the height and orientation of rooftop features has not been finalized, all rooftops were conservatively modeled as flat, with no features to obstruct noise propagation. For a conservative analysis, it was assumed that the air handling units would be continuously operated at maximum capacity.

Trolley Vibration

Analysis of vibration impacts associated with trolley operations on the adjacent MTS Green Line trolley corridor to future residences follows the guidance provided in the FTA's Transit Noise and Vibration Impact Assessment document (FTA 2018). The analysis follows the general assessment procedure outlined in the document. The general level of assessment uses generalized data to develop a curve of vibration level as a function of distance from the trolley tracks. The vibration levels at specific buildings are estimated and adjustments are applied to account for factors such as track support system, vehicle speed, type of building, and track and wheel condition. The FTA has developed base curves for three standard transportation systems: locomotive-powered passenger or freight trains, rapid transit or light rail vehicles, and rubber-tired vehicles.

Typical ground-surface vibration levels calculated by the FTA assume equipment is in good condition and travels at speeds of 50 mph for the rail systems (locomotive freight and rapid transit or light rail vehicles) and 30 mph for buses (rubber-tired vehicles). The levels of groundborne vibration and noise vary approximately as 20 times the logarithm of speed. This means that doubling, or halving, train speed would increase, or decrease, the vibration levels approximately six decibels. As discussed in Section 4.3, trolleys (light rail vehicles) were modeled at 30 mph in the vicinity of the project. Thus, to determine the vibration level at the project site, the FTA generalized ground surface vibration curves were used and then adjusted for speed.

Construction-related Vibration

Analysis of construction-related vibration impacts to existing and future residents was based on the guidance provided in the FTA's Transit Noise and Vibration Impact Assessment document (FTA 2018). Construction equipment vibration levels and reference distances are based on those provided in the FTA guidance. Vibration levels at specific properties were calculated using the annoyance assessment formula contained the FTA guidance.

4.9.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant noise impact would occur if implementation of the proposed project would result in any of the following:

1. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

2. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

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

4.9.5 Impact Analysis

4.9.5.1 Noise Standards

Threshold 1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise

Noise associated with the grading, building, and paving for the project would potentially result in short-term impacts to surrounding properties. Nearby residential developments include the La Cuesta Apartments, Colony Mobile Plaza, Comanche Hills Apartments, Fleetwood Apartment Homes, and single-family residences located south of the project site (across Alvarado Creek and the MTS Green Line trolley corridor). Additionally, a motel (Motel 6) is located approximately 700 feet to the east of the project site.

A car dealership is located directly east of the project site, and the 70th Street Trolley Station is immediately west of the site; however, these uses are not considered noise sensitive. Additional residential uses are located north of the project site across I-8 but construction noise would not be anticipated to exceed ambient traffic noise at these residences due to vehicle traffic noise from I-8.

A variety of noise-generating equipment would be used during construction of the project, such as excavators, backhoes, front-end loaders, and concrete saws, along with others. Although maximum noise levels may be 85 to 90 dBA at a distance of 50 feet during most construction activities, hourly average noise levels would be lower when taking into account the equipment usage factors. The loudest activities of construction would occur during the grading/excavation phase and would include dozers, loaders, and excavators. Construction noise levels were calculated assuming up to nine pieces of heavy equipment being active simultaneously.

Construction noise is considered a point source and would attenuate at approximately 6 dBA for every doubling of distance. To reflect the nature of grading and construction activities, equipment was

modeled as an area source distributed over the project footprint. The total sound energy of the area source was modeled with all pieces of equipment operating simultaneously. Noise levels were modeled at a series of 12 receivers located at the adjacent property lines. The results are summarized in Table 4.9-6, *Modeled Construction Noise Levels*. Modeled receiver locations and construction noise contours are shown in Figure 4.9-2, *Construction Noise Receiver Locations and Contours*.

Table 4.9-6
MODELED CONSTRUCTION NOISE LEVELS

Receiver Number	Receiver Description	Noise Level (dBA L_{EQ})
1	La Cuesta Apartments	64
2	5107 73rd Street Units	64
3	North end of Keeney Street	65
4	5084 Keeney Street	62
5	5061 Keeney Street	66
6	Colony Mobile Plaza	64
7	Colony Mobile Plaza	64
8	Colony Mobile Plaza	64
9	Colony Mobile Plaza	61
10	Comanche Hills Apartments	66
11	Comanche Hills Apartments	68
12	7570 Saranac Avenue	61

Source: RECON 2018b
dBA = A-weighted decibel; L_{EQ} = one-hour average sound level

As shown, construction noise levels at nearby residential properties would range from 61 to 68 dBA L_{EQ}. Additionally, the project could be developed in two phases, with proposed Buildings 1, 2, 3, as well as Alvarado Creek and public improvements occurring in Phase 1 and Building 4 occurring in Phase 2. In this event, the portion of the RV resort east of Alvarado Creek would remain in its existing condition during Phase 1 construction. People staying at the RV resort would be exposed to construction noise levels generated on the adjacent area during Phase 1 construction. If Phase 2 construction occurs after Phase 1 is constructed and buildings are occupied, then on-site residents of Buildings 1, 2, and 3 would potentially be exposed to construction noise levels from Phase 2 construction activities.

Although these receptors would likely be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not be considered adverse. Construction noise levels may be disruptive to nearby and on-site residences (existing and future based on development phases) and motel customers during the allowable daytime construction hours of operation. However, the City's daytime noise limits (as identified in Table 4.9-4) do not apply to construction equipment. Rather, the City restricts the hours of operation of construction equipment to the hours considered least disturbing to residents. Construction activities associated with the proposed project would generally occur on weekdays between the hours of 7:00 a.m. and 5:00 p.m., which is within the limits specified for construction in Section 10.80.100 of the municipal code. Because construction would comply with the applicable regulation for construction noise, temporary increases in noise levels from construction activities would be less than significant.

Transportation Noise

On-site Transportation Noise

The main source of noise at the project site is vehicle traffic on I-8 and Alvarado Road. Additional noise is generated by trolley traffic on the adjacent MTS Green Line trolley corridor.

On-site traffic noise contours were developed using the SoundPLAN program. Noise level contours were modeled at the ground-floor level. These contours account for shielding provided by proposed buildings, topography, and proposed grading. Future vehicle traffic noise contours are shown in Figure 4.9-3, *Future Vehicle Traffic Noise Contours*. As shown, first-floor exterior noise levels are projected to range from approximately 60 to 75 CNEL across the project site.

To refine the noise analysis and determine noise levels at proposed on-site outdoor use areas (patio above café, podium level courtyards, and top-floor sky decks) and building façades, exterior noise levels were calculated at a series of receiver locations throughout the project site. No specific receiver locations were modeled for the concrete parking garage podiums (one story for Building 1 and three stories for Buildings 2, 3, and 4) because they would not include noise-sensitive areas. Modeled receiver locations are shown in Figure 4.9-3.

Daytime noise contours due to trolley operations were developed using the SoundPLAN program. Noise level contours were modeled at the first-floor level and account for shielding provided by proposed buildings, topography, and proposed grading. Future trolley noise contours are shown in Figure 4.9-4, *Future Trolley Noise Contours*. Trolley noise levels were also modeled at the same 41 specific receiver locations as for vehicle traffic. Trolley noise levels are projected to be 60 CNEL or less at all modeled receivers.

Vehicle traffic and trolley noise levels were summed to calculate combined transportation noise levels. Table 4.9-7, *Transportation Noise Levels without Noise Reduction Features*, summarizes the combined vehicle traffic and trolley noise levels at the 41 modeled receivers without incorporation of any noise reduction features.

Table 4.9-7
TRANSPORTATION NOISE LEVELS WITHOUT NOISE REDUCTION FEATURES

Receiver	Description	Exterior Noise Level (CNEL) Second Floor	Exterior Noise Level (CNEL) Third Floor	Exterior Noise Level (CNEL) Fourth Floor	Exterior Noise Level (CNEL) Fifth Floor	Exterior Noise Level (CNEL) Sixth Floor	Exterior Noise Level (CNEL) Seventh Floor	Exterior Noise Level (CNEL) Eighth Floor
1-1	Building 1 Patio Above Café	80	--	--	--	--	--	--
1-2	Building 1 Western Sky Deck	--	--	--	--	70	--	--
1-3	Building 1 Eastern Sky Deck	--	--	--	--	75	--	--
1-4	Building 1 Façade North	78	78	78	78	--	--	--
1-5	Building 1 Façade North	79	80	80	79	79	--	--
1-6	Building 1 Façade North	79	80	80	80	79	--	--
1-7	Building 1 Façade North	78	79	79	79	78	--	--
1-8	Building 1 Façade East	71	73	73	73	73	--	--
1-9	Building 1 Façade South	58	58	58	58	58	--	--
1-10	Building 1 Façade South	58	59	59	59	59	--	--
1-11	Building 1 Façade South	72	72	72	72	72	--	--
1-12	Building 1 Façade West	75	75	75	75	--	--	--
2-1	Building 2 Western Sky Deck	--	--	--	--	--	--	68
2-2	Building 2 Podium Courtyard	--	--	39	--	--	--	--
2-3	Building 2 Podium Periphery	--	--	57	--	--	--	--
2-4	Building 2 Façade North	--	--	79	79	79	78	78
2-5	Building 2 Façade North	--	--	79	79	79	79	78
2-6	Building 2 Façade North	--	--	79	79	79	79	78

Table 4.9-7 (cont.)
TRANSPORTATION NOISE LEVELS WITHOUT NOISE REDUCTION FEATURES

Receiver	Description	Exterior Noise Level (CNEL) Second Floor	Exterior Noise Level (CNEL) Third Floor	Exterior Noise Level (CNEL) Fourth Floor	Exterior Noise Level (CNEL) Fifth Floor	Exterior Noise Level (CNEL) Sixth Floor	Exterior Noise Level (CNEL) Seventh Floor	Exterior Noise Level (CNEL) Eighth Floor
2-7	Building 2 Façade East	--	--	62	67	69	70	70
2-8	Building 2 Façade South	--	--	57	58	58	58	58
2-9	Building 2 Façade South	--	--	58	58	58	58	58
3-1	Building 3 Podium Courtyard	--	--	58	--	--	--	--
3-2	Building 3 Podium Periphery	--	--	67	--	--	--	--
3-3	Building 3 Western Sky Deck	--	--	--	--	--	--	67
3-4	Building 3 Eastern Sky Deck	--	--	--	--	--	--	71
3-5	Building 3 Façade West	--	--	64	68	70	69	70
3-6	Building 3 Façade North	--	--	79	79	79	79	78
3-7	Building 3 Façade North	--	--	79	79	79	78	78
3-8	Building 3 Façade Northeast	--	--	75	75	75	75	75
3-9	Building 3 Façade East	--	--	57	58	57	56	56
3-10	Building 3 Façade South	--	--	57	57	58	58	57
4-1	Building 4 Podium Courtyard	--	--	38	--	--	--	--
4-2	Building 4 Podium Periphery	--	--	68	--	--	--	--
4-3	Building 4 Western Sky Deck	--	--	--	--	--	--	70

Table 4.9-7 (cont.)
TRANSPORTATION NOISE LEVELS WITHOUT NOISE REDUCTION FEATURES

Receiver	Description	Exterior Noise Level (CNEL) Second Floor	Exterior Noise Level (CNEL) Third Floor	Exterior Noise Level (CNEL) Fourth Floor	Exterior Noise Level (CNEL) Fifth Floor	Exterior Noise Level (CNEL) Sixth Floor	Exterior Noise Level (CNEL) Seventh Floor	Exterior Noise Level (CNEL) Eighth Floor
4-4	Building 4 Eastern Sky Deck	--	--	--	--	--	--	70
4-5	Building 4 Façade Northwest	--	--	73	73	73	73	73
4-6	Building 4 Façade North	--	--	76	76	76	76	76
4-7	Building 4 Façade East	--	--	68	68	69	69	69
4-8	Building 4 Façade South	--	--	58	58	58	58	58
4-9	Building 4 Façade South	--	--	60	60	59	59	59
4-10	Building 4 Façade South	--	--	58	59	59	59	58

Source: RECON 2018b
"--" denotes where the receiver does not exist on a floor (e.g., sky decks only exist on the top floor)
CNEL = Community Noise Equivalent Level

Pursuant to the noise – land use compatibility guidelines contained in the General Plan Noise Element, for multi-family residential uses, exterior noise levels up to 65 CNEL are considered normally acceptable. Noise levels up to 70 CNEL are considered conditionally acceptable provided an analysis of noise reduction requirements is conducted and noise insulation features are included in the design, which normally can be achieved with closed windows and air conditioning units. Exterior noise levels between 70 and 75 CNEL are considered normally unacceptable, which means that new development must conduct a detailed analysis of noise reduction requirements and needed noise insulation features must be included in the design. Exterior noise levels in excess of 75 CNEL are considered clearly unacceptable and new development should generally not be undertaken.

Each residential unit within the proposed buildings would include an HVAC system. Additionally, standard wood-frame construction typically achieves an exterior-to-interior noise reduction of 25 dBA (FHWA 2011). Exterior noise levels at the proposed building façades would need to be 70 CNEL or less (with closed windows) to achieve the CCR Title 24 interior noise standard of 45 CNEL in habitable areas of residences. Therefore, the project would be considered consistent with the Nose Element noise – land use compatibility guidelines if noise exposure levels at the building façades would not exceed 70 CNEL.

Furthermore, Noise Element Policy NS-1.1-3 clarifies that the noise compatibility standards also require that new developments minimize the effects of noise by incorporating noise reduction features to

reduce exterior noise levels at multi-family outdoor use areas to 65 CNEL or less (i.e., to within the normally acceptable range of the noise compatibility guidelines).

As shown in Table 4.9-7, exterior noise levels would exceed 65 CNEL at some of the proposed outdoor use areas and 70 CNEL along some proposed building façades without the incorporation of any noise reduction design features, including:

Building 1
- Patio above café (80 CNEL)
- Eastern sky deck (75 CNEL)
- Northern, western, eastern, and western half of southern building façades (71 to 80 CNEL)

Building 2
- Western sky deck (68 CNEL)
- Northern building façade(78 to 79 CNEL)

Building 3
- Podium periphery (67 CNEL)
- Western sky deck (67 CNEL)
- Eastern sky deck (71 CNEL)
- Northern and northeastern building façades (75 to 79 CNEL)

Building 4
- Podium periphery (68 CNEL)
- Western sky deck (70 CNEL)
- Eastern sky deck (70 CNEL)
- Northern and northwestern building façades (73 to 76 CNEL)

As set forth in the Noise Element, where exterior noise levels are in the conditionally acceptable or normally unacceptable ranges, “a detailed analysis of noise reduction requirements must be made and needed noise insulation features must be included in the design” (City 2012a). A project-specific noise analysis was conducted that identified noise reduction design features to achieve consistency with the noise compatibility standards (RECON 2018b). Identified design features include incorporation of sound-attenuating architectural treatments on exterior walls along the northern, western, eastern, and western half of southern façades of Building 1; the northern façade of Building 2; the northern and northeastern façade of Building 3; and the northern and northwestern façade of Building 4. These walls would include components such as windows, doors, finishes (e.g., stucco, wood siding), and/or wall assemblies (i.e., framing) with architectural treatments that would achieve a composite sound transmission class rating of 35.

Additionally, the project would incorporate sound walls into the design at various locations to reduce exterior noise levels at outdoor use areas. The sound walls would consist of solid masonry, acrylic glass, or a combination thereof and would include 10- to 12-foot-high walls around the patio above the café in Building 1, 6-foot-high walls along the eastern sky deck in Building 1, and 5-foot-high walls along the other sky decks and podium periphery identified above.

With these noise reduction design features that have been incorporated into the project design, interior noise levels at all habitable rooms would be reduced to levels that comply with the City interior noise

compatibility standards of 45 CNEL or less. The incorporation of the identified noise walls would reduce noise levels at all outdoor use areas that would comply with the City's exterior noise compatibility standards of 65 CNEL or less. Therefore, impacts related to on-site transportation noise would be less than significant.

Off-site Transportation Noise

The project site is accessed exclusively via Alvarado Road and thus project-generated traffic would contribute to increased traffic noise levels along Alvarado Road. Nearby NSLUs in the project area include multi-family residences (La Cuesta Apartments, Comanche Hills Apartments, Fleetwood Apartment Homes), a mobile home community, and single-family residences located between 0.03 and 0.07 mile south of the project site (across Alvarado Creek and the MTS Green Line); a motel approximately 0.13 mile east of the project site, and an educational facility (National University campus) approximately 0.2 mile southeast of the site. Traffic volumes along Alvarado Road would essentially double with implementation of the project based on existing and forecasted daily traffic volumes (Kimley Horn 2020). A doubling of traffic volumes on a given roadway typically results in a three dBA increase in ambient noise levels. However, ambient noise levels along Alvarado Road are primarily attributable to vehicle traffic on I-8 rather than vehicle traffic on Alvarado Road itself. Vehicle traffic on I-8 would be anticipated to remain the dominant traffic noise source due to the relative volume and speed of vehicle traffic (vehicles on I-8 typically travel at 65 mph and the speed limit for Alvarado Road is 35 mph). Although the project would contribute to an increase in traffic volumes along Alvarado Road, ambient noise increases would be anticipated to be less than three dBA. Therefore, the project would not result in a substantial increase in ambient noise levels in the vicinity of the project such that noise levels at nearby NSLUs would exceed applicable noise standards. Impacts associated with off-site transportation noise would be less than significant.

On-site Generated Noise

Noise sources on the project site following construction are anticipated to be typical of any residential complex, such as vehicles arriving and leaving, children at play, and landscape maintenance machinery. None of these on-site noise sources is anticipated to exceed the La Mesa Municipal Code noise limits at adjacent properties or result in a substantial permanent increase in existing noise levels. However, HVAC equipment with a roof-mounted condenser unit for each residence would be placed on each proposed building. These on-site generated noise sources were modeled to calculate noise levels at 12 receivers located adjacent to the southern property line.

The location of each condenser unit array was obtained from the project roof plans. Noise generated by HVAC equipment would occur on an intermittent basis, primarily during the day and evening hours and less frequently during the nighttime hours. For a conservative analysis, it was assumed that the HVAC units would operate continuously. The location of the modeled receivers and HVAC units are shown in Figure 4.9-5, *On-site Generated Future Noise Contours*. Future projected HVAC noise levels at adjacent residential properties are presented in Table 4.9-8, *HVAC Noise Levels at Adjacent Residential Properties*.

Table 4.9-8
HVAC NOISE LEVELS AT ADJACENT RESIDENTIAL PROPERTIES

Receiver	Receiver Description	Noise Level [dBA L_{EQ}]	Noise Level Limit (dBA L_{EQ}) Daytime	Noise Level Limit (dBA L_{EQ}) Nighttime
1	La Cuesta Apartments	39	60	55
2	5107 73rd Street Units	40	60	55
3	North end of Keeney Street	41	55	50
4	5084 Keeney Street	44	55	50
5	5061 Keeney Street	42	60	55
6	Colony Mobile Plaza	45	55	50
7	Colony Mobile Plaza	45	55	50
8	Colony Mobile Plaza	45	55	50
9	Colony Mobile Plaza	44	55	50
10	Comanche Hills Apartments	41	60	55
11	Comanche Hills Apartments	39	60	55
12	7570 Saranac Avenue	41	55	50

Source: RECON 2018b

As shown, on-site generated noise levels from HVAC equipment would range from 39 to 45 dBA L_{EQ} and would not exceed the noise limits set forth in LA Mesa Municipal Code Section 10.80.040 at adjacent properties.

Additionally, the project could be developed in two phases: Phase 1 would include proposed Buildings 1, 2, 3, as well as the Alvarado Creek and public improvements; Buildings 1, and Phase 2 would include Building 4. If Phase 2 occurs after Phase 1 is constructed and buildings are occupied, there could be an interim period where Phase 1 and the remaining portion of the RV resort are both in operation. In this case, people staying at the RV resort could potentially be exposed to noise levels from HVAC equipment on Buildings 1, 2, and 3. The project site currently has a commercial zone classification (CM) and thus, applicable municipal code noise limits are 65 dBA L_{EQ} during the daytime and 60 dBA L_{EQ} during the nighttime. It is anticipated that noise levels generated from on-site HVAC equipment at the RV resort would be similar to, but slightly higher than the calculated levels at adjacent residences above (in Table 4.9-8) because some of the RV spaces are closer to the HVAC equipment than the model receivers. Given that the upper range above is 45 dBA L_{EQ}, on-site generated noise levels at the RV resort would not be expected to exceed 60 dBA L_{EQ}. Therefore, impacts related to on-site generated noise would be less than significant.

4.9.5.2 Vibration

Threshold 2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

The main concern associated with groundborne vibration from typical development projects is annoyance; however, vibration-sensitive operations and equipment, such as those in hospitals and laboratories, can be disrupted at much lower levels than would typically affect other uses. In extreme cases, groundborne vibration can cause damage to buildings, particularly those that are old or otherwise fragile. In addition, excessive levels of groundborne vibration of either a regular or an intermittent nature can result in annoyance to residential uses or schools.

Common sources of groundborne vibration are trains and construction activities such as blasting, pile-driving, and heavy earth-moving equipment. Impacts related to the potential exposure of vibration-sensitive land uses to excessive groundborne vibration levels from these sources are assessed based on screening distances determined by the FTA and Caltrans:

- Vibration-sensitive land uses within 600 feet of a railroad may be exposed to disruptive vibration (FTA 2018)
- Major construction activity within 200 feet and pile driving within 600 feet may be potentially disruptive to vibration-sensitive operations (Caltrans 2002)

Trolley Vibration

The project site is located adjacent to the MTS Green Line trolley corridor, and the proposed buildings would be as close as approximately 65 feet from the tracks. Because the proposed residential uses are within the 600-foot screening distance for railroads, vibration levels were calculated to determine if the proposed on-site buildings would be subject to excessive vibration due to trolley pass-bys. Vibration levels at the project site were determined by the FTA generalized ground surface vibration curves (based on a reference speed of 50 mph) and then adjusted for speed based on project area trolley characteristics.

The closest proposed building façade, the southern façade of Building 4, would be approximately 65 feet from the railroad centerline. Based on the FTA vibration curves, trolleys traveling at 50 mph would generate a vibration level of 71 VdB at a distance of 65 feet. Adjusting these levels for speed results in an estimated vibration level of 67 VdB. As shown in Table 4.9-2, the applicable groundborne vibration impact criterion for Category 2 land uses (residential uses) is 72 VdB for frequent events, which is defined as more than 70 vibration events of the same source per day. Trolley vibration levels of 67 VdB would not exceed the impact criteria of 72 VdB and thus, project residents would not be exposed to excessive groundborne vibration or noise levels. Vibration impacts to on-site residents associated with trolley pass-bys would be less than significant.

Construction-related Vibration

The project consists of a residential development with some limited resident-serving commercial uses. This type of development does not include uses or equipment that generate excessive groundborne vibration. Construction activities however would involve equipment that creates groundborne vibration. Thus, the following analysis evaluates potential annoyance due to construction-related vibration at nearby vibration-sensitive land uses.

Vibration-sensitive land uses in the project area include nearby single- and multi-family residences, a motel, and an educational facility. No hospitals, laboratories, or research facilities that could use vibration-sensitive equipment occur in the project vicinity. The closest residences range from approximately 150 to 400 feet away from the project site to the south. The motel is approximately 700 feet to the east, and the educational facility is approximately 1,000 feet to the northeast. Some of the residences to the south are within the screening distances for major construction activities and thus could be subject to intermittent groundborne vibration during project construction, particularly during demolition, site clearing, and grading.

Construction equipment utilized during the construction phases of the project that would generate the highest levels of construction-related vibration would be a bulldozer, which creates a vibration level of 87 VdB at a reference distance of 25 feet (FTA 2018). At a distance of 150 feet, which is the approximate distance to the closest residential use, this level would be expected to reduce to 63.7 VdB (applying the FTA annoyance assessment equation). Based on the vibration impact criteria in Table 4.9-2, the applicable vibration impact level for construction activities at the nearby residential land uses is 80 VdB for infrequent events. Normal construction activities are considered infrequent events with the exception of vibratory pile driving which are frequent events (due to the potential duration of the activity); however, no vibratory pile driving would be required for project construction. As construction vibration levels at the closest residential use would not exceed impact criteria of 80 VdB, project construction would not generate excessive groundborne vibration or noise levels.

Additionally, the project could be developed in two phases, with proposed Buildings 1, 2, 3, as well as Alvarado Creek and public improvements occurring in Phase 1, and Building 4 occurring in Phase 2. In this event, the portion of the RV resort east of Alvarado Creek would remain in its existing condition during Phase 1 construction. People staying at the RV resort would be exposed to construction-related groundborne vibration levels generated on the adjacent area during Phase 1 construction, particularly during site preparation and grading (when the heaviest construction equipment operates). If Phase 2 construction occurs after Phase 1 is constructed and buildings are occupied, then on-site residents of Buildings 1, 2, and 3 would potentially be exposed to construction-related vibration levels from Phase 2 construction activities.

During Phase 1 construction, the closest RV spaces from the construction area would range from 30 to 45 feet. At a distance of 30 feet, groundborne vibration levels would be between approximately 79 and 85 VdB, which would exceed the vibration impact criteria of 80 VdB for infrequent events. This calculation is based on a conservation assumption of a bulldozer operating near the eastern end of the construction area. However, it should be noted that vibration from construction equipment is a source that continually moves across the site, so the exposure would not be a constant source at any one location. Vibration levels at RV spaces at distances of 43 feet or greater from the source (i.e., specific construction equipment), which would be most of the spaces in the RV resort, would not exceed 80 VdB. Furthermore, vibration events would be short-term and infrequent during initial site clearing and grading activities and would occur during allowable day time hours (per Municipal Code Section 10.80.100). Thus, while some people staying at the RV resort would potentially be exposed to construction-related vibration during Phase 1 construction that could be considered an annoyance, Phase 1 construction activities would not generate excessive groundborne vibration or noise levels.

During Phase 2 construction, the closest on-site building, Building 3, would be approximately 50 feet from the construction area. At a distance of 50 feet, groundborne vibration levels would be approximately 78 VdB, which would not exceed the vibration impact criteria of 80 VdB for infrequent events. As a result, Phase 2 construction activities would not generate excessive groundborne vibration or noise levels.

Based on the analysis above, the project would not generate excessive groundborne vibration or groundborne noise levels during construction. Therefore, construction-related vibration impacts would be less than significant.

4.9.5.3 Airport Noise

Threshold 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No private airstrips or public airports are located in the project vicinity. The closest public airport to the project site is Gillespie Field, which is approximately five miles to the northeast in the City of El Cajon. The next closest airports include Montgomery-Gibbs Executive Airport (approximately seven miles to the northwest in the City of San Diego) and MCAS Miramar (approximately eight miles to the northwest in the City of San Diego). The project site is not located within the 60 dBA CNEL noise contour of Gillespie Field, Montgomery-Gibbs Executive Airport, or MCAS Miramar (SDCRAA 2010a, 2010b, and 2008). The Grossmont Hospital heliport is located approximately 1.8 miles northeast of the project site in the City of La Mesa. The heliport is privately owned and operated by the Grossmont Hospital District. Five to ten flights are normally flown to the hospital every month, typically during standard business hours (City 2012a). This relatively low number of flights is not enough to generate noise levels above 60 CNEL at the project site. Therefore, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels generated by airports. Impacts would be less than significant.

4.9.6 Mitigation Measures

4.9.6.1 Noise Standards

No significant noise impacts related to substantial temporary or permanent increases in ambient noise levels in excess of applicable noise standards would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.9.6.2 Vibration

No significant impacts related to the generation of excessive groundborne vibration or groundborne noise levels would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.9.6.3 Airport Noise

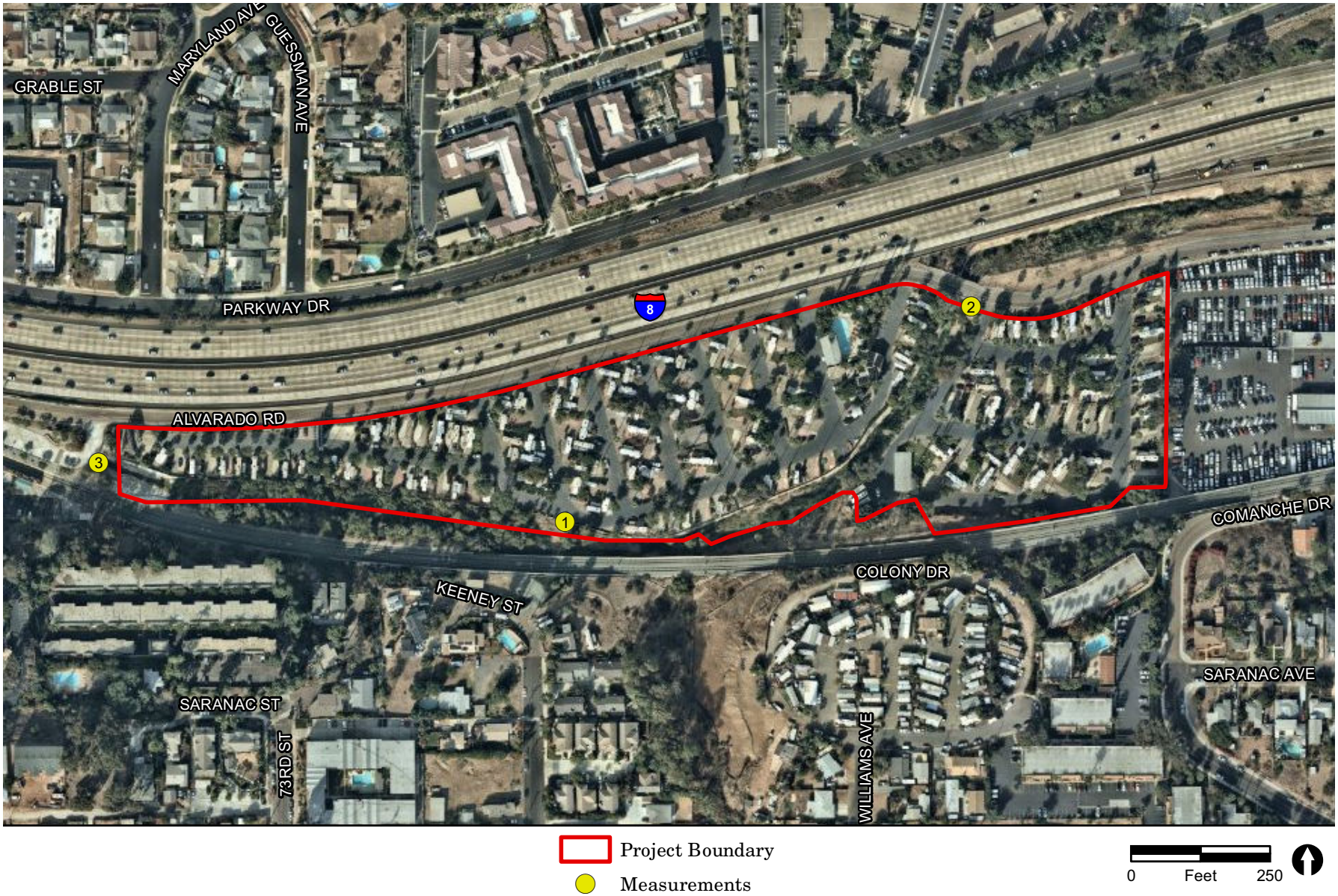
No significant impacts related to airport noise would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.9.7 Significance Determination

The significance of noise impacts before and after mitigation is summarized in Table 4.9-9, *Significance Determination Summary of Noise Impacts*. Implementation of the proposed project would not result in any significant noise impacts. Impacts related to noise standards, vibration, and airport noise would be less than significant, and no mitigation is required.

Table 4.9-9
SIGNIFICANCE DETERMINATION SUMMARY OF NOISE IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Noise Standards	Less than significant	None required	Less than significant
Vibration	Less than significant	None required	Less than significant
Airport Noise	Less than significant	None required	Less than significant



Source: RECON 2018

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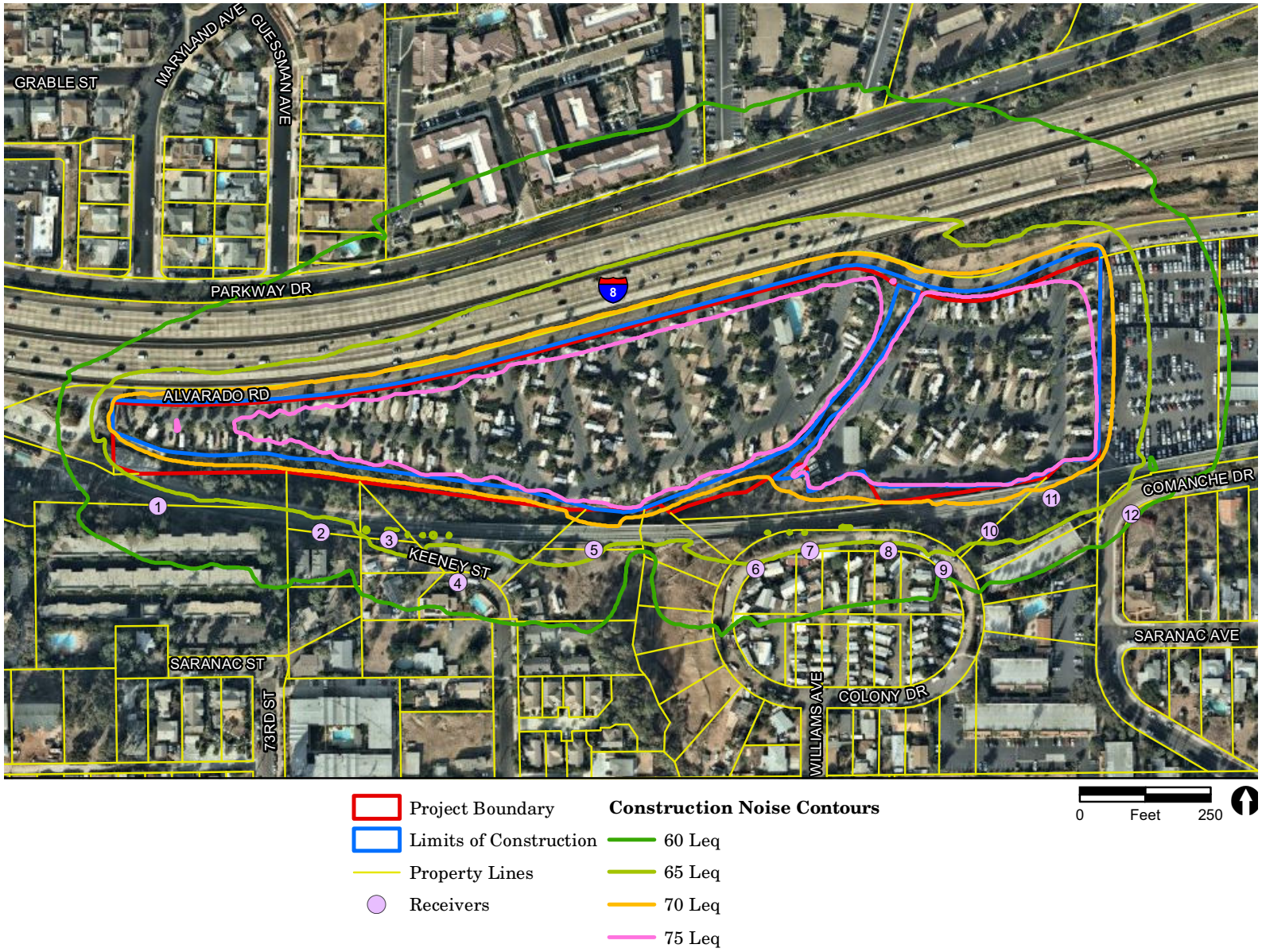
Ambient Noise Measurement Locations

Figure 4.9-1



Source: RECON 2018

i:\PROJECTS\L\LAM\LAM-08_AlvaradoSP\Map\EIR\Fig4.9-2_ConstructionNoise.indd LAM-08 5/7/2020 - RK

HELIX Environmental Planning

Construction Noise Receivers and Contours

Figure 4.9-2

i:\PROJECTS\L\LAM\LAM-08_AlvaradoSP\Map\EIR\Fig4.9-3_FutureVehicleNoise.indd LAM-08 5/7/2020 - RK

Source: RECON 2018

HELIX Environmental Planning

Future Vehicle Noise Contours

Figure 4.9-3

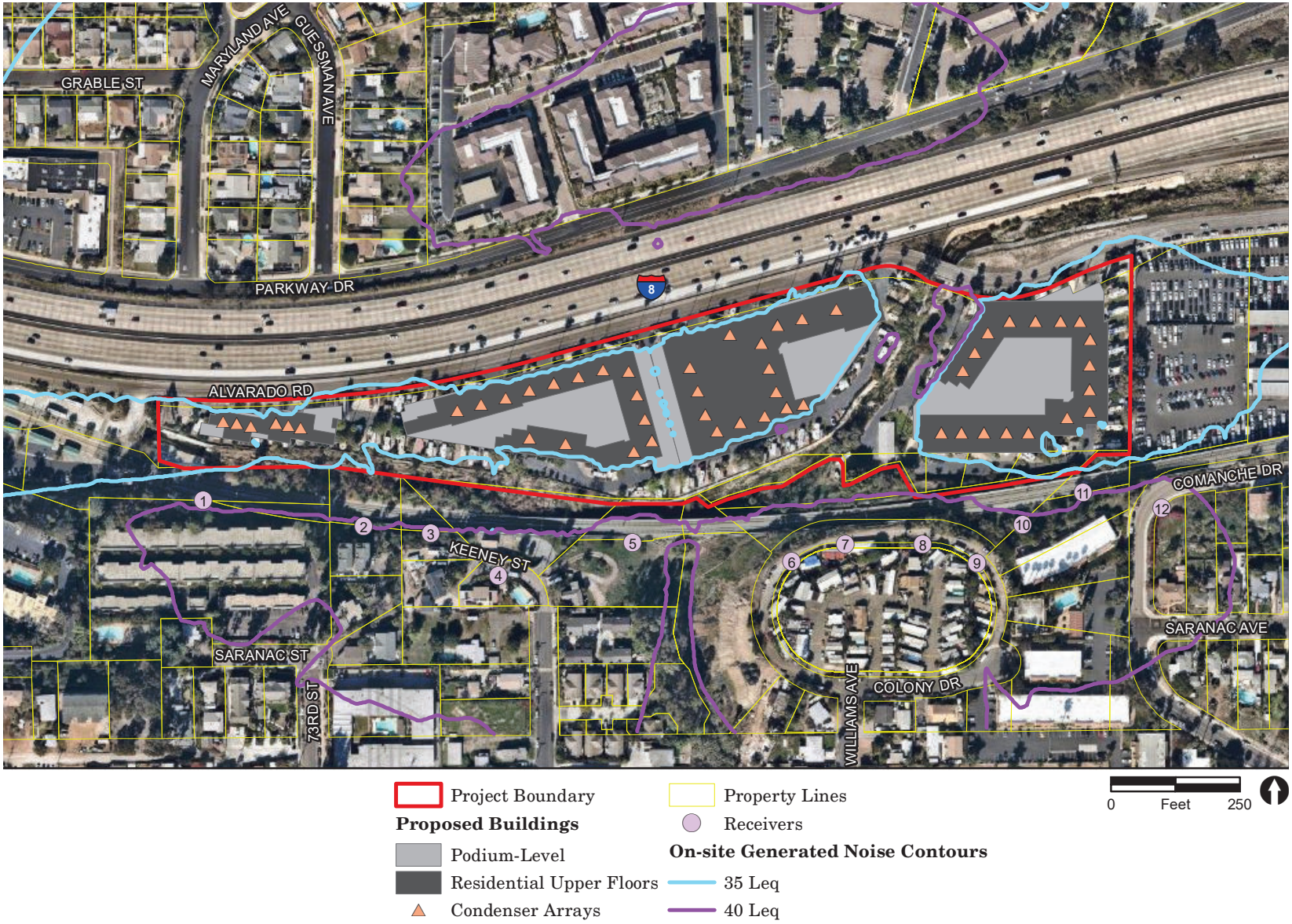
i:\PROJECTS\L\LAM\LAM-08_AlvaradoSP\Map\EIR\Fig4.9-4_FutureTrolleyNoise.indd LAM-08 5/7/2020 - RK

Source: RECON 2018

HELIX Environmental Planning

Future Trolley Noise Contours

Figure 4.9-4



i:\PROJECTS\L\LAM\LAM-08_AlvaradoSP\Map\EIR\Fig4.9-5_OnsiteNoise.indd LAM-08 5/7/2020 - RK

Source: RECON 2018

HELIX Environmental Planning

On-site Generated Noise Contours

Figure 4.9-5

4.10 PALEONTOLOGICAL RESOURCES

This section of the EIR evaluates potential impacts associated with paleontological resources resulting from implementation of the proposed project. The following discussion is based, in part, on the Report of Preliminary Geotechnical Investigation (Geotechnical Exploration, Inc. 2004), Interim Report of Site Conditions and Preliminary Opinions (Geotechnical Exploration, Inc. 2018), and Report of Geotechnical Investigation Update (Geotechnical Exploration, Inc. 2019), which are included as Appendix F of this EIR.

4.10.1 Existing Conditions

4.10.1.1 Paleontological Resources

Paleontology is the science dealing with prehistoric plant and non-human animal life. Paleontological resources (or fossils) typically include the buried remains or traces of prehistoric organisms (i.e., animals, plants, and microbes). Fossil remains such as bones, teeth, shells, leaves, and wood, as well as trace fossils such as tracks, trails, burrows, and footprints, are found in geologic units composed of the sediments that originally buried them. The formation of fossils typically involves the rapid burial of plant or animal remains and the formation of casts, molds, or impressions in the associated sediment (which subsequently becomes sedimentary bedrock). Paleontological resources include not only the actual fossil remains, but also the collecting localities and the geologic formations containing those localities.

Fossils are considered important scientific and educational resources because they serve as direct and indirect evidence of prehistoric life and are used to understand the history of life on Earth, the nature of past environments and climates, the membership and structure of ancient ecosystems, and the patterns and processes of organic evolution and extinction. Fossils are also considered to be non-renewable resources because typically the organisms they represent no longer exist.

The potential for fossil remains at a location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are buried. Geologic formations possess a specific paleontological resource potential wherever the formation occurs based on discoveries made elsewhere in that particular formation.

4.10.1.2 Paleontological Resource Sensitivity

Paleontological resource sensitivity of geologic formations is typically rated from zero to high. The sensitivity of the paleontological resource determines the significance of a paleontological impact. Paleontological resource sensitivity ratings, derived from Deméré and Walsh (1993), are briefly defined as follows:

- High Sensitivity – High sensitivity is assigned to geologic formations are known to contain paleontological localities with rare, well-preserved, critical fossil materials. Generally, high-sensitivity formations produce vertebrate fossil remains or are considered to have the potential to produce such remains.

- Moderate Sensitivity – Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved, common elsewhere, or stratigraphically unimportant fossil material. The moderate sensitivity category is also applied to geologic

formations that are judged to have a strong, but often unproven, potential for producing unique fossil remains.

- Low Sensitivity – Low sensitivity is assigned to geologic or surficial formations/materials that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains.

- Zero Sensitivity – Zero sensitivity is assigned to geologic formations that consist of volcanic or plutonic igneous rocks with a molten origin (such as basalt or granite), or artificially and/or mechanically-generated materials (such as fill and topsoil), and do not exhibit any potential for producing fossil remains.

4.10.1.3 Geologic Setting

The project site is located within the coastal plain of San Diego County, which lies at the western edge of the Peninsular Ranges Geomorphic Province of California. Along the coastal plain, crystalline basement rocks of the Jurassic- to Cretaceous-age Santiago Peak Volcanics and the Cretaceous-age Peninsular Ranges Batholith are overlain by a "layer cake" sequence of sedimentary strata of late Cretaceous, Eocene, Oligocene, Miocene, Pliocene, and/or Pleistocene age.

4.10.1.4 Geologic Formations

Knowing the geology of a particular area and the fossil productivity of formations that occur in that area, it is possible to predict where fossils will, or will not, be encountered. The City is located in areas underlain by very old paralic (deposits laid down on the landward side of a coast in shallow fresh water subject to marine invasions resulting in marine and nonmarine sediment interbedding) deposits of Pleistocene-age (approximately 0.5 to 1 million years old) and three middle Eocene-age formations: the Stadium Conglomerate (approximately 44 million years old), Mission Valley Formation (43 million years old), and Pomerado Conglomerate (37 million years old; El Adli 2012, Kennedy and Tan 2005, 2008).

Geologic formations located underlying the project site are identified below, along with associated paleontological resource sensitivity ratings.

- Artificial Fill – Since almost the entire project site has been previously graded and/or excavated during development of the RV resort, surface soils are highly disturbed. The surface of the project site is covered by a relatively shallow layer of artificial fill soils that extend to a depth of two to three feet. The fill consists of a loose to medium density and consists of damp, red-brown to gray-brown, silty, fine to medium and fine to coarse sand with pebbles and cobbles. Artificial fill deposits exhibit zero potential for the occurrence of sensitive paleontological resources.

- Stream Deposits – The fill soils along the southern portion of the site are underlain by stream deposits to an approximate depth of three to nine feet below the present surface grade. The stream deposits consist of a medium dense, wet, tan-gray to orange-brown, fine to coarse sand with abundant cobbles and boulders. River deposits in the County are generally grouped together because there is insufficient stratigraphic data available to differentiate them (Deméré and Walsh 1993). Stream deposits exhibit a low to moderate to high potential for the occurrence of sensitive paleontological resources.

- Stadium Conglomerate Formation – The entire site is underlain by dense cobble conglomerate formational material of the Tertiary Stadium Conglomerate Formation at depths greater than three feet. Stadium Conglomerate exhibits a moderate to high potential for the occurrence of sensitive paleontological resources.

4.10.1.5 Unique Geologic Features

A unique geological feature may be the best example of its kind locally or regionally, illustrate a geologic principle, provide a key piece of geologic information, be the "type locality" of a fossil or formation, or it may have high aesthetic appeal. Unique geologic features may be exposed or created from natural weathering and erosion processes, or from human excavations. These unique geological features provide aesthetic, scientific, educational, or recreational value. There are no known unique geological features located within the City.

4.10.2 Regulatory Setting

4.10.2.1 State

California Environmental Quality Act

CEQA requires lead agencies to consider the potential effects of a project on unique paleontological resources. CEQA requires an assessment of impacts associated with the direct or indirect destruction of unique paleontological resources or sites that are of value to the region or state. Pursuant to Section 15065 of the CEQA Guidelines (CCR Sections 15000–15387), a lead agency must find that a project would have a significant effect on the environment when the project has the potential to eliminate important examples of the major periods of California prehistory, including significant paleontological resources.

4.10.2.2 Local

City of La Mesa Municipal Code

Title 25, Historic Preservation, of the City's Municipal Code implements the goals of the Historic Preservation Element of the City's General Plan. Section 25.01.060 created the Historic Preservation Commission and established their powers and duties. Section 25.03.010 identifies the Historic Landmark and Historic District Designation Criteria. Under Section 25.03.010, a cultural resource may be recommended for designation as a landmark or historic district if it is an archaeological or paleontological site that has the potential of yielding information of scientific value. If designated as a landmark, any alteration or relocation of the resource is prohibited without a Certificate of Appropriateness issued by the City's Historic Preservation Commission of City Council.

4.10.3 Methodology and Assumptions

The identification of underlying geologic formations was based on field testing conducted as part of the Geotechnical Investigation for the project (Geotechnical Exploration, Inc. 2004, 2018, 2019). The field testing consisted of cone penetrometer tests, exploratory trenches, and two supplemental drilling borings within the site, as described in greater detail in Section 4.4.3. Relevant information from the California Department of Conservation and the California Geological Survey, as well as relevant maps and geologic documentation, were also reviewed.

Additionally, relevant information and paleontological resource sensitivity data contained *Paleontological Resources County of San Diego* (Deméré and Walsh 1993) was reviewed.

4.10.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact to paleontological resources would occur if implementation of the proposed project would result in the following:

1. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4.10.5 Impact Analysis

4.10.5.1 Paleontological Resources

Threshold 1: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Because paleontological resources are limited, non-renewable resources of scientific, cultural, and/or educational value, the loss of fossils that could yield information important to prehistory, or that embodies the distinctive characteristics of a type of organism, environment, period of time, or geographic region, would be considered a significant environmental impact. Impacts to paleontological resources primarily entail the destruction of non-renewable paleontological resources and the loss of information associated with such resources. If potentially fossiliferous bedrock is disturbed, the disturbance could result in the destruction of paleontological resources and subsequent loss of information.

Geological formations within the project site include a shallow layer of fill (approximately two to three feet), stream deposits in the southern portion of the site at depths from three to nine feet, and the Stadium Conglomerate Formation underlying the entire site at depths greater than three feet. There is no potential for paleontological resources to exist within the fill material. The stream deposits have a low to moderate potential for resources. The Stadium Conglomerate Formation is assigned a high paleontological resource sensitivity rating. Thus, ground disturbing activities associated with construction of the project have the potential to uncover paleontological resources. In the event that paleontological resources are encountered during construction, such resources could potentially be damaged or destroyed. Therefore, implementation of the proposed project could potentially result in significant impacts to paleontological resources.

There are no unique geologic features known or expected to occur on the project site. Therefore, implementation of the proposed project would not result in impacts to unique geologic features.

4.10.6 Mitigation Measures

Implementation of the proposed project could result in a potentially significant impact to unknown paleontological resources. Implementation of mitigation measure PAL-1 would reduce this impact to below a level of significance.

PAL-1 Paleontological Monitoring. Prior to construction, the owner/permittee shall retain a qualified paleontological monitor. The paleontological monitor shall attend pre-construction meeting(s)

with the construction manager and shall be present during all initial cutting, grading, or excavation of previously undisturbed substratum. If a fossil is encountered, all operations in the area where the fossil was found shall be suspended immediately, the City shall be notified, and a qualified paleontologist shall be retained by the City to evaluate the significance of the find; to salvage, record, clean, and curate significant fossil(s); and to document the find in accordance with current professional paleontological standards. Within 30 days of completion of ground-disturbing activities, either a letter signed by the paleontological monitor stating that no fossils were found or, if fossils were found, a report prepared by the qualified paleontologist documenting the mitigation program shall be submitted to the City.

4.10.7 Significance Determination

The significance of paleontological resources impacts before and after mitigation is summarized in Table 4.10-1, *Significance Determination Summary of Paleontological Resources Impacts*. No impacts related to unique geological features would occur, and no mitigation is required. Implementation of the proposed project, however, would result in potentially significant impacts related to paleontological resources. With implementation of mitigation measure PAL-1, these impacts would be reduced to below a level of significance.

Table 4.10-1
SIGNIFICANCE DETERMINATION SUMMARY OF PALEONTOLOGICAL RESOURCES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Paleontological Resources	Potentially significant	PAL-1	Less than significant

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4.11 PUBLIC FACILITIES AND SERVICES

This section of the EIR evaluates potential impacts to public facilities and services resulting from implementation of the proposed project. Public services are those functions that serve residents on a community-wide basis. These functions include fire protection, police protection, schools, parks, libraries, and other facilities such as recreation centers, community centers, and senior centers.

4.11.1 Existing Conditions

Existing public facilities that serve the project area are described below and their locations are shown on Figure 4.11-1, *Existing Public Facilities*.

4.11.1.1 Fire Protection and Emergency Medical Services

Fire protection services in La Mesa are provided by Heartland Fire and Rescue (Heartland Fire), an organization formed by a joint powers agreement (JPA) that includes the cities of La Mesa, El Cajon, and Lemon Grove. Heartland Fire and Rescue was established in 2010 to provide cooperative fire services for all three cities for a more efficient allocation of services. The JPA gives the participating cities greater flexibility in how these services are utilized by pooling resources and streamlining management procedures within each fire department, thereby enabling these departments to service a larger area.

Heartland Fire includes over 130 staff that serves a population of over 186,000 people and responds to over 22,000 calls for emergency service each year (Heartland Fire 2020). The La Mesa Operations Division is staffed with one Operations Division Chief, one Battalion Chief, 12 fire captains, 12 fire engineers, and 15 firefighters/paramedics (Heartland Fire 2020).

Heartland Fire operates eight fire stations, with three located in La Mesa. Station 11, located at 8034 Allison Avenue, serves the central and western sections of the City, and is staffed with three career personnel daily, including one captain, one engineer, and one firefighter/paramedic, one medic engine, one rescue engine, and one fire truck. Station 12, located at 8844 Dallas Street, serves the northern section of the City and employs three career personnel daily, including one captain, one engineer, and one firefighter/paramedic, and maintains one medic engine and one reserve engine on site (Dudek 2019). Station 13, located at 9110 Grossmont Boulevard, serves the eastern section of the City. Station 11 is the closest fire station to the project site, at approximately 0.75 mile to the southeast and would primarily serve the project.

4.11.1.2 Police Services

The City's Police Department provides police protection and general law enforcement services for the City. The Police Department's headquarters building is located at 8085 University Avenue, approximately 0.75 mile southeast of the project site. The City maintains three patrol shifts that provide 24-hour response to calls for assistance and traffic control. The Police Department has 69 sworn officers and 31 civilian employees, as well as a large contingent of retired senior volunteers, and answers over 100,000 calls for service each year (City 2020b). The Police Department includes a Patrol Division, Investigations Unit, Special Investigations Unit, Traffic Unit, School Resource Unit, and Crime Prevention/Community Resource Unit and provides services such as patrol, investigations, traffic, school resources, support services, animal control, parking enforcement, and community resources services.

4.11.1.3 Schools

The project area is served by the La Mesa Spring Valley School District for primary education. The La Mesa–Spring Valley School District serves approximately 12,400 students within 26 square miles and includes 22 schools comprising 17 elementary schools and 5 middles schools/academies (Education Data Partnership [Ed Data] 2020). Rolando Elementary School, located at 6925 Tower Street, and La Mesa Arts Academy, located at 4200 Parks Avenue, would serve elementary and middle school students generated from the proposed project. Rolando Elementary School had an enrollment of 550 students during the 2018-2019 school year, and the La Mesa Arts Academy had an enrollment of 1,085 students during the same school year (Ed Data 2020).

The project area is served by the Grossmont Union High School District for secondary education. The Grossmont Union High School District covers 465 square miles, including the cities of El Cajon, La Mesa, Santee, and Lemon Grove; a small portion of the City of San Diego; and the unincorporated areas of Spring Valley, Dulzura, Alpine, Jamul, and Lakeside. Grossmont Union High School District serves 21,342 students across nine traditional high schools, two charter schools, two alternative high schools, one continuation high school, and three special education programs (Ed Data 2020). The project site is within the boundaries for Grossmont High School, located at 1100 Murray Drive. High school students generated from the proposed project would be served by Grossmont High School. Grossmont High School had an enrollment of 2,219 students during the 2018-2019 school year (Ed Data 2020).

4.11.1.4 Parks

There are 14 public parks in the City of La Mesa encompassing a total area of approximately 136 acres of parkland. The City's General Plan categorizes parks into four different classifications: regional parks, community parks, neighborhood parks, and pocket parks. Regional parks typically serve several communities and have substantially more acreage than parks in individual communities. Regional parks have a variety of recreation facilities and larger scale uses such as golf courses and swimming pools. Harry Griffen Park, located 2.8 miles northeast of the project site, is an approximately 53-acre regional park with amenities including picnic tables, a children's play structure, an off-leash dog park, hiking trails, and a large amphitheater that is utilized for special events.

Community parks serve a larger population within either a single community area or multiple communities, and uses typically include amenities such as field sports, picnic areas, play areas, and community centers. MacArthur Park is an approximately 22-acre community park located 1.2 miles east of the project site. The park includes a municipal pool, a historic building used for special events, a community center, and a recreation center.

Neighborhood parks serve a smaller population within an area, but still include passive and active recreational facilities. Neighborhood parks may include tot lots, picnic facilities, and a multi-use court. Most of the City's parks are classified as neighborhood parks. The closest neighborhood park to the project site is Aztec Park, located approximately 0.6 mile northeast of the project site. This park consists of large, mature shade trees with large expanses of rolling turf. In addition, the park has picnic areas and a children's playground.

Pocket parks are less than one acre in size and are primarily made up of hardscape-type plazas and walkways that support a variety of recreational opportunities. Examples of pocket parks in the City include the historic La Mesa Depot Museum, which is a historical museum about the time when

Southern Pacific Railway trains traveled through the City, and the "Walkway of the Stars," which is a pedestrian walkway that includes decorative art murals and seating areas.

4.11.1.5 Other Public Facilities

The project site and surrounding areas are served by the La Mesa Library for public library services. The La Mesa Library is a branch of the San Diego County Library system; however, the building is owned by the City and shares space with the La Mesa post office at the Civic Center complex at 8074 University Avenue. The library building is 17,725 SF with approximately 10,525 SF devoted to library space (City 2012a). The La Mesa Library circulates over 60,000 titles each month, making it one of the top circulating branches in the San Diego County Library system.

A community center and recreation complex are located within MacArthur Park at 4975 Memorial Drive that includes banquet facilities, a municipal pool, and a baseball field. The recreation center holds classes and activities primarily for youth, teens, and younger adults. The municipal pool provides aquatic activities and classes for all ages. The Kuhlken Baseball Field is used by youth sports organizations.

The La Mesa Adult Enrichment Center is located within Porter Park and offers a variety of classes, activities, and programs for adults to promote active, healthy aging. Activities include a broad range of individual and group services and activities for active mature adults, as well as access to many other community resources and agencies serving senior citizens. This includes educational, recreational, social and cultural events, daily lunch program, day and extended day trips, legal services, information and referral, health screenings, exercise, and dance.

4.11.2 Regulatory Setting

4.11.2.1 State

California Mutual Aid Plan

The California Mutual Aid Plan establishes policies, procedures, and responsibilities for requesting and providing inter- and intra-agency assistance in emergencies. The plan directs local agencies to develop automatic or mutual aid agreements, or to enter into agreements for assistance by hire (e.g., Schedule A contracts) where local needs are not met by the framework established by the Mutual Aid Plan.

Senate Bill 50

SB 50, or the Leroy F. Greene School Facilities Act of 1998, restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered "full and complete mitigation" of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any school impacts (Chapter 407, Statutes of 1998).

Quimby Act and Assembly Bill 1359

Cities and counties have been authorized since the passage of the 1975 Quimby Act (Government Code Section 66477) to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The dedicated land or fees may only be used for the development or rehabilitation of neighborhood or community parks or recreational facilities in the subdivision they were provided for, according to AB 1359 (Chapter 412, Statutes of 2013), unless certain requirements are met, and an exception is made. The goal of the Quimby Act is to require developers to help mitigate the impacts of property improvements. The Act gives authority for passage of land dedication ordinances only to cities and counties. Special districts must work with cities and/or counties to receive parkland dedication and/or in-lieu fees. The fees must be paid, and land conveyed directly to the local public agencies that provide park and recreation services communitywide.

4.11.2.2 Local

City of La Mesa General Plan

The City's General Plan contains a Public Services and Facilities Element to address publicly managed and provided facilities and services. This element provides policies for financing, prioritization, developer, and City funding responsibilities for public facilities in the City. The Public Services and Facilities Element of the General Plan contains the following goals, objectives, and policies related to public services as they pertain to development:

Goal PSF-4: A safe community.

- **Objective PSF-4.1**: The City will maintain a Police Department that is adequately staffed and funded to ensure a safe community.
- **Policy PSF-4.1.1**: The City will monitor and prepare assessments of Police services to identify the level of Police staffing necessary to achieve the goal of a safe community, within budgetary constraints.

Goal PSF-5: A community where fire risk is minimal.

- **Objective PSF-5.1**: The City will provide fire suppression services and prevention information and services.
- **Policy PSF-5.1.1**: The Department will continue to provide first response medical emergency services.

Additionally, the Recreation and Open Space Element contains goals, objectives, and policies for the maintenance and enhancement of recreation and open space amenities, including parks. Relevant polices applicable to the project include the following:

Goal RO-1: A network of public parks throughout the City that will be convenient and beneficial to all segments of the community.

- **Objective RO-1.1**: Give priority to maintaining and improving the City's public park lands.

- **Policy RO-1.1.1**: Use standards established within the Parks Master Plan for improvements to existing and proposed park facilities.

- **Policy RO-1.1.4**: Continue to collect park in-lieu fees from developers to fund needed park improvements.

- **Objective RO-1.2**: Improve accessibility to parks.

- **Policy RO-1.2.1**: Situate park and recreation facilities and improve access to these facilities so that no resident is more than a 15-minute walk from an opportunity to engage in a recreational activity.

4.11.3 Methodology and Assumptions

Potential impacts resulting from implementation of the proposed project were evaluated based on relevant information from the General Plan (City 2012a), Parks Master Plan (City 2012b), La Mesa-Spring Valley School District, Grossmont Union High School District, Heartland Fire and Rescue, and La Mesa Police Department. Additionally, population estimates and other relevant demographic data, as well as aerial photography coverage, were reviewed and used in the analysis.

4.11.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines a significant impact related to public facilities and services would occur if implementation of the proposed project would result in any of the following:

1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - fire protection?
    - police protection?
    - schools?
    - parks?
    - other public facilities?

2. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

3. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

4.11.5 Impact Analysis

4.11.5.1 Public Facilities

Threshold 1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- *fire protection?*
- *police protection?*
- *schools?*
- *parks?*
- *other public facilities?*

Fire Protection

The project proposes the addition of up to 950 multi-family residential units and up to 15,000 SF of resident-serving commercial space, which would increase the demand for fire protection and emergency services in the service area and could potentially adversely impact current response times. Based on a persons per household of 2.37 for La Mesa, as identified by SANDAG demographic data (SANDAG 2019c), the project could result in an additional 2,252 people in the project area, although some project residents may be relocating from other areas within the City, potentially resulting a smaller actual population increase from the project. However, the project site is already served by Heartland Fire. Heartland Fire has facilities and staffing in the project area to adequately serve the project. Although the project would potentially result in increases in calls for fire protection and/or emergency service, no new facilities or improvements to existing facilities would be required as a result of the project. The proposed project is located in a highly developed urban area of La Mesa, which is not considered at high risk for wildland fires and is not adjacent to any undeveloped open land areas that are susceptible to wildland fires. Furthermore, the proposed project would comply with the City's Fire Code (La Mesa Municipal Code Title 11), including all applicable requirements for fuel management, brush clearance, and sprinklers for the proposed buildings to minimize on-site fire hazards. Heartland Fire provided input in the design of the proposed project to ensure that it meets state and local fire safety standards. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities. Impacts related to fire protection services would be less than significant.

Police Protection

The project proposes the addition of up to 950 multi-family residential units and up to 15,000 SF of resident-serving commercial space with up to approximately 2,252 residents, which would increase the demand for police protection services in the service area and could potentially adversely impact current response times. The project site is currently provided with police protection services by the La Mesa Police Department. The La Mesa Police Department has indicated that it has the capacity and capability to provide service to the project. The 40,000-SF Police Department Headquarters building, located at 8085 University Avenue, was constructed in 2010 and meets present space needs and includes currently underused capacity committed to house the expanded police service functions required to meet the needs of future development. Therefore, the project would not result in substantial adverse physical

impacts associated with the provision of new or physically altered police facilities. Impacts related to police protection services would be less than significant.

Schools

The project proposes the addition of up to 950 multi-family residential units with up to approximately 2,252 residents, which would generate new students in the area that would need to be accommodated at nearby schools that serve the project site, including Rolando Elementary, La Mesa Arts Academy, and Grossmont High School. Capacity information for these three schools are presented in Table 4.11-1, *School Capacity and Enrollment Data*.

Table 4.11-1
SCHOOL CAPACITY AND ENROLLMENT DATA

School	Design Capacity[1]	2018-2019 Enrollment[2]	Resulting Excess/ (Deficit) Capacity
Rolando Elementary	575	550	25
La Mesa Arts Academy	1,156	1,085	71
Grossmont High School	2,586	2,219	367

[1] Reported school design capacities in the La Mesa General Plan Final Program EIR (City 2013a).
[2] Enrollment numbers from Educational Data Partnership (Ed Data 2020).

As shown, the three schools designated to serve the project are not operating at full capacity. While these schools may or may not have sufficient capacity in the near term to serve new students generated by the project, planning for future school facilities is the responsibility of the school districts. Government Code Section 65995 and Education Code Section 53080 authorize school districts to impose facility mitigation fees on new development to address any increased enrollment that may result. SB 50, enacted on August 27, 1998, substantially revised developer fee and mitigation procedures for school facilities as set forth in Government Code Section 65996. The legislation holds that an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. Once paid, the school impact fees would serve as mitigation for any project-related impacts to school facilities. As such, the City is legally prohibited from imposing any additional mitigation related to school facilities, as payment of the school impact fees constitutes full and complete mitigation.

Both La Mesa–Spring Valley School District and Grossmont Union High School District collect developer fees for residential and commercial projects, and the project would be required to pay applicable school facilities fees prior to issuance of building permits. Payment of school fees would provide full and complete mitigation for impacts to school facilities in accordance with state law pursuant to Government Code Section 65996 and SB 50. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities. Impacts related to schools would be less than significant.

Parks

The project proposes the addition of up to 950 multi-family residential units and up to 15,000 SF of resident-serving commercial space with up to approximately 2,252 residents, which would increase the demand for use of existing public parks in the project area. The Parks Master Plan (City 2012b) establishes population-based park standards for neighborhood and community parks, including one

neighborhood park per 5,000 residents and 1 community park per 20,000 residents. Based on the current population of La Mesa at 61,261 residents (SANDAG 2019c), 12.25 neighborhood parks and 3.06 community parks are needed to achieve the population-based park standards. The City currently provides 12 neighborhood parks and 1 community park and thus, a shortage of parkland currently exists.

Additionally, Policy RO-1.2.1 in the Recreation and Open Space Element of the General Plan states that no resident should be more than a 15-minute walk from an opportunity to engage in a recreational activity such as a park. As noted above in Section 4.1.1.4, the closest neighborhood park to the project site is Aztec Park, which is approximately 0.6 mile (as the crow flies) to the northeast; however, Aztec Park is located across I-8 and is not accessible on foot within the 15-minute accessibility goal. The closest park south of I-8 is MacArthur Park at a distance of approximately one mile to the southeast. Using the fastest pedestrian route on public streets (Alvarado Road to Guava Road to El Cajon to Baltimore Drive to University Avenue to Memorial Drive), Google Maps approximates that it would take approximately 35 minutes to walk to this park, which exceeds the 15-minute goal.

In order to generate funds for park improvements or to acquire land for parks, the City adopted two park development impact fees as part of the City's Municipal Code, including the Residential Parkland Dedication In-lieu Fee (Municipal Code Section 9.20.040) and the Residential Park Improvement Impact Fee (Municipal Code Section 9.20.050). These impact fees are designed for single and multi-family residential developments to mitigate the impact of new development on the City's existing facilities and infrastructure. Residential development projects are obligated to dedicate three acres of undeveloped parkland per one thousand people. The fees developed were based on population and growth projections, facility standards, amount/cost of facilities required to accommodate growth, and total cost of facilities per unit of development. By collecting these fees, the goals and priorities of the City's recreational space and facilities standards established in the Parks Master Plan and General Plan can be met. The project is subject to these fees. With payment of a parkland improvement fee to comply with the City's standards for parks, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered population-based parks. Impacts related to parks would be less than significant.

Other Public Facilities

The project proposes the addition of up to 950 multi-family residential units, which could increase the demand for public facilities such as libraries, community centers, and senior centers. As stated above in Section 4.11.1.5, the project site and surrounding areas are served by the La Mesa Library for public library services, which includes 10,525 SF of library space at the Civic Center complex. A minimum space service goal for the San Diego County Library system is 0.50 SF per capita (County of San Diego 2011). The La Mesa Library provides approximately 0.17 SF per capita based on the 2018 City population of 61,261 (SANDAG 2019c). Using the San Diego County Library system size metric, the La Mesa Library would need to be 30,631 SF to meet the current need, which is 20,106 SF more than the existing space. Therefore, the La Mesa Library is already below the San Diego County Library system space service goal. Based on a persons per household of 2.37 for La Mesa, as identified by SANDAG demographic data (SANDAG 2019c), the project could result in an additional 2,252 people in the project area, although some project residents may be relocating from other areas within the City, potentially resulting a smaller actual population increase from the project. Nonetheless, the project's introduction of 2,252 residents to the area would not cause a substantial change or increased demand for additional library services. With the additional 2,252 residents, the library space service goal would decrease by a negligible amount of 0.006 (from 0.172 to 0.166 SF per capita). Similarly, the additional project residents

would not substantially increase the demand for other public facilities within the City (such as the community center, recreation center, municipal pool, baseball field, and Adult Enrichment Center) such that new or expanded facilities would be required as a result of the project. Implementation of the project therefore would not result in substantial adverse physical impacts associated with the provision of new or physically altered library or other public facilities. Impacts would be less than significant.

4.11.5.2 Deterioration of Existing Neighborhood Parks and Recreational Facilities

Threshold 2: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

As discussed above in Section 4.11.5.1, the project would increase the demand for use of existing public parks and recreational facilities in the project area due to the addition of up to 950 new residential units and 2,252 residents, which could potentially result in physical deterioration of such facilities. However, the project would be required to pay a parkland improvement fee pursuant to Municipal Code Section 9.20.040 and 9.20.050. These impact fees are designed for single and multi-family residential developments to mitigate the impact of new development on the City's existing facilities and infrastructure. With payment of a parkland improvement fee, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Impacts would be less than significant.

4.11.5.3 Construction or Expansion of Recreational Facilities

Threshold 3: Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The project would include on-site recreational amenities for project residents. The proposed buildings would include interior project amenity facilities and active outdoor spaces on the podium deck levels. Building amenities are anticipated to include clubhouses, pools, and gymnasiums, as well as patios and balconies. Outdoor recreation areas would include a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas (e.g., seating and/or interpretive signage at Alvarado Creek overlook areas). A pedestrian promenade would be located along the interior of the project site and much of it would be adjacent to the enhanced Alvarado Creek. The environmental effects resulting from implementation of the proposed on-site recreational amenities are evaluated in this EIR and where potential adverse physical effects could occur, mitigation is identified that would reduce impacts to below a level of significance.

As discussed in Section 4.11.5.1, the project would contribute to the existing citywide need for additional park and recreational facilities. The project would require payment of a parkland improvement fee pursuant to Municipal Code Section 9.20.040 and 9.20.050 to offset the impact of new development on the City's existing facilities and infrastructure. Payment of a parkland improvement fee would not result in physical effects on the environment. Accordingly, impacts associated with construction or expansion of recreational facilities would be less than significant.

4.11.6 Mitigation Measures

4.11.6.1 Public Facilities

No significant impacts related to public facilities, including fire protection, police protection, schools, parks, libraries, or other public facilities would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.11.6.2 Deterioration of Existing Neighborhood Parks and Recreational Facilities

No significant impacts related to deterioration of existing parks and recreational facilities would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.11.6.3 Construction or Expansion of Recreational Facilities

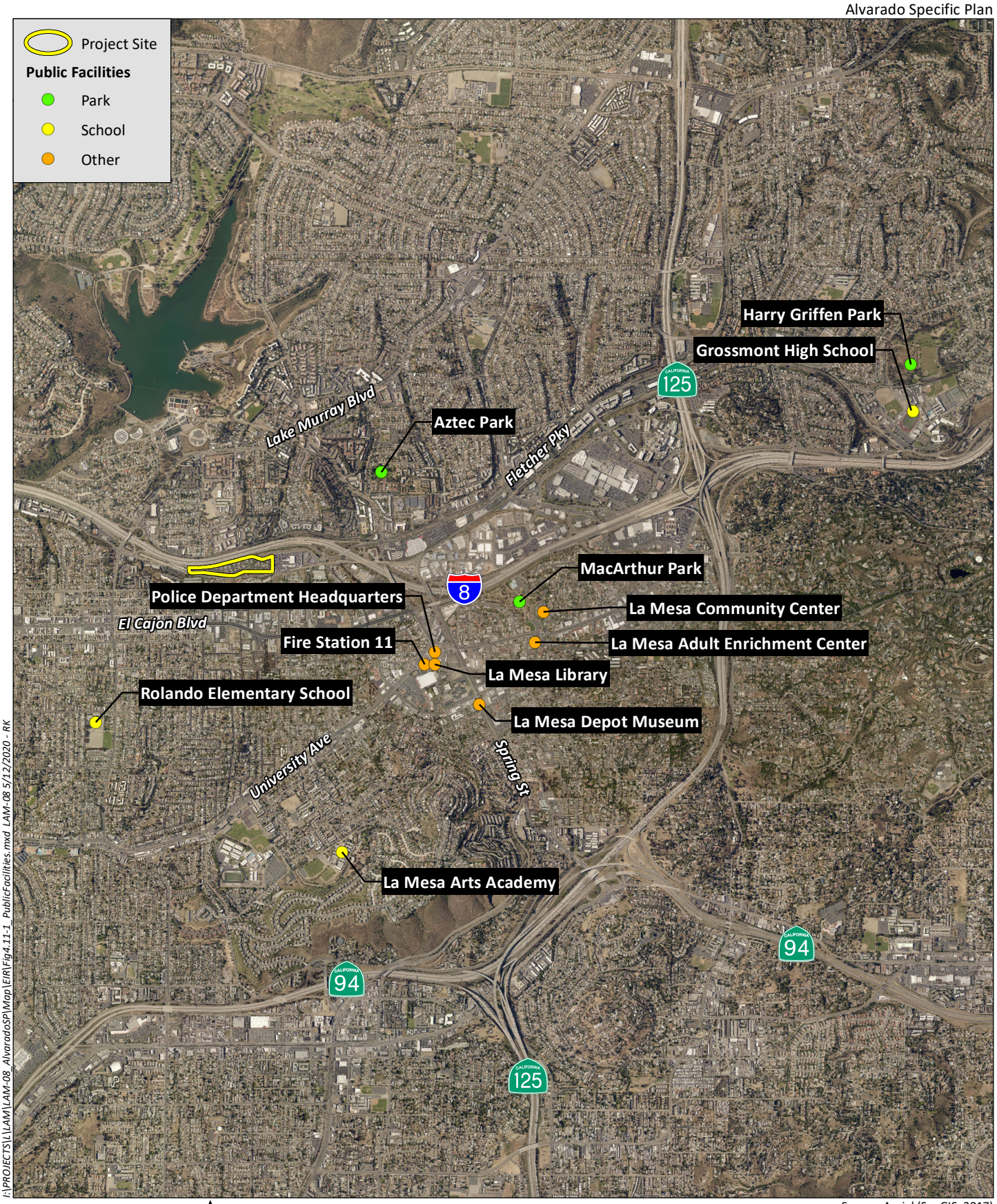
No significant impacts related to the construction or expansion of recreational facilities would result from the implementation of the proposed project with implementation of mitigation measures identified throughout this EIR. Therefore, no additional mitigation measures are required.

4.11.7 Significance Determination

The significance of public facilities and services impacts before and after mitigation is summarized in Table 4.11-2, *Significance Determination Summary of Public Facilities and Services Impacts*. Implementation of the proposed project would not result in any significant impacts to public facilities and services. Impacts related to public facilities and deterioration of existing neighborhood parks and recreational facilities would be less than significant. Impacts associated with construction or expansion of recreational facilities would also be less than significant with implementation of mitigation measures identified throughout this EIR such that no additional mitigation is required.

Table 4.11-2
SIGNIFICANCE DETERMINATION SUMMARY OF PUBLIC FACILITIES AND SERVICES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Public Facilities			
Fire Protection	Less than significant	None required	Less than significant
Police Protection	Less than significant	None required	Less than significant
Schools	Less than significant	None required	Less than significant
Parks	Less than significant	None required	Less than significant
Other Public Facilities	Less than significant	None required	Less than significant
Deterioration of Existing Neighborhood Parks and Recreational Facilities	Less than significant	None required	Less than significant
Construction or Expansion of Recreational Facilities	Less than significant	No additional measures required	Less than significant



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0 3,000 Feet

Source: Aerial (SanGIS, 2017)

HELIX Environmental Planning

Existing Public Facilities

Figure 4.11-1

4.12 PUBLIC UTILITIES

This section of the EIR evaluations potential impacts associated with public utilities resulting from implementation of the proposed project. The following discussion is based, in part, on the Preliminary Drainage Study and Floodplain Analysis (Fuscoe 2020a), Sewer Study (Fuscoe 2020b), and Water Supply Assessment (Fuscoe 2020c) prepared for the project, which are included as Appendices I, L, and M of this EIR, respectively.

4.12.1 Existing Conditions

4.12.1.1 Water Supply

Helix Water District

The Helix Water District (HWD) provides water services to 276,000 customers through a water system that serves over 50 square miles in the cities of La Mesa, Lemon Grove, and El Cajon; and the unincorporated communities of Spring Valley and Lakeside within the County of San Diego. HWD imports approximately 83 percent of its water from other areas such as northern California and the Colorado River (HWD 2016). To do this, HWD purchases imported water from the San Diego County Water Authority (Water Authority). The Water Authority was formed for the purpose of purchasing Colorado River water from The Metropolitan Water District of Southern California (MWD) for conveyance to San Diego County.

HWD's water system consists of a large network of infrastructure connecting residents and businesses to the water supply and includes 56,255 service meters, 735 miles of water transmission and distribution pipeline, 25 reservoir tanks, 25 water pump stations, and one water treatment plant, the R.M. Levy Water Treatment Plant with a total capacity of 106 million gallons per day (HWD 2020). HWD's primary water collection and storage facilities are at Lake Cuyamaca, Lake Jennings and El Capitan Reservoir. Grossmont Reservoir, located under Harry Griffin Park, has a storage capacity of 31.4 million gallons (MG). Twenty-two other aboveground storage tanks (ASTs) are located throughout the HWD service area with eleven of these located in La Mesa. The ASTs provide an additional 38.5 MG for a total storage capacity of approximately 70 MG of water (HWD 2015).

HWD's 2015 Urban Water Management Plan (UWMP) was developed to serve as the overarching water resources planning document to address HWD's water system, water demand, water supply resources, conservation efforts, and historic and projected water use. The 2015 UWMP was prepared in accordance with the Urban Water Management Planning Act, requiring urban water suppliers to adopt and submit a plan every five years to the California Department of Water Resources.

The Metropolitan Water District of Southern California

The MWD was formed in 1928 to develop, store, and distribute supplemental water in Southern California for domestic and municipal purposes. The MWD is a wholesale supplier of water to its member agencies, which includes the Water Authority. It obtains supplies from local sources as well as the Colorado River via the Colorado River Aqueducts, which it owns and operates. It also obtains water supplies via the Sacramento-San Joaquin Delta via the State Water Project. Planning documents such as the Regional Urban Water Management Plan (RUWMP) and Integrated Water Resources Plan (IWRP)

help to ensure the reliability of water supplies and the infrastructure necessary to provide water to Southern California.

MWD's IWRP was updated in 2015 to accommodate recent changes in retail demands, water use efficiency, and local and imported supplies, and to update resource targets. The IWRP sets reliability targets to identify developments in imported and local water supply and in water conservation to reduce water shortages and mandatory restrictions. These regional targets are set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. MWD's 2015 RUWMP, adopted in June 2016, documents the availability of these existing supplies and additional supplies required to meet future demands. It includes the resource targets in the IWRP and contains an assessment of water supply reliability. The Long-Term Conservation Plan was implemented in July 2011 with the goal to achieve the conservation target in MWD's 2010 IWRP as well as to pursue water efficiency innovations and to transform the public's perception of the value of the regional water supply.

San Diego County Water Authority

The Water Authority is an independent public agency that serves as the County's regional water wholesaler. As a retail member agency of the Water Authority, HWD purchases water from the Water Authority for retail distribution within its service area.

The Water Authority's 2015 UWMP was adopted by the Water Authority Board in June 2016 in accordance with state law and the RUWMP. The 2015 Plan contains a water supply reliability assessment that identifies a diverse mix of imported and local supplies necessary to meet demands over the next 25 years in average, single-dry year, and multiple-dry year periods. The UWMP documents that although no shortages are anticipated during a normal year through 2040, shortages may occur during a single-dry year starting in 2035, and during a multiple-dry water year event starting in 2028. The Water Authority also prepares an annual water supply report providing updated documentation on existing and projected water supplies.

4.12.1.2 Water Distribution System

HWD provides water service to the project area via HWD's R.M. Levy Water Treatment Plant (WTP) and/or the Water Authority's Second Aqueduct Pipeline. Water is distributed from these facilities to the project area in a system of large water pipelines that connect to numerous distribution main lines within the City. An existing 10-inch-diameter water main is located within Alvarado Road that currently provides potable water service to the project site.

4.12.1.3 Wastewater Collection System

The City provides sanitary sewer service for all areas within the City limits and owns, operates, and maintains approximately 165 miles of sewer main and several interagency connection facilities located in the County of San Diego. The City's collection system is divided into four major sewer drainage basins, including the Alvarado, University, Spring Valley, and Lemon Grove Sewer Basins. The City is a member of the Metro Wastewater Joint Powers Authority, which is a coalition of agencies that utilize the Point Loma WTP operated by the City of San Diego. As such, the City's wastewater ultimately flows into the City of San Diego's Metropolitan Wastewater System for treatment and disposal (City 2019).

The project site is in the Alvarado Basin, located in the northwestern portion of the City, and wastewater from the project area flows to the Alvarado Trunk Sewer main pipeline The Alvarado Trunk sewer main extends within Alvarado Road and is composed of a 21-inch-diameter vitrified clay pipe (VCP). A 15-inch diameter sewer lateral extends southward from the sewer main in Alvarado Road in the eastern portion of the site and then turns to the west across the site where it connects to an eight-inch-diameter sewer pipe within Alvarado Creek. Another eight-inch-diameter sewer pipe extends southward from the on-site lateral and off the site beneath the MTS Green Line trolley corridor to Colony Drive. Two other sewer lines extend off-site to the south from the pipe within Alvarado Creek.

4.12.1.4 Storm Water Drainage System

The City's storm water drainage system includes approximately 53 miles of concrete and corrugated metal storm drain pipeline (City 2012a). Storm water runoff in the northern half of the City drains to the San Diego River watershed and to the San Diego Bay watershed in the southern half of the City. The project site is located within the San Diego River watershed.

The project is developed and has extensive impervious surfaces. Nearly all rainfall can be expected to become runoff because of limited opportunities for infiltration. Typical runoff response from highly impervious areas is flashy with high peak flow rates for short durations. Storm water runoff from the project site is conveyed to Alvarado Creek via surface flow and storm drain inlets.

4.12.1.5 Electric Power

San Diego Gas & Electric (SDG&E) is the owner and operator of electricity transmission, distribution, and natural gas distribution infrastructure in San Diego County, and currently provides electric and gas services to the project site. The SDG&E service area covers 4,100 square miles within southern California. Energy is provided by SDG&E to 3.6 million customers through 1.4 million electric meters and 873,000 natural gas meters (SDG&E 2020).

SDG&E supplies customers with electricity generated both locally and outside of the utility's service territory, with local facilities currently capable of generating a total of approximately 3,100 megawatts (MW) of power. SDG&E owns and contracts with generation facilities both within and outside its service territory, and power is also produced in local facilities that are non-utility owned. Local generation is important for local power supply needs due to the voltage support it provides that keeps the electric system running smoothly.

Table 4.12-1, *SDG&E 2018 Power Mix*, lists SDG&E's energy sources and the most recent available data of the power mix of those energy sources. As shown, SDG&E used biomass, solar, and wind sources, and obtained 44 percent of its energy from renewable resources in 2018 (California Energy Commission [CEC] 2019). As directed by the California Renewables Portfolio Standard in SB 1078, SDG&E and other statewide energy utility providers are targeted to achieve a 33 percent renewable energy mix by 2020 and 50 percent by 2030.

Table 4.12-1
SDG&E 2018 POWER MIX

Energy Source	Power Mix (%)
Renewables	43
Biomass	2
Solar	20
Wind	21
Natural Gas	29
Unspecified	27

Source: CEC 2019

Currently, there are no local mandated standards or ordinances requiring reliance on alternative energy by new developments. Title 24 of the California Public Resources Code contains energy efficiency requirements for residential and commercial uses that the project would be required to adhere to.

Existing 12-kilovolt overhead electrical lines extend across most of the site. These lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a generally north-south alignment.

4.12.1.6 Natural Gas

Natural gas is imported into the San Diego region by pipeline after being produced at any of several major supply basins located from Texas to Alberta, Canada. Although the San Diego region has access to all of these basins by interstate pipeline, the final delivery into the SDG&E system is dependent on just one Southern California Gas Company (SoCalGas) pipeline that enters San Diego County from Orange County located along I-5.

Natural gas consumption by sector varies somewhat each year. In general, power plants account for the highest percentage of natural gas consumption in the San Diego region. Residential consumption of natural gas for heating and cooking is the second highest percentage, followed by cogeneration, commercial and industrial consumption, and natural gas fueled vehicles.

A 16-inch-diameter gas line traverses the southern portion of the project site in generally an east-west alignment and extends off the site.

4.12.1.7 Communications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as Cox, AT&T, Spectrum, and other independent cable companies. Facilities are located above and below ground within private easements. In recent years, the City has initiated programs to promote economic development through the development of high-tech infrastructure and integrated information systems. The City also works with service providers to underground overhead wires, cables, conductors, and other overhead structures associated with communication systems in residential areas in accordance with proposed development projects.

Existing overhead communications lines extend across most of the site. These lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a generally north-south alignment.

4.12.1.8 Solid Waste Management

Solid waste disposal is provided by EDCO Waste and Recycling, a private franchise hauler which handles all residential, commercial, and industrial collections within the City. Waste is collected and hauled to the Otay Landfill, located at 1700 Maxwell Road in Chula Vista. Otay Landfill is a privately owned facility operating under a permit from the state with local enforcement by the County DEH. According to the Solid Waste Information System (SWIS) database maintained by the California Department of Resources Recycling and Recovery (CalRecycle), the Otay Landfill had a remaining capacity of approximately 21,194,008 cy of solid waste as of May 2016. Based on the remaining capacity and disposal rates, the Otay Landfill is expected to close in February 2030 (CalRecycle 2020a).

Another landfill, Sycamore Landfill, provides disposal capacity within the region. The Sycamore Landfill is located at 8514 Mast Boulevard in the city of San Diego. The SWIS database indicates that the Sycamore Landfill has a remaining capacity of 113,972,637 cy as of December 2016 and is expected to close in December 2042 (CalRecycle 2020b).

The City has implemented an aggressive effort to curb the amount of waste headed to landfills. Working with EDCO, recycling of most categories of waste is available for all residences and commercial establishments located in the City.

4.12.2 Regulatory Setting

4.12.2.1 Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), passed by Congress in 1974, authorizes the federal government to set national standards for drinking water. These National Primary Drinking Water Regulations protect against both naturally occurring and man-made contaminants. Enforceable maximum contaminant levels (MCLs) for drinking water also resulted from the SDWA. All water providers in the United States, excluding private wells serving fewer than 25 people, must treat water to remove contaminants.

The 1986 amendments to the SDWA and the 1987 amendments to the CWA established the USEPA as the primary authority for water programs throughout the country. The USEPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems.

4.12.2.2 State

Senate Bill 610 and 221

SB 610 and SB 221 went into effect in January 2002 with the intention of linking water supply availability to land use planning by cities and counties. SB 610 requires water suppliers to prepare a Water Supply Assessment (WSA) report for inclusion by land use agencies during the CEQA process for new developments subject to SB 221. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of a large-scale subdivision of land under the State Subdivision Map Act. Large-scale projects include the following:

- Residential developments of more than 500 units;
- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 SF of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 SF of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 SF of floor space;
- Mixed-use projects that include one or more of the above types of projects; and
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-du project.

Integrated Waste Management Act

The California Integrated Waste Management Act (IWMA) of 1989 (California AB 939), which is administered by CalRecycle, requires counties to develop an Integrated WMP (IWMP) that describes local waste diversion and disposal conditions, and lays out realistic programs to achieve the waste diversion goals. IWMPs compile Source Reduction and Recycling Elements (SRREs) that are required to be prepared by each local government, including cities. SRREs analyze the local waste stream to determine where to focus diversion efforts and provide a framework to meet waste reduction mandates. The goal of the solid waste management efforts is not to increase recycling, but to decrease the amount of waste entering landfills. AB 939 required all cities and counties to divert a minimum 50 percent of all solid waste from landfill disposal. In 2011, the State legislature enacted AB 341 (PRC Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 also requires the provision of recycling service to commercial and residential facilities that generate four cy or more of solid waste per week.

4.12.2.3 Local

Urban Water Management Plans

Urban water purveyors are required to prepare and update an UWMP every five years. UWMPs address water supply, treatment, reclamation, and water conservation, and contain a water shortage contingency plan. UWMPs prepared by local water districts supplement the regional plans prepared by the San Diego County Water Authority and the Metropolitan Water District. Urban retail water suppliers must develop a water-use target and report on progress toward achieving the target.

MWD’s 2015 UWMP describes and evaluates sources of water supply, efficient uses of water, demand management measures, implementation strategies and schedules, and other relevant information and programs. Information from MWD’s UWMP is used by local water suppliers in the preparation of their own plans. The information included in MWD’s UWMP represents the district’s most current planning projections of demand and supply capability developed through a collaborative process with the member agencies.

The Water Authority developed its 2015 UWMP in coordination with its 24 member agencies. The main components of the UWMP include baseline demand forecasts under normal weather, dry weather and climate change scenarios; conservation savings estimates and net water demand projections; a water supply assessment; supply reliability analysis; and scenario planning.

HWD developed a 2015 UWMP, which was adopted by the HWD's Board of Directors in 2016 (HWD 2016). The 2015 UWMP provides an overview of the water system; quantifies existing and projected water uses and water use targets; addresses water supply sources, reliability, and shortages; and outlines conservation strategies.

San Diego County Integrated Waste Management Plan

Pursuant to the state's Integrated Waste Management Act, the County prepared a Countywide Integrated Waste Management Plan that was approved on June 25, 1997. The County consistently provides Five-Year Review Reports to document adherence to the plan and any additional updates. A total of four Five-Year Review Reports have been released since the approval of the original report, with the most recent one released in August 2017 (County Department of Public Works 2017). The Countywide Integrated Waste Management Plan includes goals, policies, and objectives for coordinating regional efforts to divert, market, and dispose of solid waste. County policies and programs are included in local jurisdiction's Source Reduction and Recycling Element and Household Hazardous Waste Element. Regional cooperation encourages a coordinated and planned approach to integrated waste management.

City of La Mesa Municipal Code

Title 7, *Health and Sanitation*, of the La Mesa Municipal Code includes regulations related to waste management and storm water control. Title 14, *Building Regulations*, covers topics related to construction, energy efficiencies, and waster-conserving landscaping. Title 17, *Sewers*, covers sewage collection and disposal. Title 21, *Public Utilities*, and Title 26, *Cable Communications Franchise Ordinance*, cover public utilities and cable communication services, respectively.

4.12.3 Methodology and Assumptions

Potential impacts to public utilities resulting from implementation of the proposed project were evaluated based on relevant regulations and development guidelines, existing conditions, data on existing facilities and projected capacity needs found in online documentation and the CalRecycle SWIS Database, the WSA prepared for the project (Fuscoe 2020c; Appendix M), the sewer study prepared for the project (Fuscoe 2020b; Appendix L), and the drainage study prepared for the project (Fuscoe 2020a; Appendix I).

4.12.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines a significant impact related to public utilities would occur if implementation of the proposed project would result in any of the following:

1. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

4. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

4.12.5 Impact Analysis

4.12.5.1 Utilities

Threshold 1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water

The project would connect to an existing 10-inch-diameter water main within Alvarado Road for potable water service. HWD provided a letter to the City confirming that it has the capacity and capability to provide water service to the project site (HWD 2018). Based on the availability and suitability of existing water infrastructure to serve the project, the project would not result in the need for new or expanded water facilities. Impacts to water distribution facilities would be less than significant.

Wastewater

Sewer system improvements are proposed as part of the project, including relocating an existing sewer trunk line within Alvarado Creek out of the channel and under the proposed internal access road, raising and capping an existing manhole within Alvarado Creek, removal of portions of existing on-site sewer lines, and construction of new on-site sewer lines. The proposed sewer utility improvements are included as part of the project and potential impacts related to these sewer utility improvements are addressed by the environmental analysis of this EIR. The improvements would not result in environmental effects aside from those outlined in this EIR.

Sewer Capacity

The project site is located in the Alvarado Wastewater Drainage Basin, and wastewater from the project area is conveyed to the Alvarado Trunk Sewer located within Alvarado Road, which consists of a 21-inch diameter VCP. The proposed project would include two new connections, or points of confluence (POC), to the Alvarado Trunk Sewer to serve the project—one at the western end of the site, just west of the proposed western access drive (POC A) and one at the eastern end of the site, just east of the proposed eastern access drive (POC B). Segments of the Alvarado Trunk Sewer along the project frontage of

Alvarado Road generally between POC A and POC B were analyzed to determine potential impacts to the capacity of the existing wastewater system resulting from the project. Proposed on-site sewer lines, which would be eight inches in diameter, were also analyzed to determine if they could accommodate flows generated by the project.

For the Alvarado Trunk Sewer analysis, existing wastewater peak design flow rates under both dry and wet weather conditions were obtained from the City of La Mesa Wastewater Collection System Master Plan (City 2008). Since completion of the aforementioned wastewater master plan, development has continued to occur within the Alvarado Wastewater Drainage Basin. In order to account for this subsequent development (including both constructed and planned developments), wastewater flows generated by such development were calculated and added to the existing flows. Where the subsequent developments resulted in an increase in sewer flows, this was added to the existing flows entering the site. Sewer flows that would be generated by the proposed project at buildout were then calculated and added to the existing plus subsequent developments flows entering the site. For the proposed on-site sewer analysis, only flows from subsequent development and the proposed project were considered since these lines do not currently exist.

Sewer flow rates were calculated using a generation rate of 180 gallons per day (gpd) per multi-family dwelling unit, as specified in the City of La Mesa Wastewater Master Plan (City 2008). Because proposed Building 2 is conservatively planned as student housing, residential units within this building would have more beds than a typical multi-family development. Thus, wastewater flows for proposed Building 2 were calculated using a generation rate for boarding schools from the 2018 Uniform Plumbing Code of 100 gpd per bed. Peaking factors for project flows were based on the City of San Diego Sewer Guide and used a conservative value of 3.5 population per dwelling unit. Calculations were performed using the Flowmaster software program. The results of this analysis are shown below in Table 4.12-2, *Wastewater Flow Results in Existing and Proposed Conditions*.

Table 4.12-2
WASTEWATER FLOW RESULTS IN EXISTING AND PROPOSED CONDITIONS

Line No.	Weather Condition	Existing Conditions Peak Design Flow (CFS)	Existing Conditions dn (feet)	Existing Conditions dn/D	Proposed Conditions Peak Design Flow (CFS)	Proposed Conditions dn (feet)	Proposed Conditions dn/D
Alvarado Trunk Sewer Lines							
PA0013.05	Dry	5.54	0.72	0.41	5.71	0.79	0.45
	Wet	6.09	0.72	0.41	6.27	0.84	0.48
PA0012.05	Dry	5.54	0.71	0.41	5.71	0.78	0.45
	Wet	6.09	0.71	0.41	6.27	0.82	0.47
PA0011.05	Dry	5.54	0.70	0.40	5.71	0.78	0.45
	Wet	6.09	0.70	0.40	6.27	0.82	0.47
PA0010.05	Dry	5.54	0.71	0.41	5.71	0.78	0.45
	Wet	6.09	0.71	0.41	6.27	0.82	0.47
PA0009.05	Dry	5.54	0.61	0.35	5.71	0.67	0.38
	Wet	5.54	0.61	0.35	6.27	0.70	0.40
PA0008.05	Dry	5.54	0.75	0.43	6.36	0.71	0.41
	Wet	6.09	0.79	0.45	6.92	0.93	0.53

Table 4.12-2 (cont.)
WASTEWATER FLOW RESULTS IN EXISTING AND PROPOSED CONDITIONS

Line No.	Weather Condition	Existing Conditions Peak Design Flow (CFS)	Existing Conditions dn (feet)	Existing Conditions dn/D	Proposed Conditions Peak Design Flow (CFS)	Proposed Conditions dn (feet)	Proposed Conditions dn/D
Proposed On-site Sewer Lines							
PA008.01	Dry	--	--	--	0.02	0.04	0.06
	Wet	--	--	--	0.02	0.04	0.06
PA009.01	Dry	--	--	--	0.23	0.16	0.24
	Wet	--	--	--	0.23	0.16	0.24
PA009.02	Dry	--	--	--	0.23	0.16	0.24
	Wet	--	--	--	0.23	0.16	0.24
PA009.03	Dry	--	--	--	0.23	0.17	0.26
	Wet	--	--	--	0.23	0.17	0.26
PA0008.17	Dry	--	--	--	0.09	0.10	0.15
	Wet	--	--	--	0.09	0.10	0.15
PA0008.16	Dry	--	--	--	0.52	0.24	0.36
	Wet	--	--	--	0.52	0.25	0.38
PA0008.15	Dry	--	--	--	0.52	0.24	0.36
	Wet	--	--	--	0.52	0.25	0.38
PA0008.14	Dry	--	--	--	0.52	0.24	0.36
	Wet	--	--	--	0.52	0.25	0.38
PA0008.13	Dry	--	--	--	0.52	0.23	0.35
	Wet	--	--	--	0.52	0.23	0.35
PA0008.13b	Dry	--	--	--	0.11	0.12	0.18
	Wet	--	--	--	0.11	0.12	0.18
PA0008.12	Dry	--	--	--	0.62	0.30	0.45
	Wet	--	--	--	0.63	0.30	0.45
PA0008.11	Dry	--	--	--	0.62	0.31	0.47
	Wet	--	--	--	0.63	0.30	0.45
PA0008.10	Dry	--	--	--	0.65	0.31	0.47
	Wet	--	--	--	0.66	0.31	0.47

Source: Fuscoe 2020b
CFS = cubic feet per second, dn = depth of flow, dn/D = depth of flow to pipeline diameter ratio

Pursuant to the City's Wastewater Collection System Master Plan (City 2008), a dn/D ratio of less than 0.75 is required for pipes greater than 15 inches in diameter, and less than 0.50 is required for pipes at 15 inches or less in diameter. The dn/D ratio is the depth of flow within a pipeline divided by the diameter of the pipeline and provides a measure of a pipeline's operating capacity as a percentage. If a pipeline has a dn/D ratio of 0.50, it means that the pipeline at 50-percent capacity.

As shown in Table 4.12-2, under proposed conditions, the maximum dn/D ratio for Alvarado Trunk Sewer lines would be 0.53 under wet weather conditions and 0.45 under dry weather conditions, which would not exceed the maximum dn/D ratio of 0.75 for pipes greater than 15 inches. The maximum dn/D ratio for the proposed on-site sewer lines would be 0.47 under wet weather and dry weather conditions, which would not exceed the maximum dn/D ratio of 0.50 for pipes at 15 inches or less in

diameter. Based on the estimated project flows combined with both existing flows and subsequent developments, the existing and proposed sewer systems would have capacity to serve the project.

Downstream Wet Weather Capacity

Downstream of the project site, the Alvarado Trunk Sewer connects to the City of San Diego sewer system at a metering manhole west of 70th Street. Flows at this metering manhole have exhibited large spikes during wet weather conditions, resulting in overflows and near overflows. A downstream wet weather capacity analysis was conducted to evaluate whether the proposed project could exacerbate this condition.

Under existing conditions, approximately 1,035 linear feet of existing 15-inch and eight-inch VCP and five manholes occur within Alvarado Creek at the project site. As part of the project, the existing sewer lines within Alvarado Creek would be abandoned and the flows entering from the south would be rerouted through to the project site to the Alvarado Trunk Sewer in Alvarado Road. Two manholes would be required in Alvarado Creek where the sewer lines from the south are intercepted. These manholes would be reconstructed with watertight, elevated lids to prevent the intrusion of stormwater into the manholes.

To assess the condition of the existing sewer lines in Alvarado Creek and the project site, video inspection of the existing sewer lines was performed. Evidence of infiltration into the sewer lines were found at multiple locations. Removal of the existing sewer lines and manholes from within Alvarado Creek would reduce infiltration and interception into the sewer system, which would help alleviate wet downstream weather flow spikes. Thus, the project would not substantially contribute to, or exacerbate existing downstream sewer system capacity impacts.

Conclusion

While some sewer line relocations and improvements within and adjacent to the project site are proposed (new connection points, removal/abandonment of existing lines and manholes, raising sewer manholes, and new on-site sewer lines), implementation of the project would not require the relocation or construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

Storm Water Drainage

As discussed in Section 4.7, *Hydrology and Water Quality*, of this EIR, the project site comprises two major drainage basins. Basin 1 encompasses approximately 4.5 acres and consists of the area to the east of where Alvarado Creek bisects the site, while Basin 2 is approximately 7.7 acres and consists of the area to the west of Alvarado Creek.

To analyze project impacts on the existing storm drain system, peak runoff flow rates and times of concentrations[1] were calculated for the 100-year storms under the existing and proposed drainage patterns on the project site. With implementation of the proposed project, the peak discharge under the 100-year storm event would decrease in Basin 1 but would increase in Basin 2 primarily due to the slight

[1] Time of concentration is a concept used in hydrology to measure the response of a watershed to a rain event. It is defined as the time needed for water to flow from the most remote point in a watershed to the watershed outlet and is a function of the topography, geology, and land use within the watershed.

increase in impervious surfaces and the decreased time of concentration (Fuscoe 2020a). However, the project would provide on-site drainage features, including detention basins, grass-lined swales, catch basins, and storm drains that have been sized for the 100-year storm. Therefore, the proposed storm drain system for the project would have sufficient capacity to convey the 100-year storm event without causing flooding on or off the site. While new storm water drainage facilities would be constructed within the project site in conjunction with the project, the proposed facilities would connect to the existing municipal storm drain system, the capacity of which would not be adversely affected by the project. Therefore, implementation of the project would not require the relocation or construction of new or expanded storm water drainage facilities. Impacts related to stormwater drainage would be less than significant.

Electric Power and Natural Gas

Electric and natural gas utilities exist in the area and such service is currently provided to the existing uses on the project site. There are existing 12-kilovolt overhead power lines that extend across the project site. The lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a general north-south alignment. The portion of the overhead power lines that cross the site would be relocated underground in the western end of the site as part of the project. Relocation of the electric power utilities would not result in environmental effects aside from those outlined in this EIR. While some electric power line relocations would occur within the project site in conjunction with the project, the relocated lines would connect to the existing electric power distribution system, the capacity of which would not be adversely affected by the project.

Similarly, the project would connect to existing gas lines within the project area and would not adversely affect the capacity of the existing gas distribution system. A 16-inch-diameter gas line traverses the southern portion of the project site in generally an east-west alignment and extends off the site. A portion of this existing line that would be under the buildings would be removed.

Therefore, implementation of the project would not require the relocation or construction of new or expanded electric power or natural gas distribution facilities. Impacts would be less than significant.

Telecommunications Systems

There are existing communications overhead lines that extend across the project site on the same facilities and alignment as the existing overhead electric power lines discussed above. The lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a general north-south alignment. The portion of the overhead telecommunications utility lines that cross the site would be relocated underground in the western end of the site. The relocation of these telecommunication utilities is included as part of the project and potential impacts related to the relocation of such utilities are addressed by the environmental analysis of this EIR. Relocation of the telecommunication utilities would not result in environmental effects aside from those outlined in this EIR. While some telecommunication line relocations would occur within the project site in conjunction with the project, the relocated lines would connect to the existing telecommunications distribution system, the capacity of which would not be adversely affected by the project. Therefore, implementation of the project would not require the relocation or construction of new or expanded telecommunication facilities. Impacts would be less than significant.

4.12.5.2 Water Supply

Threshold 2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

A WSA was prepared for the proposed project (Fuscoe 2020c) in compliance with SB 610 to assess whether sufficient water supplies would be available to meet the projected water demands of the proposed project during a normal, single-dry year, and multiple-dry year period during a 20-year projection. The WSA identifies existing water supply entitlements, water rights, water service contracts or agreements relevant to the identified water supply for the proposed project, and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements.

The MWD and the Water Authority have developed water supply plans to improve reliability and reduce dependence upon existing imported supplies. MWD's RUWMP and IWRP, and the Water Authority's 2015 UWMP and annual water supply report include water infrastructure projects that meet long-term supply needs through securing water from the State Water Project, Colorado River, local water supply development, and recycled water.

As demonstrated in the WSA, there is sufficient water planned to supply the proposed project's estimated annual average usage. The expected potable water demand generated by the project at buildout is 179,949 gallons per day or 201.5 acre-feet per year. This represents an increase of approximately 147 acre-feet per year (AFY) as compared to existing water demands. To estimate future water demands, HWD uses land use data from the SANDAG Series 13 Regional Growth Forecast, which is SANDAG's projection of land use, population, and economic growth through the year 2050. The HWD 2015 UWMP utilized the La Mesa General Plan to estimate future demand projections associated with the project. For the Specific Plan area, the General Plan land use designation is Regional Serving Commercial. This land use designation allows for retail shopping centers, large office complexes and uses providing services to the traveling public such as restaurants, service stations, hotels, and motels. In addition, mixed-use or high-density residential developments would also be permitted. Therefore, it is anticipated that similar water demands to those of the proposed project were incorporated into HWD's 2015 UWMP.

The 147 AFY increase in demand is also accounted for through the accelerated forecasted growth demand increment of the Water Authority's 2015 UWMP. As documented in the Water Authority's 2015 UWMP, the Water Authority is planning to meet future and existing demands, which include the demand increment associated with the accelerated forecasted growth. The Water Authority will assist its member agencies in tracking the environmental documents provided by the agencies that include WSAs and verifications reports that utilize the accelerated forecasted growth demand increment to demonstrate supplies for the development. In addition, the next update of the demand forecast for the Water Authority's 2020 UWMP will be based on SANDAG's most recently updated forecast, which will include the project. Therefore, based on the findings from the HWD's 2015 UWMP and the Water Authority's 2015 UWMP, the proposed project would result in no unanticipated demands on water supply.

The Water Authority's 2015 UWMP provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasted development as part of its municipal and industrial sector demand projections. These housing and commercial units were identified by SANDAG in the course of its regional housing needs assessment but are not yet included in existing general land use

plans of local jurisdictions. The demand associated with accelerated forecasted residential development is intended to account for SANDAG's land use development currently projected to occur between 2035 and 2050 but has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated forecasted residential and commercial development could occur within the planning horizon (2015 to 2035) of the 2015 UWMP. This land use is not included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment, termed accelerated forecasted growth, can be used by the Water Authority's member agencies to meet the demands of development projects not identified in the general land use plans.

The WSA concluded that the proposed project is consistent with the water demands assumptions included in the regional water resource planning documents of HWD, Water Authority, and MWD. Current and future water supplies, as well as the actions necessary to develop these supplies, have been identified in the water resources planning documents of HWD, Water Authority, and MWD to serve the projected demands of the Specific Plan area, in addition to the existing and planned future water demands of HWD. Impacts related to water supply would be less than significant.

4.12.5.3 Wastewater

Threshold 3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The City of La Mesa is a member of the Metro Wastewater Joint Powers Authority (MWJPA), a coalition of agencies that utilize the Point Loma Wastewater Treatment Plant (WTP) operated by the City of San Diego. Wastewater generated within the City is collected by the City's sewer service and then conveyed to the Point Loma WTP located at the south end of the Point Loma peninsula. The Point Loma WTP treats approximately 175 mgd of wastewater generated in a 450-square-mile area by more than 2.2 million residents. Located on a 40-acre site on the bluffs of Point Loma, the WTP has a treatment capacity of 240 mgd (City of San Diego 2020). The Point Loma WTP is owned and operated by the City of San Diego and allows 15 other municipalities, including La Mesa, to purchase allocations of wastewater treatment capacity at the plant.

The project would increase wastewater generation at the site due to the construction of additional housing units. Based on the sewer generation rates used in the sewer capacity analysis described in Section 4.12.5.1 (180 gpd per multi-family dwelling unit and 100 gpd per bed for student housing), the project would generate 181,100 gpd of wastewater. Given an existing remaining treatment capacity of 65 mgd (240 mgd total capacity less the current 175 mgd of treated effluent) at the Point Loma WTP, the project's increase would represent less than one percent of the WTP's remaining capacity. Therefore, the Point Loma WTP has adequate capacity to serve the project's projected demand in addition to its existing commitments. Impacts would be less than significant.

4.12.5.4 Solid Waste Management

Threshold 4: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Threshold 5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The proposed project would generate solid waste and recycling during both the construction and operation of the project. Consistent with Title 14.27, *Construction and Demolition Debris Diversion*, of the City's Municipal Code, a minimum of 75 percent of construction and demolition debris generated by the proposed project would be diverted from the landfill by reuse on site, recycling, salvation or donation, thereby minimizing the amount of construction solid waste that ends up in the landfill.

During operation, the proposed project would divert at least 75 percent of operational waste from landfills through reuse and recycling in accordance with AB 341 and provide areas for storage and collection of recyclables and yard waste in accordance with 2019 Title 24 Part 11 CALGreen Standards. Following such standards would ensure that the project would also comply with Title 7.22, *Mandatory Recycling*, of the City's Municipal Code and AB 939, which mandates that 50 percent of solid waste generated be diverted from landfill disposal through source reduction, recycling, or composting. Once constructed, solid waste and recycling generated from the project site would be typical of that generated by similar residential uses, and could potentially include small amounts of hazardous materials, as discussed in Section 4.6, *Hazards and Hazardous Materials*, of this EIR. Landscaping would be designed to reduce green waste generation.

The project site would be serviced by EDCO, which maintains a current contact with the City, and all waste would be disposed of at either the Sycamore Landfill or the Otay Landfill. Based on the 2017 Five-Year Review Report of the Countywide Integrated Solid Waste Management Plan prepared for San Diego County pursuant to AB 939, the County has sufficient landfill capacity to accommodate disposal for at least the next 15 years, which meets the state requirements that the County maintains a minimum of 15 years of future disposal capacity. Therefore, the project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. It would also comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts related to solid waste management would be less than significant.

4.12.6 Mitigation Measures

4.12.6.1 Utilities

No significant impacts related to the relocation or construction of new or expanded utilities infrastructure would result from implementation of the proposed project. Therefore, no mitigation measures are required.

4.12.6.2 Water Supply

No significant impacts related to water supplies available to serve the project and reasonably foreseeable future development would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.12.6.3 Wastewater

No significant impacts related to wastewater treatment capacity would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.12.6.4 Solid Waste Management

No significant impacts related to solid waste management would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.12.7 Significance Determination

The significance of public utilities impacts before and after mitigation is summarized in Table 4.12-3, *Significance Determination Summary of Public Utilities Impacts*. Implementation of the proposed project would not result in any significant impacts to public utilities. Impacts related to utilities, water supply, wastewater, and solid waste management would be less than significant, and no mitigation is required.

Table 4.12-3
SIGNIFICANCE DETERMINATION SUMMARY OF PUBLIC UTILITIES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Utilities	Less than significant	None required	Less than significant
Water Supply	Less than significant	None required	Less than significant
Wastewater	Less than significant	None required	Less than significant
Solid Waste Management	Less than significant	None required	Less than significant

4.13 TRANSPORTATION

This section of the EIR evaluates potential impacts on the transportation system resulting from implementation of the proposed project. The analysis is based, in part, on a Transportation Impact Analysis (TIA) prepared for the project (Kimley Horn 2020), which is included as Appendix N of this EIR.

4.13.1 Existing Conditions

The existing roadways, public transit network, bicycle network, and pedestrian network surrounding the project site are discussed below and shown in Figure 4.13-1, *Existing Transportation Network*.

4.13.1.1 Roadway Network

The principal roadways and highways in the project area are described briefly below.

70th Street

70th Street functions as a north-south major arterial that extends between University Avenue and Lake Murray Boulevard. Near the project site (between El Cajon Boulevard and Lake Murray Boulevard), 70th Street includes four vehicular lanes south of Alvarado Road and five lanes to the north over the I-8 freeway. 70th Street provides direct access to westbound I-8 and indirect access eastbound I-8 via Alvarado Road. The posted speed limit is 35 mph. On-street parking is permitted on both sides of the roadway south of Amherst Street. Sidewalks are provided on both sides of the road except for a few gaps between Saranac Street and I-8. Class II bicycle facilities are provided along both sides of the road except for the northbound side between Saranac Street and I-8.

Alvarado Road

Alvarado Road is an east-west, two-lane collector that extends between I-8 in La Mesa and College Avenue in the City of San Diego. The roadway generally parallels I-8 and functions as a frontage road to the freeway. Alvarado Road forms the northern boundary of the project site and provides access to the site. The posted speed limit for Alvarado Road is 35 mph. Within the project area (between I-8 eastbound ramp and Comanche Drive), on-street parking is provided along portions of the south side of the road, but no sidewalks or bicycle facilities are provided along the project frontage.

Fletcher Parkway

Fletcher Parkway is a six-lane major arterial that extends between I-8 in La Mesa to State Route 67 in El Cajon. Near the project site (between the I-8 westbound ramp and Baltimore Drive), Fletcher Parkway provides access to I-8 and to Alvarado Road. This segment does not have a posted speed limit and no on-street parking, sidewalks, or bicycle facilities are provided.

Guava Avenue

Guava Avenue is a two-lane collector that extends between Alvarado Road and La Mesa Boulevard in a north-south alignment. Near the project site (between Alvarado Road and El Cajon Boulevard), Guava Avenue provides access to I-8 via El Cajon Boulevard and to Alvarado Road. This segment has a posted speed limit of 25 mph. On-street parking is permitted along the northbound side of the road. Sidewalks are provided along portions of both sides of the roadway, but no bicycle facilities are provided.

El Cajon Boulevard

El Cajon Boulevard is a four-lane major arterial that extends through the cities of La Mesa and San Diego in an east-west alignment. Near the project site (between Guava Avenue and Baltimore Drive), El Cajon Boulevard provides direct access to I-8 east of Baltimore Drive and indirect access via 70th Street. The segment has a posted speed limit of 35 mph. On-street parking, Class II bicycle facilities, and sidewalks are provided along both sides of the roadway.

Interstate 8

I-8 is an east-west interstate highway that extends between Ocean Beach in the west and I-10 in Arizona. Within the project area, I-8 includes four general purpose lanes in each direction with interchanges at 70th Street/Lake Murray Drive and Fletcher Parkway.

4.13.1.2 Transit Network

The project site is located within a designated Transit Priority Area (TPA) and Smart Growth Area per the City of San Diego and SANDAG. TPAs include areas within one-half mile of major transit station or a station along a high-quality transit corridor. A major transit stop is a site that contains a rail transit stations, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes, each having a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods. Smart growth areas are locations that either contain existing smart growth development or allow planned smart growth in accordance with the identified land use targets and are accompanied by existing or planned transit service.

Existing public transportation within the project area consists of trolley and bus service provided by MTS. The major routes served in the immediate project area include the MTS Green Line Trolley and Bus Route 14. Both of these operate out of the adjacent 70th Street Trolley Station to the west. However, there are no existing pedestrian or bicycle connections to the Trolley Station from the project site.

The Green Line Trolley runs from Santee to Downtown San Diego, through Downtown San Diego, Old Town, Mission Valley, and El Cajon to Santee. There are 27 stops along this route one of which is at the adjacent 70th Street Trolley Station. This line runs on weekdays and weekends departing at 5:03 am and ends around 12:30 am with 15-minute headways. The project site is located directly north of the Green Line Trolley corridor.

Bus Route 14 runs from the Grantville Trolley Station to the Baltimore Drive and Lake Murray Boulevard bus stop. The route runs along Friars Road, College Avenue, Montezuma Road, 70th Street, and Lake Murray Boulevard, and stops at the 70th Street Trolley Station. This route runs on weekdays departing at 6:25 am with 60-minute headways. Weekend service is not provided.

4.13.1.3 Bicycle Facilities

The existing bicycle network within the project area includes Class II bike lanes and Class III bike routes along local roadways. Class II bike lanes provide a striped lane designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited. Bike lanes are one-way facilities located on either side of a roadway. Additional enhancements such as painted buffers and signage may be applied. Class II facilities are currently present along the following roadways within the project area:

- 70th Street: along the southbound side between Alvarado Road and University Avenue, and along the northbound side between Saranac Street and University Avenue.
- Lake Murray Boulevard: along the southbound and northbound sides from approximately 1,000 feet north of I-8 to the City limits near Flume Road.
- Fletcher Parkway: along both sides of the road from Baltimore Avenue to the City limits approximately 1,000 feet north of Dallas Street.
- Baltimore Drive: along the southbound side between El Cajon Boulevard to Fletcher Parkway and between Lake Murray Boulevard and the City limits at Blue Lake Drive, and along the northbound side between El Cajon Boulevard and the City limits at Blue Lake Drive.
- El Cajon Boulevard: along both sides of the road between Baltimore Drive and 73rd Street.

Class III bike routes provide shared use of traffic lanes with cyclists and motor vehicles, identified by signage and/or street markings such as "sharrows." Bike routes are best suited for low-speed, low-volume roadways with an outside lane of 14 feet or greater. Bike routes provide network continuity or designate preferred routes through corridors with high demand. Existing Class III facilities in the project area provided along both sides of El Cajon Boulevard between 73rd Street and 70th Street.

No bicycle facilities currently exist along Alvarado Road.

4.13.1.4 Pedestrian Facilities

Existing pedestrian facilities within the project area consist of sidewalks and crosswalks along local roadways. Along some project area roadways, sidewalks are contiguous on one or both sides, but others have gaps. No sidewalks are provided along either side of Alvarado Road between 70th Street and the project frontage. Just east of the project site, contiguous sidewalks are provided along the eastbound side of the road to Guava Avenue. Alvarado Road serves as the only access road to the project site and currently, there are no pedestrian facilities that provide access to the project site.

4.13.2 Regulatory Setting

4.13.2.1 State

Senate Bill 743

SB 743, which was codified in PRC Section 21099 on September 27, 2013, required changes to the guidelines implementing CEQA regarding the analysis of transportation impacts. Specifically, SB 743 required the California Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must promote the reduction of GHG emissions, the development of multi-modal transportation networks, and a diversity of land uses. To that end, OPR published its *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018, and the California Natural Resources Agency has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, are no longer the basis for determining a significant

environmental effect under CEQA. The City is using the OPR guidance for conducting transportation impact analyses.

4.13.2.2 Local

San Diego Forward: The Regional Plan

The Regional Plan (SANDAG 2015) is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The underlying purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County as stipulated under SB 375. The Regional Plan establishes a planning framework and implementation actions that increase the region's sustainability and encourage "smart growth while preserving natural resources and limiting urban sprawl." The Regional Plan encourages an increase in residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation. General urban form goals, policies, and objectives are summarized as follows:

- Mix compatible uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.

The Regional Plan also addresses border issues, providing an important guideline for communities that have borders with Mexico. In this case, the goal is to create a regional community where San Diego, its neighboring counties, tribal governments, and northern Baja California mutually benefit from San Diego's varied resources and international location.

On February 22, 2019, the SANDAG Board of Directors approved an action plan to develop a new vision for the 2021 Regional Plan that would transform the way people and goods move throughout the region. Development of the 2021 Regional Plan, including the associated projects, programs, and policies, is underway and going through the planning process with an anticipated adoption by late 2021. While work progresses to develop this new vision, SANDAG prepared and adopted a 2019 Federal Regional Transportation Plan (2019 Federal RTP; SANDAG 2019b) that complies with federal requirements for the development of regional transportation plans, retains air quality conformity approval from the U.S. Department of Transportation, and preserves funding for the region's

transportation investments. The 2019 Federal RTP builds on The 2015 Regional Plan with updated project costs and revenues and a new regional growth forecast.

City of La Mesa General Plan

The Circulation Element of the adopted La Mesa General Plan outlines circulation goals, policies, and objectives related to streets and highways, scenic highways, public transit (trolley lines, bus, and paratransit), non-motorized transportation (bicycle facilities and pedestrian circulation), and regional transportation. The Circulation Element establishes a system for the classifying streets according to their intended function and identifies standards for the required elements (e.g., number of lanes, parking lanes, sidewalks, medians, bicycle lanes) of each functional classification. The following goals, objectives, and policies from the Circulation Element are relevant to the project:

Goal CE-1: A comprehensive, flexible transportation system that is functional, safe, accessible and attractive.

- **Objective CE-1.1**: Enhance and maintain City streets to meet the diverse needs of the community.
- **Policy CE-1.1.3**: Require new developments to provide for on- and off-street improvements directly related to the project, found to be needed to meet the City's policies regarding street function, design, and safety and that advance the City's "Complete Streets" objectives.

Goal CE-3: A diverse transit system offering a safe, time-efficient, and cost-effective transportation choice that reduces traffic congestion and improves air quality.

- **Objective CE-3.1**: Maximize the utility of La Mesa's transit services.
- **Policy CE-3.1.5**: Develop and apply Design Standards applicable to future developments that improve access to public transit.

Goal CE-4: Local and regional facilities that accommodate the unique needs of bicycle travelers.

- **Objective CE-4.2**: Improve safety for bicyclists and motorists alike.
- **Policy CE-4.2.1**: Design bicycle facilities in accordance with Caltrans design criteria.

Goal CE-5: Provide opportunities that encourage safe pedestrian travel.

- **Objective CE-5.1**: Improve the pedestrian network and walkability in La Mesa.
- **Policy CE-5.1.3**: Within a quarter mile of transit services, the needs of pedestrians will be a priority for future capital investment.

City of La Mesa Bicycle Facilities and Alternative Transportation Plan

The Bicycle Facilities and Alternative Transportation Plan (City 2012c) provides a framework for the future development of the City's bicycle network and also makes the City eligible for local, state, and

federal funding for bicycle and pedestrian projects. The plan objectives are to address the following issues as identified through discussions with City staff and the public:

- Provide a comprehensive bikeway system that provides a network of facilities serving destinations throughout the City.
- Place importance on sidewalk continuity and pedestrian safety during transportation facility improvements.
- Provide more programs to educate residents about the health benefits of cycling and walking.
- Provide enforcement and education of both motorists and cyclists to improve safety and awareness throughout the City.
- Develop a Complete Streets framework that encourages all modes of transportation and reduces traffic congestion, increases alternative transportation options and connectivity, and improves public health and safety.

The planned system builds upon existing bicycle and pedestrian facilities throughout the City with enhancements to overall connectivity, support facilities, safety and education programs. Coupled with bicycle and pedestrian education, as well as enforcement and promotional programs, the anticipated result is an increase in the number of commuters choosing to ride a bicycle and walk to nearby destinations.

4.13.3 Methodology and Assumptions

The VMT analysis conducted for the project was based on the OPR Technical Advisory. The Technical Advisory provides agencies with recommendations on screening thresholds, VMT analysis methodologies, project VMT thresholds, and mitigation strategies.

Screening thresholds are used to identify projects that are anticipated to result in less than significant transportation impacts without requiring a detailed transportation study. OPR recommends agencies develop thresholds to screen out projects based on project size, maps, transit availability, and provision of affordable housing. If a project meets any of the following screening thresholds, it is assumed to result in less than significant impacts related to VMT and a detailed transportation study is not required. The four screening thresholds are identified below:

- Project size: projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact.
- Screening maps: maps created with VMT data can illustrate areas that are currently below threshold VMT and would likely result in similar levels of VMT with new development can be used to screen residential and office projects.
- Proximity to transit: certain projects (residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within one half mile of an existing major transit stop or an existing stop along a high-quality transit corridor would result in a less than significant impact on VMT.

- Affordable Residential Development: A 100-percent affordable residential development (or the residential component of a mixed-use development) in infill locations may be presumed to result in a less than significant transportation impact.

The OPR Technical Advisory provides suggested methodologies to analyze VMT associated with a project. For residential and office projects, tour- and trip-based[1] approaches are recommended for assessing project VMT and comparing to the VMT thresholds. The OPR Technical Advisory also provides recommended numeric VMT thresholds for residential, office, and retails land projects. The methodology consists of calculating the VMT per capita and comparing it to the citywide or regionwide VMT per capita. If the ratios for the residential project exceed 85 percent of the city or regional average, a significant transportation impact would occur. This methodology was used for the proposed project's VMT analysis (Kimley Horn 2020). VMT for the project was estimated using the Series 13 regional SANDAG model under 2035 Horizon Year conditions for TAZ 3168 where the project site is located. Additionally, the SANDAG Mobility Management VMT Reduction Calculator Tool was used to assess VMT reductions for the project.

4.13.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines, a significant impact associated with transportation would occur if implementation of the proposed project would result in any of the following:

1. Would the project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

2. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

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

4. Would the project result in inadequate emergency access?

4.13.5 Impact Analysis

4.13.5.1 Transportation Plans

Threshold 1: Would the project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project would be consistent with applicable transportation plans, including San Diego Froward: The Regional Plan, the Circulation Element of the General Plan, and the City of La Mesa Bicycle Facilities and Alternative Transportation Plan, as discussed below.

[1] Trip-based assessment of a project's effect on travel behavior counts VMT from individual trips to and from the project. It is the most basic, and traditionally the most common, method of counting VMT. A tour-based assessment counts the entire home-back-to-home tour that includes the project.

San Diego Forward: The Regional Plan

The proposed project would be consistent with the overarching principles of the Regional Plan of increasing residential concentrations in areas served by transit and implementation of smart growth designed to strengthen the integration of land use and transportation. The project site is identified as a smart growth area on SANDAG's Smart Growth Concept Map (SANDAG 2016a) that includes the area surrounding the 70th Street Trolley Station. This smart growth area, identified as site LM-10, is designated a Community Center Smart Growth place type and described as "potential exists for a transit-oriented, mixed-use development located adjacent to the 70th Street Trolley Station" (SANDAG 2016b). Each smart growth place type is associated with certain housing and employment density targets and transit service thresholds and can qualify as either "Existing/Planned" or "Potential," depending upon whether it meets the thresholds included by reference in the Regional Plan. The minimum land use and transit targets for a Community Center include a minimum residential target of 20 dwelling units per acre and minimum transit service characteristics of high-frequency local bus or streetcar/shuttle within an urban area transit strategy boundary. Site LM-10 is designated an Existing/Planned smart growth area, which is a location that either contains existing smart growth development or allows planned smart growth in accordance with the identified land use targets and are accompanied by existing or planned transit services included in The Regional Plan. The proposed project would be consistent with both the land use target and transit characteristics.

The project would be consistent with other Regional Plan goals and strategies of increasing transportation mode choices and reducing reliance on the single-occupancy automobile. Currently, the project is well served by public transit, but the adjacent 70th Street Trolley Station is not easily accessible from the project site. Connections to the east and west of the project site are limited by lack of pedestrian infrastructure. The project would provide an accessible route for resident and public access the adjacent 70th Street Trolley Station by walking or biking via a shared-use path along the south side of the Alvarado Road. The shared-use path would continue from the project site to the east along Alvarado Road and connect to the existing sidewalk on Comanche Drive for access to other neighborhoods and destinations. The proposed shared-use path would also connect to planned future bicycle facilities along Alvarado Road. Provision of these multi-modal facilities would improve access to and from a major transit station for pedestrians and bicyclists and would provide project residents alternatives to single occupancy vehicular transportation. The potential for the project to incorporate a student housing component within the mix of residential units would likely reduce the number of single-occupancy vehicle trips to and from the site. Therefore, the proposed project would be consistent with the goals and strategies of the Regional Plan.

General Plan Circulation Element

The proposed project would be consistent with the relevant goals, objectives, and policies of the Circulation Element identified in Section 4.13.2.2. The project would construct a TOD that would provide direct connections to the adjacent 70th Street Trolley Station, as well as roadway, bicycle, and pedestrian improvements along Alvarado Road. Improvements are proposed to Alvarado Road along the project site frontage include road right of-way dedication and a public access easement to provide for a shoulder, parking lane, curb and gutter, a Class I shared pedestrian/bicycle path, pedestrian bridge over Alvarado Creek, and street-side landscaping. On-site access roads and pedestrian facilities would also be provided, including two internal access roads that would loop around the building perimeters, a pedestrian promenade along Alvarado Creek, and several other pedestrian paths connecting on-site areas.

These improvements would be consistent with Policy CE-1.13 (Require new developments to provide for on- and off-street improvements directly related to the project, found to be needed to meet the City's policies regarding street function, design, and safety and that advance the City's "Complete Streets" objectives), Policy CE-3.1.5 (Develop and apply Design Standards applicable to future developments that improve access to public transit), Objective CE-4.2 (Improve safety for bicyclists and motorists alike), Goal CE-5 (Provide opportunities that encourage safe pedestrian travel), and Objective CE-5.1 (Improve the pedestrian network and walkability in La Mesa). Therefore, the proposed project would be consistent with the Circulation Element.

Bicycle Facilities and Alternative Transportation Plan

The project would include bicycle facilities that would not conflict with those identified in the Bicycle Facilities and Alternative Transportation Plan (City 2012c). This plan identifies provision of Class II bike lanes along Alvarado Road between 70th Street and Guava Avenue. The project proposes a Class I facility along the south side of Alvarado Road along the project frontage that would connect to planned future bicycle facilities along Alvarado Road to the east and west. Provision of a Class I facility along the south side of Alvarado Road would provide more protection for bicyclists than Class II facilities and is a more practical facility for this site for access between the project site and the adjacent 70th Street Trolley Station, as westbound bicyclists would not have to cross Alvarado Road. Thus, while the project would provide a different type of bicycle facility along a portion of Alvarado Road than identified in the Bicycle Facilities and Alternative Transportation Plan, it would provide a separated bikeway that would accommodate both bicycle and pedestrians.

The project would be a TOD and would include improvements to bicycle and pedestrian facilities, encouraging the use of alternative transportation. The La Mesa General Plan Circulation Element proposes Class II bicycle lanes along Alvarado Road. The project would provide a shared-use path along the south side of Alvarado Road that will provide more protection for bicyclists than Class II bicycle lanes. The project would also connect to the Class II bike lanes that are proposed to be installed to the east of the project site. Therefore, the project would be developed in accordance with the City's Bicycle Facilities and Alternative Transportation Plan and the City's General Plan. The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

4.13.5.2 Vehicle Miles Traveled

Threshold 2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts and states that generally, VMT is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. As discussed in Section 4.13.4, the project VMT analysis was conducted using the methodologies and thresholds contained in the OPR Technical Advisory.

VMT Screening

Per the OPR Technical Advisory screening thresholds, a project located within one half mile of an existing major transit stop or along a high-quality transit corridor is presumed to have a less than significant impact on VMT. A major transit stop is defined 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. The project site is located adjacent to the 70th Street Trolley Station, which meets the definition of a major transit stop since it contains an existing rail station. The project therefore meets the VMT screening thresholds for land use projects due to the project site's proximity to a major transit stop. Thus, the proposed project may be presumed to have a less than significant impact on VMT and no detailed VMT analysis is required.

VMT Analysis

Although not required per the VMT screening threshold for proximity to transit, a VMT analysis was conducted for the project to determine whether it would exceed VMT thresholds. The VMT analysis was based on a Series 13 regional SANDAG model under 2035 Horizon Year conditions. The results of the analysis are shown in Table 4.13-1, *2035 Regionwide, Citywide, and Project VMT Per Resident*.

Table 4.13-1
2035 REGIONWIDE, CITYWIDE, AND PROJECT VMT PER RESIDENT

Scenario	Residents	Total Trips	VMT	VMT per Capita
Regionwide	3,855,696	13,756,249	58,989,617	15.3
City of La Mesa	72,248	264,684	1,011,045	14.0
Proposed Project	2,112	7,766	28,418	13.5

Source: Kimley-Horn 2020
VMT = vehicle miles traveled

The VMT per capita resulting from the proposed project is 13.5 miles, which is 88 percent of the regional average of 15.3 miles and above the threshold of 85 percent for residential projects.

VMT Reductions

The proposed project includes various transportation demand management strategies and multi-modal improvements that would be incorporated into the project as design features that are covered in the SANDAG Mobility Management VMT Reduction Calculator Tool. These VMT reduction features include construction of a TOD and provision of pedestrian and bicycle facility improvements.

As stated in the SANDAG VMT Reduction Calculator Tool, "TOD refers to projects built in compact walkable areas that have easy access to public transit" and are "places within a 10-minute walk of high-frequency rail transit station (e.g. SPRINTER, COASTER, Trolley)." The project would fulfill this requirement because the project is within one half mile of a rail transit station and would provide pedestrian and bicycle access to the 70th Street Trolley Station. This design feature would reduce the project's VMT per capita by 5.2 percent. Additionally, the project would include improvements to pedestrian and bicycle facilities. A shared-use path would be provided along the south side of Alvarado Road, providing an accessible walkway for residents to access the 70th Street Trolley Station by walking or biking. The shared-use path would continue to the east side of the project site, with a bridge structure over the creek, connecting to the City-planned bicycle facilities east of the project. Per the SANDAG VMT Reduction Calculator Tool, such improvements would reduce the project's VMT per capita by 1.5 percent. Incorporation of the project features listed above would reduce the project's VMT per capita to approximately 81 percent of the regionwide VMT per capita, which is below 85 percent of the

regional average. Therefore, the project would not conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Transportation impacts related to VMT would be less than significant.

4.13.5.3 Transportation Design Hazards

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

There would be no hazardous design features or incompatible uses introduced as a result of the project. The project would involve improvements to Alvarado Road along the project site frontage, including road right-of-way dedication and a public access easement to provide for a shoulder, parking lane, curb and gutter, a pedestrian bridge over Alvarado Creek, a shared pedestrian/bicycle path, and street-side landscaping. The shared-use path along the south side of the Alvarado Road project frontage would be constructed as a Class I facility, which would provide a buffered facility dedicated for bicyclists and pedestrians, where none currently exist.

On-site access roads and pedestrian facilities would also be provided, including two internal access roads that would loop around the building perimeters, a pedestrian promenade along Alvarado Creek, and several other pedestrian paths connecting on-site areas. The internal streets would provide ingress and egress for residents to the parking structures, guest parking spaces near the project entry points, access and circular routes for service vehicles, and emergency vehicle access and dedicated fire lanes. The design of these improvements would be required to conform with applicable federal, State, and City design criteria which contain provisions to minimize transportation hazards.

Additionally, the project site access points along Alvarado Road would be designed in accordance with City standards to consider adequate sight distances for both directions. These transportation improvements are intended to improve safety for motorists, bicyclists, and pedestrians on the roadway.

The proposed residential and resident-serving commercial uses are not anticipated to generate the types of traffic that would be incompatible with the existing transportation network or composition of traffic. Traffic generated by the project would include standard automobiles, bicycle, and pedestrian traffic, which would be consistent with the existing traffic in the area.

Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts related to transportation design hazards would be less than significant.

4.13.5.4 Emergency Access

Threshold 4: Would the project result in inadequate emergency access?

During construction of the project, heavy construction vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). Additionally, construction of the project could require temporary detours and/or lane closures that could temporarily disrupt travel along Alvarado Road for a period of time within the construction zone. Emergency access to all surrounding properties, however, would be maintained throughout the construction period. As a result, the project's construction-related impacts would be less than significant.

The project would construct improvements to Alvarado Road along the project site frontage, including road right of-way dedication and a public access easement to provide for a shoulder, parking lane, curb and gutter, a shared pedestrian/bicycle path, pedestrian bridge over Alvarado Creek, and street-side landscaping. Additionally, the project site access points along Alvarado Road have been designed to provide for adequate site distances for both directions. These roadway improvements would provide improved circulation along the roadway, including for emergency vehicles.

The project would provide adequate emergency access within the site. Access for emergency vehicles would be provided along the proposed perimeter road. Fire lanes would also be provided on site to accommodate emergency response vehicles such that Alvarado Road would not be obstructed for public safety vehicle movement as well as local traffic both to the east and west in the event of an emergency. Therefore, the project would not result in inadequate emergency access. Impacts would be less than significant.

4.13.6 Mitigation Measures

4.13.6.1 Transportation Plans

No significant impacts associated with transportation plans would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.13.6.2 Vehicle Miles Traveled

No significant impacts associated with VMT would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.13.6.3 Transportation Design Hazards

No significant impacts associated with transportation design hazards would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.13.6.4 Emergency Access

No significant impacts associated with emergency access would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.13.7 Significance Determination

The significance of impacts to transportation before and after mitigation is summarized in Table 4.13-2, *Significance Determination Summary of Transportation Impacts.* Implementation of the proposed project would not result in significant impacts related to transportation plans, VMT guidelines, transportation design hazards, or emergency access. Therefore, impacts related to transportation would be less than significant without mitigation.

Table 4.13-2
SIGNIFICANCE DETERMINATION SUMMARY OF TRANSPORTATION IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Transportation Plans	Less than significant	None required	Less than significant
VMT	Less than significant	None required	Less than significant
Transportation Design Hazards	Less than significant	None required	Less than significant
Emergency Access	Less than significant	None required	Less than significant

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0 3,000 Feet

Source: Aerial (SanGIS, 2017)

HELIX Environmental Planning

Existing Transportation Network

Figure 4.13-1

4.14 VISUAL RESOURCES

This section of the EIR describes the existing visual setting of the project site and vicinity within the context of the surrounding community, identifies applicable guidelines and regulations related to visual resources, and evaluates potential visual impacts related to implementation of the project. The following discussion includes information based on the Visual Impact Analysis for the Alvarado Creek Specific Plan (HELIX 2019), which is included as Appendix O of this EIR.

4.14.1 Existing Conditions

4.14.1.1 Landforms

The City's jurisdiction encompasses 9.2 square miles and is located approximately 14 miles inland from the Pacific Ocean. The City is in a transition zone between the coast and foothills in an area of San Diego County that is dominated by a series of geological features known as marine terraces. Canyons such as those containing Alvarado Creek cut through these terraces. The terraced topography results in substantial topographical variation and provides panoramic views of much of the City from a variety of locations. Topographical features, such as Mount Nebo and foothills of Mount Helix further define the geography and landforms of the City.

The project site is relatively level with a slight topographical variation as it slopes downward from east to west to the degree of approximately 10 feet. Existing on-site elevations range from approximately 400 feet to 410 AMSL. Land to the north includes Alvarado Road and I-8 corridors, which are generally at grade with the project site. Across I-8, the terrain gradually ascends within the existing developed neighborhoods to an elevation of approximately 500 feet AMSL. To the south of the project site, the land rises approximately 10 to 30 feet to a bench where the trolley corridor occurs. Beyond this bench, steep hillsides supported by retaining walls rise an additional 10 to 50 feet to a mesa at the edge of residential neighborhoods.

4.14.1.2 Visual Setting and Site Characteristics

The project site comprises four separate parcels that encompass approximately 12 acres. All four parcels are developed and currently occupied by the San Diego RV Resort. The RV Resort contains 174 full-hookup RV spaces and serves a combination of short-term and extended stay visitors. One of notable visual features of the project site includes a stand of approximately 155 Mexican fan palm trees that are scattered throughout the project site. These trees are informally grouped, and most have reached a relatively uniform height of approximately 80 feet. Due to the number of trees and associated heights, this stand of palm trees is highly visible and fairly prominent from surrounding areas.

Apart from the alignment of Alvarado Creek, which has retained some natural vegetation along the channelized banks, the project site is developed with a combination of paved surfaces and ornamental landscaping, as pictured in Figure 4.14-1, *Existing Visual Conditions – San Diego RV Resort*. Numerous RVs are parked within the paved areas and are grouped together along internal roadways. A combination of wrought iron and a wooden plank fence separate the site's boundary from Alvarado Road. Low shrubs and street landscaping provide further separation between the site and the roadway, as shown in Figure 4.14-2, *Existing Visual Conditions – Alvarado Road Frontage*.

On-site structures include two laundry/bathroom buildings and an office/apartment complex comprised of four buildings. All six existing buildings were constructed between 1954 and 1959. The office/ apartment complex consists of a two-story, rectangular-shaped office building; a single-story meeting building; a two-story fitness center building; and a two-story apartment building. The office and apartment buildings exhibit a contemporary architectural style with stucco exterior facades and low-pitch gable roofs with wide boxed eaves. The office building is rectilinear and has numerous large, metal-framed windows, and the second story cants out on the two long sides. The meeting room is rectangular with angled walls, a flat roof with stucco wall surfaces, metal-framed windows with wood molding, and wood-framed doors. The fitness center building has an exercise room with a curved façade and large picture windows, as well as pilasters and bay windows. A small keyhole-shaped swimming pool is present immediately east of the office building and is surrounded by a concrete patio. The two laundry/bathroom buildings are rectangular, single-story buildings with stucco façades and low front gable roofs. Both buildings have a small laundry room at one end with restrooms and storage in the remaining space. These buildings are pictured in Figure 4.14-3, *Existing Visual Conditions – Existing Buildings*.

Alvarado Creek is another notable visual feature of the project site. Alvarado Creek enters the site at the intersection of Alvarado Road on the east and continues through the site, bisecting the property until it enters an underground storm drainage facility in the western portion of the property. Alvarado Creek is channelized as it enters into the project site from the northeast and flows through a box culvert underneath a bridge over Alvarado Road. Alvarado Creek consists of a trapezoidal channel with concrete-lined banks and a natural channel bottom aside from the concrete aprons near the Alvarado Road overcrossing and at the western end of the site (adjacent to the 70th Street Trolley Station). Much of the channel supports vegetation including native and non-native species at varying vegetative cover, and water regularly flows through this section of Alvarado Creek. This reach of Alvarado Creek is shown in Figure 4.14-4, *Existing Visual Conditions – Alvarado Creek*.

Three freeway-oriented billboard signs are located within the project site along the Alvarado Road frontage. One is located at the eastern boundary of the site and is single-sided sign and oriented for viewers traveling along eastbound I-8. The other two signs occur in the western portion of site and are double sided and visible to both eastbound and westbound viewers. These signs are depicted in Figure 4.14-5, *Existing Visual Conditions – Billboards*.

Overhead utility lines also cross over portions of the site that connect to 15 utility poles located throughout the site (see Figure 4.14-1).

4.14.1.3 Surrounding Land Uses

Surrounding land uses include Alvarado Road and I-8 to the north, the double-track Green Line trolley line to the south, a car dealership and motel to the east, and the 70th Street Trolley Station to the west of the site. A more detailed description of the visual environment of the surrounding land uses is provided below.

North of the Project Site

The northern boundary of the project site area is defined by Alvarado Road and beyond that, I-8. Alvarado Road is a two-lane local collector with minimal improvements; no sidewalks or bicycle facilities are provided along the site frontage. Alvarado Road also serves as a frontage road to I-8 and as such it

parallels the freeway in this area, divided by a concrete masonry wall along the western portion of the project frontage. The wall itself has been subject to graffiti and its removal is evidenced by the various swaths and patchwork of paint that are visually inconsistent and further accentuate the deteriorated condition of this roadway right-of-way.

Further east along the project frontage, I-8 is divided by a chain link fence and the alignment of Alvarado Creek. I-8 is a major east-west freeway and in the area of the project, I-8 has four general purpose lanes in each direction. The freeway is heavily traveled and has an annual average daily traffic count of approximately 20,800 (Caltrans 2017a).

North of I-8 along Parkway Drive are residential neighborhoods composed of single-family homes and multi-story apartment complexes that front Parkway Drive.

South of the Project Site

The Green Line trolley tracks and Alvarado Creek generally form the southern project site boundary. Immediately adjacent land uses south of the project site include the Green Line trolley tracks and portions of Alvarado Creek. Beyond that and located up on a mesa are a combination of single and multi-family residences.

Within the western portion of the project site that abuts Alvarado Creek, the southern site boundary is formed by a four-foot tall cement wall. Beyond the wall, Alvarado Creek and vegetated open space separate the trolley tracks from the site. As the tracks extend eastward along and near the southern site boundary, they begin to rise in elevation on a bench and end up approximately 30 feet above the site in the eastern portion of the project site. The trolley corridor contains rail infrastructure, including double track rail, ballast, catenary poles and wires, signals, and fencing. Additionally, retaining walls occur on portions of the north-facing slopes on both sides of the trolley corridor.

Further south of the tracks and on a mesa that rises approximately 50 feet above the project site are a mixture of single-family and multi-family residences. The character of this neighborhood is eclectic, as there are a variety of residential building types at varying ages with different architectural styles.

Adjacent to the western end of the site are two large, two-story apartment complexes along Saranac Street (Fleetwood Apartment Homes and La Cuesta Apartments). Single-family homes along Keeney Street that include a mix of older and newer homes occur east of the apartment complexes. The Colony Mobile Plaza mobile home park and another large apartment complex (Comanche Hills) are located along the mesa east of the mobile home park and adjacent to the eastern portion of the project site. There is little connectivity between these residential uses, such as sidewalks or streetscaping that would define the area as a collective unit or cohesive neighborhood. This area is served by a grid of local streets that connect to El Cajon Boulevard but have no direct street connection to each other or the project site below the mesa upon which they occur.

East of the Project Site

Directly east of the project site is Bob Stall Chevrolet, which occupies 3.67-acres of automobile sales and service land uses along Alvarado Road. The site supports an automotive sales building, automobile repair buildings, and a paved sales lot. As a commercial business, the site has nighttime lighting on both the structures themselves and on light standards spaced throughout the lot. Traveling further east on

Alvarado Road is a motel (Motel 6) and the commercial fleet sales and service departments of the auto dealership.

West of the Project Site

Immediately west of the project site is the 70th Street Trolley Station. This station consists of covered bench seating areas, a park-and-ride lot, and a bus pull in and loading/unloading area. There is security lighting provided throughout the trolley station on light standards and affixed to the awning structures. While there is some ornamental landscaping, it is mostly clustered in the parking area. West of the trolley station is an automobile repair business in a single-story warehouse-type building and a two-story, multi-tenant office building.

4.14.1.4 Visual Resources

Scenic Vistas

The Land Use and Urban Design Element of the City's General Plan identifies specific panoramic views and vistas that contribute to the City's community image. Panoramic views are described in the General Plan (Table LD-5) as providing "an overall image of a large portion of the city or outlying region." The location may be within or adjacent to the city and from an easily access point such as a hilltop, pass, or atop a landmark. There are two designated panoramic views in the General Plan, including one from Mount Helix and one near the Fletcher Parkway/Amaya Drive intersection.

Vistas are described in the General Plan as "similar to panoramic views but with a much narrower angle." These views are characterized by long vertically defined spaces that open to allow sight of a few select elements. Common examples occur along streets, corridors, or groves that open to views of the ocean, a major building, or a square. The General Plan designates four vistas, including a view of Lake Murray from Baltimore Drive, a view from Fletcher Parkway near Baltimore Drive, and two views along La Mesa Boulevard in the downtown village.

None of these designated panoramic views or scenic vistas are located within the project vicinity. Furthermore, the project site does not contain any features that would be part of a scenic vista, nor does it provide any expansive views of notable regional landforms. There are very limited views of Cowles Mountain from the project site and the surrounding areas; however, existing urban development and natural topography largely obstruct views of Cowles Mountain.

Scenic Resources

There is not a comprehensive list of specific features that automatically qualify as scenic resources. However, Caltrans provides some direction citing a partial list of visual qualities and conditions that if present indicate the presence of a scenic resource. This list includes a landmark tree or group of distinctive trees accented in a setting as a focus of attention. Conversely, trees that are commonplace and repetitious, occurring frequently along a roadway, lack the typical characteristics of a scenic resource (Caltrans 2019).

The Land Use and Urban Design Element of the City's General Plan identifies visual resources within and adjacent to the City. In addition to the panoramic views and vistas discussed above, multiple landmarks/ nodes; districts and groupings; and gateways, paths, and edges are designated throughout the City. Within the project site, the Mexican fan palm trees are identified in the General Plan as a landmark and

a grouping. The General Plan Update defines a landmark as "usually either physical objects such as signs, isolated towers, unique buildings; or natural features such as a hill or a lake." They may be seen within the city or at such a distance that they symbolize a constant direction. A grouping is defined as "small-to-medium sections of the city that are similar in relation to districts. They are a collection of similar units that bridge gaps left between districts and nodes. A grouping may be buildings of similar character, use, or history, or be non-structural such as a park or open space."

The palm trees are visible from I-8 approaching the project area from the west, providing a visual landmark indicating the entrance into the La Mesa area. Additionally, given their location near a freeway ramp, they may also provide navigational aid for drivers along I-8 entering the area. They are also visible from other nearby locations to the north and south but are most prominent from the freeway corridor and adjacent frontage roads (Alvarado Road and Parkway Drive). Their concentration, height, and resulting visual prominence create a visual focal point for the area. Palm trees, however, are commonplace in the southern California landscape and are frequently planted along roadways and within developed properties, including within the project area and other portions of the city. No other designated scenic resources occur on site or in the immediate project area.

The City has identified other visually sensitive areas through the Scenic Preservation Overlay Zone and Hillside Overlay Zone. Most of the land within these overlay zones are located within the southern portion of the City. The project site is not within either of these overlay zones. There are also five additional "visually sensitive areas" where new development is required to be compatible with the physical characteristics of each of these sites and the surrounding environment. Although two of these additional visually sensitive areas are near the site (one to the east on an undeveloped hillside and one to the west on undeveloped land), none occur on or adjacent to the project site.

Additionally, there is one designated scenic highway in the city limits of La Mesa—a two-mile portion of SR 125 as it transitions from SR 94 to I-8. This scenic highway corridor passes through residential and commercial development and provides generally open views of the foothills and peak of Mount Helix, as well as more distant views of Mount Miguel and Dictionary Hill. The project site is approximately two miles northwest of this scenic highway corridor.

4.14.1.5 Visual Character

Visual character is descriptive and non-evaluative, which means it is based on defined attributes that do not include subjective positive or negative value judgments. Visual character, as evaluated below is composed of pattern elements and pattern character.

Pattern Elements

Pattern elements are the artistic attributes inherent in the elements that compose a landscape and include the primary visual attributes of objects such as form, line, color, and texture. The form of an object is its visual mass, bulk, or shape. Line is introduced by the edges of objects or parts of objects. The color of an object is both its visual or reflective brightness and its hue. Texture is apparent surface coarseness. Awareness of pattern elements varies with distance.

The visual character of the project area encompasses diverse forms predominantly composed of built environment features intermixed with some natural features. The area is almost entirely developed with a mixture of residential, commercial, and transportation uses. Given the variety of uses, building forms differ considerably with respect to shape and mass. The structures provide geometric forms with linear

elements and a mix of colors on the building facades and roofs. Textures are generally smooth to semi-coarse depending on the exterior surface treatment on buildings. Roadways and parking areas provide additional developed features that exhibit similar pattern elements but are more homogenous in color and texture. The trolley tracks provide a strong linear element, as do the alignments of I-8 and roadways. The natural features are positioned in between, and are surrounded by, urban development and consist of ornamental and native vegetation, hillsides, undeveloped land, and Alvarado Creek. These elements provide contrasting shapes, colors, and textures compared to the structures. The vegetation provides various shades of greens, yellows, and browns with soft textures. Within the project area, Alvarado Creek is channelized, which creates defined linear edges of the creek banks.

The project site itself lacks features with much apparent mass or bulk. There are five buildings on the site that are similar in form and color. The buildings are one to two stories with geometric forms and are painted a tan color. Most of the site consists of paved surfaces and parking stalls for RVs. This expanse of parking area provides a monotypic element in terms of color and texture. Landscaped and hardscaped areas divide the RV parking stalls for the RVs, which creates a sprawling but low-level form. The arrangement of parked RVs along an internal grid roadway network also provides some consistency in pattern elements. Extending vertically from the site and offering contrasting forms, shapes, colors, and textures are the palm trees, narrow and parallel to the low-lying structures and RVs. The palm trees are greater in height than any other of the site features and along with 15 utility poles, provide vertical linear elements. Overhead utility lines that cross the site create elevated horizontal line elements. The texture of the developed site features is typical of urban built environments, and include a combination of generally smooth hardscaped features, asphalt, and building and recreational vehicle façades and surfaces. On-site landscaping and vegetation cover, some of it rather dense, within Alvarado Creek provide verdant features with softer textures than the developed features.

Pattern Character

Pattern character describes the dominance, scale, diversity, or continuity between the pattern elements. Dominance occurs when a specific feature is prominently positioned, contrasted, or extended to a point where the specific feature strongly influences the pattern character of a scene. Scale is the size relationship among landscape components in the visual environment. Diversity is the frequency, variety, and positioning of pattern elements. Continuity is the uninterrupted flow or transition among pattern elements.

Within the project area, large-scale visually dominant elements include the I-8 freeway and associated roadway infrastructure (i.e., overcrossings and ramps), as well as the on-site billboards and stand of palm trees. Other man-made features, such as buildings and local roads are generally consistent with one another in terms of scale and prominence. Given the mixture of uses and presence of some natural features, the project area exhibits a moderately high degree of diversity. Although the area includes various uses, residential development is the prevalent use and the development patterns of residential neighborhoods provide some degree of continuity. Similarly, transportation corridors that traverse the area, most notably I-8 and the Green Line trolley corridor, also provide some continuity due to the alignment and expanse of these facilities as they extend through the project area.

The majority of the site is exemplified by the rows of RVs divided by asphalt hardscape and some softer ornamental vegetation, which does not lead to the dominance of a specific feature. However, the Mexican fan palm trees, as discussed previously, are visually prominent. While at ground level at the site they are not as recognizable as having dominance because of the relatively narrow profile of the trunks,

at further distances from the site, they do become a dominant feature given their concentration and generally uniform height of approximately 80 feet. They are pronounced in relation to other landscaped components in the visual environment. The three billboards within the site are large-scale elements compared to other on-site features and given their size and positioning along the site frontage, exhibit visual dominance. The combination of the palm trees and billboards contribute to a moderate level of dominance. Diversity of the site is moderately low given the single use of the site and similar visual elements across the site. Trees, including the palms, occur throughout the project site, and although they are not arranged in a distinctive or formal pattern, their assemblage provides some continuity across the site. This is especially evident at further distances. The arrangement of RVs along a grid pattern within the internal roadways also creates continuity among on-site pattern elements. The trees and RVs contribute to a moderate degree of continuity.

Existing Visual Character Summary

Overall, the character of the project site and surrounding area is urban in nature due to the integration of the man-made environment comprised of a mixture of residential, commercial, and transportation uses with limited natural features. The site has a moderate level of dominance, low diversity, and a moderate degree of continuity.

4.14.1.6 Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the viewshed. This approach to evaluating visual quality can help identify specific methods for mitigating specific adverse impacts that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.

In relation to vividness, the project site contains memorable visual elements, including a designated visual landmark, the palm trees, and three billboards. The concentration of the 155 trees at a generally uniform height of approximately 80 feet creates a distinctive focal point from surrounding areas. In addition, while not a landmark as defined by the City's General Plan and urban in nature, the three billboards that are placed among the site's interface with Alvarado Road are a distinctive feature of the site adding to the site's memorability. Additionally, Alvarado Creek, and especially the dense vegetation within the creek, creates a vivid natural feature that contrasts with the surrounding developed elements. At the same time, the location of the project site within an almost entirely developed urban area and surrounded by development detracts from the vividness these on-site memorable features provide. This results in a moderate vividness rating for the project site and surrounding area.

The project site is part of the broader landscape that is dominated by I-8 and residential neighborhoods to the north, the trolley tracks as they elevate from at grade to approximately 30 feet higher than the

site and the mesa with a mixture of incongruent residential land uses to the south, the trolley station to the west, and the auto dealership and motel to the east. The project area contains a mixture of land uses and exhibits a development pattern characteristic of an urbanized community, which provides some degree of intactness. There are very few natural elements that encroach into the built environment of the area, but there is some open space, undeveloped land, hillsides, and Alvarado Creek that to some extent disrupt the intactness of the built environment. The intactness of the area is therefore considered moderately low.

The visual unity of the project area is moderately low. Although the built portion of the area is composed mostly of residential development, neighborhoods and homes within them are diverse in terms of architectural style, size, color, configuration, and age. Some pockets of relatively homogenous neighborhoods are evident, but the overall visual mosaic contributes to moderately low unity. Commercial and transportation facilities within the project area also reduce unity within the area. While there are some natural features present, they are generally isolated and are surrounded by built components; there is no connectivity to larger expanses of similar natural features.

The overall existing visual quality of the project site and surrounding is moderately low given the moderate degree of vividness and moderately low rating of intactness and unity.

4.14.1.7 Viewer Response

Viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project's implementation.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, the speed at which the viewer moves, and position of the viewer. A viewer's response is also affected by the degree to which he/she is receptive to the visual details, character, and quality of the surrounding landscape. A viewer's ability to perceive the landscape is affected by his/her activity. A viewer on vacation would probably take pleasure in looking at the landscape, and an individual may be strongly attached to the view from his home, but a local resident commuting to work may not "register" those same visual resources on a daily basis.

Viewer Groups

Prior to discussing the viewer exposure and sensitivity, it is important to define who the viewer groups are that would be potentially impacted by land use changes at the project site. For this project, the viewer groups consist of those people that frequent the neighboring land uses; residents; travelers along I-8, Alvarado Road, the other local serving roads (Parkway Drive to the north, Saranac Street, Keeney Street, Williams Street, and Comanche Drive to the south); and people utilizing the trolley and the 70th Street Trolley Station. These viewer groups include motorists, bicyclists, pedestrians, and transit riders. Therefore, the assessment of viewer response focuses on these three viewer groups with views of project elements from public vantage points.

Viewer Exposure

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Location relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure. Quantity refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. Duration refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

Motorists

Motorists along I-8 have direct open views into the project site from both the eastbound and westbound direction. The freeway generally is at the same elevation as the site and there are limited intervening elements between the travel lanes and the project site. Based on the posted speed of 65 mph, views onto the project site could have a duration of about half a minute for eastbound (approximately 36 seconds) and westbound (approximately 33 seconds) travelers within the viewshed of the site along the freeway. Based on the alignment of the freeway (i.e., curves) and presence of existing developed features and landscaping, existing site elements are generally visible from a distance of 0.7 mile in the eastbound direction (near the 70th Street/Lake Murray Boulevard overcrossing) and 0.6 mile in the westbound direction (near the Fletcher Parkway overcrossing). Given the project site's proximity to the I-8, open views into the project site, and the large quantity of viewers along this stretch of the freeway (approximately 20,800 [Caltrans 2017a]), motorists' viewer exposure on I-8 is considered high. Travelers on I-8 would comprise the largest viewer group in the project area.

Viewer exposure along other nearby local roads differs per vantage point. The freeway frontage roads on the south and north sides of I-8, Alvarado Road and Parkway Drive, offer open to partially obstructed views near the site. Alvarado Road abuts the site and provides immediate and direct open views into the site, as shown in Figure 4.14-6, *Views from Public Vantage Points – Alvarado Road*. Parkway Drive is higher in elevation than the site and provides some intermittent bird's eye views into the site although roadside landscaping, walls, and the freeway block open views from some vantage points along this roadway, as shown in Figure 4.14-7, *Views from Public Vantage Points – Parkway Drive.* The number of motorists on these frontage roads is approximately 2,700 on Alvarado Road and 3,400 on Parkway Drive (SANDAG 2020). With posted speeds of 35 mph, the view duration would be about 21 seconds along Alvarado Road (for both the eastbound and westbound direction based on a site distance of approximately 0.2 mile for each direction) and about 41 seconds along Parkway Drive (both eastbound and westbound directions based on a site distance of approximately 0.4 mile). Motorists' viewer exposure would be moderately high on Alvarado Road because of the direct adjacency of the viewer, and moderate on Parkway Drive.

Viewer exposure along public roadways on the mesa south of the site is limited, and the few views afforded from a public location are mostly obstructed by intervening structures, landscaping, and topography. Public roadways in this area dead end at a residence or private street, including Saranac Street, 73rd Street, Keeney Street, and Williams Street. These streets are not highly traveled as they do not connect to other streets and are utilized almost exclusively by residents or visitors of the homes along the roadways. Comanche Drive is another local street that provides access to primarily residents, but this roadway also connects to Alvarado Road where it intersects with Fletcher Parkway and the I-8 eastbound ramp. Consequently, the number of viewers along Comanche Drive is much higher

(approximately 11,600 ADT) than the other local roadways named above (estimated at approximately 1,100 ADT or less [SANDAG 2020]). Furthermore, open views of the project site are generally not provided from these streets due to topography and intervening development. Brief glimpses of the site and/or tops of some of the on-site palm trees may be available in between buildings or above vegetation, but no discernible views encompassing the larger stand that mark the site are available. Motorists' viewer exposure from these public roadways is therefore considered very low.

Bicyclists and Pedestrians

Bicyclists and pedestrians traveling along surrounding local roadways would be moving at slower rates of travel compared automobiles resulting in longer durations of potential views. As discussed above, views into the site from surrounding local roadways are generally limited to the two frontage roads that parallel I-8: Alvarado Road and Parkway Drive. Views into the site are not generally provided from local roadways on the mesa to the south. While view durations could be longer for these viewer groups, the extent of views is essentially the same as motorists. Open proximal views are provided from Alvarado Road; however, there are no sidewalks or bike lanes along Alvarado Road. The absence of sidewalks and bicycle facilities does not necessarily preclude the use of this roadway for these viewer groups, but the number of pedestrians and bicyclists is expected to be relatively minimal. Moreover, people walking or biking along Alvarado Road are generally focused on safely traveling along the roadway and not at the surrounding visual environment. Nonetheless, viewer exposure of bicyclists and pedestrians would be moderate along Alvarado Road given the immediate adjacency of the project site.

Sidewalks are provided on the north side of Parkway Drive but there are no bike lanes on this roadway. Pedestrians traveling on the sidewalks have varying degrees of view exposure into the project site. As shown in Figure 4.14-7, there are vantage points along the roadway where views into the site are fairly open across the roadway and I-8 while views from other vantage points are largely obstructed by vegetation and walls along the roadway with only the tops of some palm trees visible. Bicyclists along Parkway Drive would have similar views but slightly shorter durations because they would be traveling faster than pedestrians. Viewer exposure along Parkway Drive would be moderate given the variability in project views.

Overall, pedestrian and bicyclist viewer exposure on surrounding local roadways that provide views into the site would be moderate.

Transit Patrons

The Green Line trolley corridor extends just to the south of the project site on the south side of Alvarado Creek. The trolley tracks sit higher than the site and thus, transit riders have open views directly into the project site as trolleys pass by the site. Based on a maximum trolley speed of 55 mph and site distance of approximately 0.75 mile, trolley passengers could have a view duration of the project site of up to approximately 49 seconds as they pass by the site while riding a trolley. Transit patrons at the adjacent 70th Street Trolley Station have static views of portions of the site, namely the tall palm trees and some of the billboards. Given the adjacency of open views from the trolley corridor and neighboring transit station, transit patrons' viewer exposure would be moderately high.

Viewer Sensitivity

Viewer sensitivity is defined as both the viewers' concern for scenic quality and the viewers' recognition of change in the visual resources that make up the view.

A viewer's concern for scenic quality is dependent upon in part, personal experiences and values and in part the context in which a viewer is observing. For this project, the viewer's concern for scenic quality is dependent upon the viewer group. Specifically, a motorist on I-8 or the local roadways or a traveler along the trolley corridor would likely have a lower concern for scenic quality since their views are fleeting and the primary focus of the viewer is on reaching a particular locale as opposed to the scenic quality of the commute. Bicyclists and pedestrians would be more concerned with scenic quality since they are traveling at slower speeds and are generally more attuned to the visual aspects of their surroundings. Similarly, transit patrons are passengers and have more opportunity as passive observers to notice the visual landscape while at the trolley station or riding in a trolley.

A viewer's recognition has three attributes: activity, awareness, and local values. Activity relates to the preoccupation of viewers and whether they are preoccupied or truly engaged in observing their surroundings. The more they are observing their surroundings, the more sensitivity viewers will have to changes to visual resources. Similar to the concern for scenic quality, a motorist or commuter traveling through the area en route to a destination is generally less engaged with the surroundings. Primary public views of the project site are from surrounding freeways and roadways, the trolley corridor, and the 70th Street Trolley Station. Viewers from these locations are likely focused on reaching their destination, but as discussed above, bicyclists, pedestrians, and transit patrons would be expected to be more aware of scenic qualities of their surroundings.

Awareness relates to the focus of view and whether the focus is wide, and the view is general, or whether the focus is narrow, and the view is specific. The more specific the awareness, the more sensitive a viewer is to change. In general, commuters may not be particularly aware of all visual changes along a commute; however, given the scale and density of the project in comparison to the existing site setting, it is anticipated that the awareness would be high for all viewer groups. Visual changes at the other public vantage points would be noticeable through the narrow viewsheds that are offered in between the structural, landscape, and topographical obstructions. Given that viewer groups in these areas would most likely be residents, their awareness would also be expected to be high.

Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics, or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. Conversely, local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals. As previously noted, the palm trees on the site are considered a landmark in the City's General Plan. There may be some local value placed upon these trees providing a navigational reference but the trees themselves are not unique to the region and are not indicative of spotlighting a greater scenic resource.

Based on the anticipated concern for scenic quality and recognition of change in the visual resources, viewer groups overall would be expected to have a high sensitivity to change.

4.14.2 Regulatory Setting

4.14.2.1 State

California Scenic Highway Program

The California Scenic Highway Program was created by legislature in 1963 (Streets and Highway Code Section 260 et seq.) and managed by the Caltrans. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. A state scenic highway is any designated freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. A scenic designation is determined by the local jurisdiction after consideration and evaluation of how much of the natural landscape a passing motorist sees and the extent to which visual intrusions (e.g., buildings, unsightly land uses, noise barriers) impact the "scenic corridor." There is one officially designated scenic highway in the city limits of La Mesa—a two-mile portion of SR 125 as it transitions from SR 94 to I-8, which at its nearest point is approximately two miles east of the project site. Scenic resources within this corridor include hillsides and sloping terrain with prominent landforms of Mount Helix, Mount Miguel, and Dictionary Hill.

I-8 from Sunset Cliffs Boulevard near the Pacific Ocean to SR 98 in Imperial County is listed as an eligible scenic highway (Caltrans 2017b). An eligible status is not an official designation and does not provide the protections under the California Scenic Highway Program. There are no identified attributes associated with I-8 in the project area that make it an eligible scenic highway.

4.14.2.2 Local

La Mesa General Plan

The General Plan sets forth goals and policies that comprise a comprehensive, unified program for physical development within the City. The goals, objectives, and policies contained in the General Plan are intended to guide the City's officials and staff in decisions concerning the use of land, as well as a wide range of issues relevant to growth and development within the City and are explained in detail in the varying General Plan Elements.

The Land Use and Urban Design Element of the General Plan contains five major concepts that are particularly important to all development that occurs within the City:

- The City's neighborhoods and facilities should be preserved and improved.
- New development and redevelopment should exhibit high quality design and fit the characteristics of the City's neighborhood and districts.
- Land use decisions should support sustainability by conserving valuable resources and planning for future generations.
- Promote local job creation and retention by encouraging new business opportunities.
- Land use and urban design are integrated to ensure that the physical forms, patterns, and aesthetics of future development advance La Mesa's goals for high quality life and a more sustainable future.

In particular, the following goals, objectives, and policies relate to visual resources as they pertain to development:

Goal UD-1: A built environment that contributes to the qualities distinguishing La Mesa's unique community identity.

Objective UD-1.1: To protect La Mesa's existing built environment and cultural heritage.

- **Policy UD-1.1.1**: The visual quality and continuity of the community will be enhanced through consistent circulation patterns, definition of community edges and boundaries, distinct gateways and nodes, and removal of visually disruptive elements.

Goal UD-2: Well-designed development based upon proven urban design principles.

- **Objective UD-2.1**: Preserve and enhance the aesthetic, environmental, economic, and social character of La Mesa through careful design review decisions.

- **Policy UD-2.1.1**: Give careful attention to Urban Design Standards related to building scale, architectural materials, landscaping, and other elements to emphasize attractive building and site design in new developments and redevelopments.

- **Policy UD-2.1-2**: The review of projects should place a priority on the compatibility of adjacent land uses. Special attention should be given to buffering and transitional methods, when reviewing projects of differing densities or land uses.

Goal UD-3: A built environment that respects La Mesa's natural environment and climate.

- **Objective UD-3.1**: Development that is architecturally and environmentally sensitive and is compatible with neighboring design and scale.

- **Policy UD-3.1.5**: Increase the amount of foliage, especially street trees, for aesthetic reasons and to provide shade, cooling, habitats, air quality benefits, and visual continuity.

La Mesa Zoning Ordinance

The La Mesa Zoning Ordinance (Title 24 of the LMMC) serves as the primary implementation of the General Plan. The Zoning Ordinance is a regulatory document that establishes specific standards for the use and development of all properties in the City. The Zoning Ordinance regulates development intensity using a variety of methods, such as specific regulations regarding the use of land; minimum lot sizes; limitations on location, height, bulk, and scale of buildings; and other regulations such as lighting.

In addition to the development regulations established by the base zones, several overlay zones have been applied to particular areas of the City where supplemental permitted use and development standards are merited. Overlay zones applicable to visual resources include the Urban Design Overlay Zone and the Scenic Preservation Overlay Zone. The Urban Design Overlay Zone is used to supplement the required land use regulations reviewed under the standard provisions of the Zoning Ordinance. The Scenic Preservation Overlay Zone established regulations for the recognized scenic areas in the City, the character of which could be adversely affected by development and the use of land without special

regulations. The project site is located within an area designated with the Urban Design Overlay Zone, but not within the Scenic Preservation Overlay Zone.

La Mesa Sign Ordinance

The La Mesa sign ordinance (Title 15 of the LMMC) provides regulations for signage intended to balance the means for conveying information with the needs to protect the visual environment. Specific regulations are generally guided by land uses. The project site currently contains three "non-conforming" freeway-oriented billboards. In accordance with the sign ordinance, all existing advertising structures (i.e., billboards) can retain their existing non-conforming status until such time that they are removed.

4.14.2.3 The Urban Design Program

The Urban Design Program uses principles of design during a review process that is intended to ensure that new development fits into the fabric of the community. The program includes guidelines for evaluating public and private projects based on the community image concept and hierarchy of land use ranging from regional to site-specific plans. The stated goal of the Urban Design Program is to "Preserve and enhance the community character and sense of place by delivering projects and programs that build upon positive design features." Projects subject to design review include new or substantially renovated commercial properties, multi-unit residential developments, projects within the City's mixed-use corridors, and sites within the Downtown Village Specific Plan area. The proposed Specific Plan would include site-specific design recommendations and criteria for development within the project site that would supersede those required by the Urban Design Program.

4.14.3 Methodology and Assumptions

The analysis in this section of the EIR is based on the Visual Impact Analysis for the Alvarado Specific Plan (HELIX 2019), which is provided as Appendix O of this EIR. Visual impacts are identified through describing the existing visual setting, assessing the amount of change that would occur as a result of the proposed project, and interpreting how the affected public would respond to or perceive those changes. The analysis and methodology are largely based on the concepts and visual assessment guidelines contained in the FHWA's *Visual Impact Assessment for Highway Projects*, as well conformance with applicable City policy guidelines, plans, and regulations that govern visual resources. The assessment utilized data from observations, a spatial analysis, and a photographic inventory of the project site and larger visual environment of the project area.

4.14.4 Significance Thresholds

According to Appendix G of the CEQA Guidelines a significant visual impact would occur if implementation of the proposed project would result in any of the following:

1. Would the project have a substantial effect on a scenic vista?

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

3. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly

accessible vantage point)? If the project is in an urbanized area, conflict with an applicable zoning and other regulations governing scenic quality.

4. Would the project create new source of substantial light and glare, which would adversely affect day and nighttime views in the area?

4.14.5 Impact Analysis

4.14.5.1 Scenic Vistas

Threshold 1: Would the project have a substantial effect on a scenic vista?

The Land Use and Urban Design Element of the City's General Plan identifies scenic vistas and panoramic views that contribute to the City's community image. None of these designated scenic vistas or panoramic views are located within the project vicinity, and the project site is not visible from any of them except for Mount Helix. Mount Helix is identified in the General Plan as one of the panoramic views and a major landmark from which expansive views of a large portion of the City can be observed. The project site is barely visible in the distance from this vista; the on-site palm trees can be seen in very distance, but they are not visually prominent and other existing on-site features are not apparent. At a distance of over three miles, the change from the existing RV resort to a multi-family residential development comprising four multi-story buildings would not be substantially discernible. At this distance and with the expanse of the view that encompasses multiple and diverse built environment features, the project elements would visually blend in with the surrounding urban development such that they would not adversely affect views from this designated vista.

The project site is also not located within the Scenic Preservation Overlay Zone, Hillside Overlay Zone, or other identified visually sensitive areas. Furthermore, the project site does not contain any features that would be part of a scenic vista, nor does it provide any expansive views of notable regional landforms.

There are very limited views of Cowles Mountain from the project site and the surrounding areas; however existing urban development and natural topography largely obstruct views of Cowles Mountain. Intermittent views of Cowles Mountain would continue to be provided from the site. Impacts associated with adverse effects on scenic vistas would be less than significant.

4.14.5.2 Scenic Resources

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

An approximately two-mile segment of SR 125, between SR 94 and I-8, is an officially designated state scenic highway. Scenic resources within this corridor include views of the prominent foothills and peak of Mount Helix with distant views of Cowles Mountain to the northwest and Mount Miguel and Dictionary Hill to the southeast. The portion of this scenic highway at the highest elevation (approximately 650 feet AMSL) and with greatest potential for visibility of the project site is located near I-8. The project site is approximately two miles west of this portion of SR 125. Existing site features are not visible from this scenic highway due to distance, existing topography, and intervening development and vegetation. With the construction of the proposed buildings that would include five stories above one to three levels of parking with a maximum building height of 85 feet aboveground and considering the average site elevation of approximately 410 feet AMSL, the proposed buildings would not be visible

from this designated scenic highway corridor for the same reasons that existing site features are not visible. I-8 is located approximately 30 feet to the north of the project site. While I-8 from Sunset Cliffs Boulevard near the Pacific Ocean to SR 98 in Imperial County is listed by Caltrans as an eligible scenic highway, it is not officially designated and as such, is not afforded aesthetic protection under the California Scenic Highway Program. Thus, the project would not substantially damage scenic resources within any designated state scenic highway.

The existing stand of Mexican fan palm trees on the project site are identified as a scenic resource, specifically a landmark in the City's General Plan. Project implementation would result in the loss of the 155 Mexican fan palms. The palm trees are highly visible from the adjacent I-8 corridor and are a visual landmark indicating the entrance into the La Mesa area. Their concentration, height, and resulting visual prominence create a visual focal point for the area. While the stand of on-site palm trees exists in a larger grouping than elsewhere in the area, neither the trees themselves nor their configuration within the larger visual context create a unique or distinctive landmark. Palm trees are quite common in the region and also occur within the surrounding project area and elsewhere in the city. Therefore, the project would not substantially damage scenic resources.

Moreover, the project provides the opportunity to create a scenic resource through the enhancement and restoration of Alvarado Creek as it traverses through the project site. Currently, within the project area footprint, Alvarado Creek is a concrete-lined channel, prone to flooding, and is characterized predominantly by non-native vegetation and debris. The project would highlight Alvarado Creek as a visual amenity while achieving flood control and storm water quality improvements. The project includes a series of viewing nodes along a pedestrian pathway that would follow the creek alignment.

Overall, project implementation would not substantially damage scenic resources or protected views and scenic resources within a state scenic highway.

4.14.5.3 Visual Character and Quality

Threshold 3: Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point)? If the project is in an urbanized area, conflict with an applicable zoning and other regulations governing scenic quality.

Landform Alteration

The project site is developed and relatively level with an approximate 10-foot existing grade differential. There are no steep slopes or other notable landforms within the site. Alvarado Creek sits slightly lower than the adjacent development pads as it traverses the site. Project construction would involve grading nearly all of the site to raise the existing grade above the base floodplain elevation, but existing landforms and topographic conditions would essentially remain the same. Upon project development, the site would be relatively level with four building pads and a channelized watercourse. The adjacent slopes to the immediate south would not be affected. Therefore, the project would not result in a substantial change to existing landforms.

Development Patterns and Forms

The proposed development would be consistent with the development patterns in the surrounding area. The proposed project would entail the redevelopment of the existing RV resort with a multi-family

residential development on a 12-acre site that is surrounded by existing development mostly composed of residential and commercial uses. Surrounding residential development includes a mixture of single-family homes and multi-family complexes. There are several apartment buildings atop the mesa to the south (along Saranac Avenue, 73rd Street, Mohawk Avenue, and Comanche Drive), as well as along Parkway Drive across the I-8 to the north. These buildings range in size and scale and are generally aligned along the I-8 corridor. Consistent with this visual pattern, the proposed project would add another multi-family development along this corridor.

Building forms associated with the proposed residential buildings would be similar to those of surrounding multi-family developments, consisting of a grouping of similarly designed multi-story, geometrically shaped buildings configured within individual sites. While shape and scale of buildings differ, this overall development pattern is evident. Thus, the project would not introduce a new land use or new type of building form that does not currently exist in the immediate area.

Massing and Scale

The proposed project would remove existing on-site elements, including paved RV spaces, five buildings, overhead utility lines and poles, and vegetation (including a large palm tree stand) and construct four multi-story buildings that would cover most of the 12-acre site. The buildings would be up to 85 feet tall with rectilinear building forms and strong line elements. Three of the proposed buildings would be similar in terms of bulk and scale and one building would be smaller in scale but generally at the same height. The buildings would be of the same construction type and would include parking garages on the lower levels with the residential units constructed on a podium deck above the parking levels. Given the size of the proposed buildings and overall lot coverage, the proposed development would be more intensive than surrounding developments in terms of bulk and scale. The development intensity at the site would substantially increase over the existing condition and even upon construction, would be greater than existing development in the project area. The project site, however, has been planned for dense redevelopment on a local and regional level. Specifically, the site is identified as a Smart Growth Opportunity Area in SANDAG's Smart Growth Concept Map (SANDAG 2016a). The site is shown as a Community Center, which has minimum residential densities of 20 dwelling units per acre served by high-frequency transit services and is described as a potential TOD adjacent to the 70th Street Trolley Station (SANDAG 2016b). The site has also been identified by the City for some time as a redevelopment opportunity site. Additionally, the General Plan designation of Regional Serving Commercial allows for high-density residential developments. The Land Use and Urban Design Element of the City's General Plan identifies "redevelopment potential for more intensive mixed-use projects located near the 70th Street Trolley Station in the Alvarado Creek area. Sites in this area are designated for Regional Serving Commercial uses to contribute to the local economy, such as office, hotel, multi-family or mixed-use development."

Because the proposed Specific Plan prescribes a "form-based" concept for the proposed buildings, no specific architectural styles or treatments for the proposed buildings are identified at the Specific Plan level. However, the buildings would incorporate common design elements and treatments utilizing a mixture of wood, metal, and glass materials. Architectural treatments such as articulations, varied roof lines, window and entry treatments, and provision of balconies and sky decks would also be incorporated into the building design to reduce mass effects of the vertical facades on the buildings. The podium decks would also provide relief along the building façades.

Each building would vary in shape depending on the building pad, and separation would be provided between each building so as not to create a uniform appearance or an uninterrupted building façade. Project entries, landscaped areas, and the enhanced Alvarado Creek would provide separation between some of the buildings to reduce massing effects. In addition, proposed landscaping at the site along the perimeter, building façade, and common areas would interrupt and visually soften structure massing effects.

Public Views

Views of the project from public vantage points would primarily be available from I-8, surrounding local roadways, the Green Line trolley corridor, and the 70th Street Trolley Station. The largest number of viewers, as well as viewers having the most direct views onto the project site from public viewpoints, would be traveling along I-8, Alvarado Road, and the trolley corridor. These views would be open and project elements would be in the foreground. Views from local roadways within residential neighborhoods to the south would mostly be obscured due to intervening development, vegetation, and topography. From these areas, multi-family residential uses, an improved Alvarado Road frontage, and an enhanced Alvarado Creek would replace existing views of the RV resort and palm trees. Changes to the existing visual character and quality of the project site and surroundings are discussed below for each of these public vantage points.

Figure 4.14-8, *Plan Perspective – Interstate 8*, depicts a conceptual perspective of the project from eastbound I-8. Following implementation of the project, views from I-8 toward the project site would be dominated by the proposed buildings. Foreground views would encompass the building façade and streetscape along Alvarado Road, as well as the existing billboards that would remain. Glimpses of an existing multi-family residential building can be seen in the middle ground in the right side of the concept. Existing off-site vegetation is also visible in the middle ground in between the proposed on-site buildings. Background views are generally limited to the sky.

Figure 4.14-9, *Plan Perspective – Alvarado Road*, depicts a conceptual perspective of the project from Alvarado Road near the eastern project boundary. Views of the site would be dominated by the proposed residential buildings. From this vantage point, the dominance of the buildings would be perceived as more apparent because of the adjacency of these new elements to Alvarado Road and the corresponding view angle from this vantage point. As shown, foreground views would encompass the multi-story buildings and to a lesser extent, the improved Alvarado Road frontage. The new sidewalk, streetlights, streetscape plantings, and pedestrian bridge (over Alvarado Creek) can be seen along the site frontage. Also visible is one of the project access roads (in the left portion of the concept) that is lined with landscaping. Elements in the middle ground are subdued by the larger project elements in the foreground, but the existing Alvarado Creek channel is visible on the north side of Alvarado Road (right side of the concept).

Figure 4.14-10, *Plan Perspective – South of Project Site*, depicts a conceptual perspective of the project representative of viewpoints south of the project site at the trolley facilities. The perspective is a bird's eye view looking downward at the project site as opposed to a ground-level view characteristic of a viewer along the trolley corridor (either traveling on the trolley or at the 70th Street Trolley Station) and thus encompasses a more expansive view; nonetheless, this perspective is a conservative representation of views from the adjacent trolley facilities. Project elements visible in the foreground include the enhanced Alvarado Creek and verdant riparian corridor, as well as portions of proposed on-site buildings (as seen in the right side of the concept). In the middle ground, the proposed buildings, outdoor

courtyard and pool, and the pedestrian promenade along the enhanced creek are visible. Background views of hillsides are barely visible and likely would not be visible from the viewing angles provided at the grade of the trolley and trolley station. As seen, the buildings in the middle ground are the most dominant visual element from this vantage point, creating new strong rectilinear built forms. The buildings however are somewhat muted and softened by the meandering riparian corridor along the enhanced creek and trees and other landscaping along the site perimeter and building façades.

The project would result in a notable change to the existing visual condition from these public viewpoints. The existing trees (palms and other), RVs, and overhead utility lines and poles at the site would be replaced with large multi-story residential buildings, an enhanced Alvarado Creek, and an improved Alvarado Road frontage. While the scale of the buildings would be new dominant features within this viewshed, they would not represent new visual elements as other multi-story buildings are present in the immediate area, including apartment buildings on the mesa to the south and across the freeway to north, as well as the Allied Plaza commercial building located off Alvarado Road to the southeast. Furthermore, project elements would not obstruct any scenic resources from these vantages or modify horizon views of the open sky. Although the existing assembly of mature palm trees would be removed from the site, palm trees would be planted along the Alvarado Road frontage to provide a visual reference to the existing trees. Additional project landscaping along the improved Alvarado Road frontage and within and along the site perimeter would provide increased visual unity. Enhancements to Alvarado Creek, including removal of non-native vegetation, installation of native species, and provision of improved hydrologic flow within the channel, would also contribute to improved visual conditions at the site.

Although very different in character from the existing condition, the project would be visually compatible with surrounding development. Multi-story residential developments occur in the project area; building forms and design elements would be compatible with these existing elements. The new buildings would be consistent in terms of line, color, texture, treatments, styles, and form that would create a cohesive development within the site. Proposed landscaping would also be visually compatible with surrounding development and the enhanced Alvarado Creek, in combination with project landscaping, would provide for increased visual unity throughout the site. The proposed buildings would be memorable elements given their relative scale, massing, and configuration. The enhanced Alvarado Creek corridor would also provide a memorable site element. While the project would remove the Mexican fan palm tree stand that is considered a landmark in the General Plan, proposed landscaping includes the planting of palm trees along the Alvarado Road frontage that would provide a reference to the existing trees. Consequently, the project would result in increased vividness. The configuration of the proposed buildings with their similar scale/forms and incorporation of common design elements would increase the intactness of the site upon project development. The buildings would be buffered from the enhanced Alvarado Creek by pedestrian promenades and recreation/common areas thereby avoiding encroachment of built and natural elements from one another. The removal of the overhead utility lines would further contribute to increased intactness. Overall, the visual quality from these viewpoints would be increased based on the added visual interest and increased visual unity, vividness, and intactness.

Zoning and Scenic Quality Regulations

The project site is located within an urbanized area within the City. While the site is currently zoned Light Industrial and Commercial Service - Flood Overlay Zone – Urban Design Overlay Zone, the project proposes to create an Alvarado Specific Plan Overlay Zone that would establish development regulations

for the site, including those pertaining to visual quality. Therefore, there are no applicable scenic quality regulations associated with the underlying base zone classification that govern the site. The proposed Specific Plan prescribes a "form-based" development approach and site-specific design recommendations and criteria to be implemented as part of the Site Development Plan review process at the project level to guide site design principles for development in accordance with the Specific Plan.

The project site is within an Urban Design Overlay Zone. As required, all new development within the Urban Design Overlay Zone is subject to the requirements of the Urban Design Program and approval by the Design Review Board. Projects within this overlay zone are evaluated in part for their compliance and their incorporation of unique design criteria that pertain to visually sensitive areas. The proposed Specific Plan however would include site-specific design recommendations and criteria for development within the project site that would supersede those required by the Urban Design Program. Compliance with the Specific Plan design criteria would ensure that the new structures provide an appropriate level of design character and quality to be a good fit within the context of the project area and broader community.

The project would be consistent with applicable goals, objectives, and policies contained in the Land Use and Urban Design Element of the General Plan that relate to visual resources. Project consistency with these applicable goals, objectives, and policies (which are identified in Section 3.2 of this report) are summarized below in Table 4.14-1, *Scenic Quality Policy Consistency Analysis*.

Table 4.14-1
SCENIC QUALITY POLICY CONSISTENCY ANALYSIS

Goal/Objective/Policy	Consistency Analysis
Goal UD – 1: A built environment that contributes to the qualities distinguishing La Mesa's unique community identity.	The proposed project would not adversely affect views from designated vistas or substantially damage scenic resources or protected views that are identified in the General Plan as contributing to La Mesa's community image. Refer to Sections 4.14.5.1 and 4.14.5.2.
Objective UD-1.1: To protect La Mesa's existing built environment and cultural heritage.	As discussed above under Public Views, the overall visual quality of the site would be improved upon project implementation. The existing on-site structures are not historical resources and thus, their demolition and removal would not adversely affect resources that contribute to La Mesa's cultural heritage.
Policy UD-1.1.1: The visual quality and continuity of the community will be enhanced through consistent circulation patterns, definition of community edges and boundaries, distinct gateways and nodes, and removal of visually disruptive elements.	Project implementation would not change existing circulation patterns and would not obfuscate any community edges or boundaries. No identified gateways or nodes are located on or immediately adjacent to the site. As discussed above under Public Views, the overall visual quality of the site would be improved upon project implementation due, in part, to the removal of existing non-native invasive vegetation and debris within Alvarado Creek and construction of a cohesive development with consistent design elements.

Table 4.14-1 (cont.)
SCENIC QUALITY POLICY CONSISTENCY ANALYSIS

Goal/Objective/Policy	Consistency Analysis
Goal UD-2: Well-designed development based upon proven urban design principles.	The project entails construction of a multi-family development with an integrated design approach guided by the framework provided in the proposed Specific Plan. The proposed development would be subject to design review in conjunction with the Site Development Plan process, which would include a consistency analysis with the site-specific design criteria contained in the Specific Plan.
Objective UD-2.1: Preserve and enhance the aesthetic, environmental, economic, and social character of La Mesa through careful design review decisions.	The project entails construction of a multi-family development with an integrated design approach guided by the framework provided in the proposed Specific Plan. The proposed development would be subject to design review in conjunction with the Site Development Plan process, which would include a consistency analysis with the site-specific design criteria contained in the Specific Plan.
Policy UD-2.1.1: Give careful attention to Urban Design Standards related to building scale, architectural materials, landscaping, and other elements to emphasize attractive building and site design in new developments and redevelopments.	The project entails construction of a multi-family development with an integrated design approach guided by the framework provided in the proposed Specific Plan. The proposed development would be subject to design review in conjunction with the Site Development Plan process, which would include a consistency analysis with the site-specific design criteria contained in the Specific Plan.
Policy UD-2.1-2: The review of projects should place a priority on the compatibility of adjacent land uses. Special attention should be given to buffering and transitional methods, when reviewing projects of differing densities or land uses.	The project would be compatible with surrounding land uses and development patterns, as discussed above under Development Patterns and Forms.
Goal UD-3: A built environment that respects La Mesa's natural environment and climate.	The project would redevelop an existing developed site that would feature an enhanced Alvarado Creek. The creek would be restored with native vegetation and improved hydrologic flows.
Objective UD-3.1: Development that is architecturally and environmentally sensitive and is compatible with neighboring design and scale.	The project would be visually compatible with surrounding development patterns and uses, as discussed above under Development Patterns and Forms. Although the project would be at a greater scale than surrounding development, the design and configuration of buildings and landscaping would reduce massing effects. See discussion above under Massing and Scale. Additionally, the project would enhance Alvarado Creek by removing non-native vegetation and debris within the channel and planting native vegetation.
Policy UD-3.1.5: Increase the amount of foliage, especially street trees, for aesthetic reasons and to provide shade, cooling, habitats, air quality benefits, and visual continuity.	The project includes a comprehensive landscape plan consisting of street trees, shrubs, and groundcovers along the Alvarado Road frontage, site perimeter, pedestrian promenades, building façades, and other common areas. In addition, native vegetation would be planted within the enhanced Alvarado Creek.

Construction Period Impacts

Views of the site during construction would include grading and construction activities, presence of construction vehicles and workers, and storage of building materials. These short-term elements could temporarily reduce the existing visual quality of the site during the construction period due to the introduction of additional visually contrasting features, such as newly graded building pads, construction fencing, construction equipment, and construction materials stockpiling and storage. Open views would be particularly available from I-8 and Alvarado Road, as well as from other local roadways at higher elevations. Although adverse, the construction-period effects would be temporary in nature, and not visible from many viewpoints within the overall viewshed due to the general screening of the site by topography or existing structures and landscaping.

Summary of Resulting Visual Impacts

The project would change the mostly open and low-scale, developed nature of the site to a higher density development comprised of multi-story residential buildings. The resulting change in visual character and visual quality would be substantial as the proposed project would be much more pronounced than the existing land use. Viewer exposure of project elements would vary by viewer group (motorists, bicyclists and pedestrians, and transit patrons), ranging from moderate to high based on the closeness of the view, openness/expanse of the view, and duration of the view. Each viewer group would be expected to have a high sensitivity to change. However, this change is not considered to be adverse because (1) the project would not substantially alter existing site topography or landforms; (2) the project would be consistent with existing development patterns in the project area as it would add another multi-family development along the I-8 corridor; (3) the project would not introduce a new land use or new type of building form that does not currently exist in the immediate area; (4) although the project would be at a greater scale than surrounding development, the design and configuration of buildings and landscaping would reduce massing effects; (5) the project site is located in an urbanized area that is identified as suitable for redevelopment with higher development intensities; (6) the visual quality from public viewpoints would be increased based on the added visual interest and increased visual unity, vividness, and intactness; and (7) the project would be consistent with applicable scenic quality goals, objectives, and policies.

For these reasons, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts related to visual character and quality would be less than significant.

4.14.5.4 Light and Glare

Threshold 4: Would the project create new source of substantial light and glare, which would adversely affect day and nighttime views in the area?

The project site is located in a developed urban area with substantial existing nighttime lighting from the existing on-site and surrounding land uses. The project site already includes some lighting features for nighttime safety and to illuminate the billboards. Other sources of nighttime lighting in the immediate area include security lights at the adjacent car dealership and the 70th Street Trolley Station, as well as a few streetlights along Alvarado Road. Additionally, vehicles traveling along I-8 contribute to the existing lighting conditions at and around the site. Implementation of the proposed project would result in additional sources of lighting. The internal street network, the Alvarado Road project frontage, the

pedestrian promenades at the site perimeter, and proposed buildings would have exterior lighting for safety. Proposed buildings would also be illuminated from interior lights.

Although project lighting would produce light levels brighter than currently exists on the site, the net increase in nighttime lighting would not be considered substantial on a citywide or regional scale due to the urbanized nature of the site and surrounding area. Exterior lighting would be subject to the design guidelines contained in the proposed Specific Plan, which may require the use of shields and may limit the location, type, and height of light fixtures to prevent light spillover onto adjacent properties. Furthermore, proposed buildings and other site amenities would not include large expanses of reflective material or surfaces such as glass or metal. Therefore, the proposed project would not result in a significant impact related to new sources of light and glare that would adversely affect day or nighttime views on the area.

4.14.6 Mitigation Measures

4.14.6.1 Scenic Vistas

No significant visual impacts related to scenic vistas would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.14.6.2 Scenic Resources

No significant visual impacts related to scenic resources would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.14.6.3 Visual Character and Quality

No significant visual impacts related to visual character or quality would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.14.6.4 Light and Glare

No significant visual impacts related to light and glare would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

4.14.7 Significance Determination

The significance of aesthetics impacts before and after mitigation is summarized in Table 4.14-2, *Significance Determination Summary of Visual Resources Impacts*. Implementation of the proposed project would not result in any significant visual impacts. Impacts related to scenic vistas, scenic resources, visual character and quality, and light and glare would be less than significant, and no mitigation is required.

Table 4.14-2
SIGNIFICANCE DETERMINATION SUMMARY OF VISUAL RESOURCES IMPACTS

Issue	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Scenic Vistas	Less than significant	None required	Less than significant
Scenic Resources	Less than significant	None required	Less than significant
Visual Character and Quality	Less than significant	None required	Less than significant
Light and Glare	Less than significant	None required	Less than significant

HELIX Environmental Planning

Existing Visual Conditions – San Diego RV Resort

Figure 4.14-1

HELIX Environmental Planning

Existing Visual Conditions – Alvarado Road

Figure 4.14-2

Office Building

Apartment Building

Meeting Building

Laundry/Bathroom Building

Source: Recon 2018

HELIX Environmental Planning

Existing Visual Conditions – Existing Buildings

Figure 4.14-3

HELIX Environmental Planning

Existing Visual Conditions – Alvarado Creek

Figure 4.14-4

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HELIX Environmental Planning

Existing Visual Conditions – Billboards

Figure 4.14-5

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HELIX Environmental Planning

Views from Public Vantage Points - Alvarado Road

Figure 4.14-6

HELIX Environmental Planning

Views from Public Vantage Points - Parkway Drive

Figure 4.14-7

Source: Schmidt Design Group 2018

HELIX Environmental Planning

Plan Perspective – Interstate 8

Figure 4.14-8

Source: Schmidt Design Group 2018

HELIX Environmental Planning

Plan Perspective – Alvarado Road

Figure 4.14-9

Source: Schmidt Design Group 2018

HELIX Environmental Planning

Plan Perspective – South of Project Site

Figure 4.14-10

5.0 CUMULATIVE IMPACTS

5.1 INTRODUCTION

Section 15130 of the CEQA Guidelines requires that an EIR address cumulative impacts of a project when its incremental effect would be cumulatively considerable. As defined in Section 15335, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. Cumulatively considerable means that the incremental effects of an individual project would be considerable when viewed in connection with the effects of past, current, or probable future, projects.

According to Section 15130 of the State CEQA Guidelines, the discussion of cumulative effects "... need not provide as great detail as is provided of the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." The evaluation of cumulative impacts is to be based on either:

A. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency, or

B. A summary of projections contained in an adopted 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 impact. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.

The basis and geographic area for the analysis of cumulative impacts is dependent on the nature of the issue and the project. In some cases, regional planning addresses cumulative impacts, while in other cases, the analysis takes into consideration more localized effects. For the analysis of cumulative impacts which are localized (e.g., traffic and noise), a list of past, approved, and pending (i.e., active applications) projects was identified by City staff and the City's Community Development website (City 2020a) based on their ability to contribute to and/or compound impacts with those of the project. The location of these cumulative projects is illustrated on Figure 5-1, *Cumulative Projects*. Table 5-1, *Cumulative Projects*, contains a brief description of the development associated with these projects (with the numbers in the list corresponding to the locations on Figure 5-1). For other topics, like air quality, the cumulative setting is the region, and analysis is instead based on regional planning documents.

Table 5-1
CUMULATIVE PROJECTS

Cumulative Project No.[1]	Location	Development Type	Project Description	Status
1	7930 Hillside Drive	Mixed-use	A mixed-use development with 22 apartment units and 5 commercial live-work units.	Discretionary Review
2	5061 Keeney Street	Multi-family Residential	A multi-family residential development with 19 apartment units.	Discretionary Review
3	7643 University Avenue	Multi-family Residential	A multi-family residential development with 60 condominiums.	Discretionary Review
4	7735 University Avenue	Multi-family Residential	A multi-family residential development with 7 studio apartment units. It is a conversion of a commercial use to a residential use.	Discretionary Review
5	7472 El Cajon Boulevard	Mixed-use	A mixed-use development with 29 apartment units.	Entitled
6	7808 El Cajon Boulevard	Mixed-use	A mixed-use development with 56 condominium units.	Entitled
7	8135 El Paso Street	Mixed-use	A mixed-use development with 20 residential condominium units.	Entitled
8	9160 Fletcher Parkway	Commercial	A commercial development of a restaurant and brewery.	Entitled
9	4400 Palm Avenue	Mixed-use	A mixed-use development with 21 apartment units and an office building.	Entitled
10	8234 University Avenue	Multi-family Residential	A multi-family residential development with 10 apartment units.	Entitled
11	7385 Colony Drive	Multi-family Residential	A multi-family residential development with 40 apartment units.	Plan Review
12	Eastridge Drive	Residential	A planned residential development with 30 units.	Plan Review
13	7393 El Cajon Boulevard	Commercial	A commercial development of a “Rally’s” drive-thru restaurant with outdoor seating.	Plan Review
14	7664 El Cajon Boulevard	Mixed-use	A mixed-use development with 252 condominium units.	Plan Review
15	High Street	Multi-family Residential	A multi-family residential development with 34 condominium units.	Plan Review
16	5042 Keeney Street	Multi-family Residential	A multi-family residential development with 10 condominium units.	Plan Review
17	4949 Baltimore Drive	Mixed-use	A mixed-use development with 230 apartment units.	Under Construction
18	7353 El Cajon Boulevard	Mixed-use	A mixed-use development with 45 apartment units.	Under Construction
19	7561 El Cajon Boulevard	Mixed-use	A mixed-use development with 19 apartment units.	Under Construction
20	7604 El Cajon Boulevard	Mixed-use	A mixed-use development with 10 apartment units.	Under Construction
21	7735 El Cajon Boulevard	Multi-family Residential	A multi-family residential development with 10 condominium units.	Under Construction
22	8165 Fletcher Parkway	Commercial	A commercial development of a Costco gas station.	Under Construction
23	5335 Jackson Drive	Commercial	A commercial development of a coffee shop with a drive-thru and outdoor seating.	Under Construction

Table 5-1 (cont.)
CUMULATIVE PROJECTS

Cumulative Project No.[1]	Location	Development Type	Project Description	Status
24	8055 La Mesa Boulevard	Mixed-use	A mixed-use development with 7 units.	Under Construction
25	8525 La Mesa Boulevard	Multi-family Residential	A residential development with 130 units.	Under Construction
26	8970 La Mesa Boulevard	Commercial	A new sales and services building at an existing Ford dealership.	Under Construction
27	4355 Rosebud Lane	Multi-Family Residential	A multi-family residential development with 7 apartment units.	Under Construction
28	5601 Grossmont Center Drive	Commercial	A commercial development of an acute care center.	Discretionary Review

Source: City 2020a

5.2 CUMULATIVE IMPACT ANALYSIS

The following discussion of cumulative impacts includes each environmental topic addressed in Chapter 4 of this EIR. A description of the area of influence for cumulative impacts with respect to each environmental topic is provided, followed by an analysis of the potential cumulatively considerable contributions of the proposed project to any significant cumulative impacts.

5.2.1 Air Quality

The geographic scope for the analysis of cumulative air quality impacts is the SDAB. It is appropriate to consider the entire air basin as air emissions can travel substantial distances and are not confined by jurisdictional boundaries; rather, they are influenced by large-scale climatic and topographical features. While some air quality emissions can be localized, such as a CO hotspot or odor, the overall consideration of cumulative air quality is typically more regional. By its very nature, air pollution is largely a cumulative impact.

The SDAB is a federal and/or state nonattainment area for PM_{10}, $PM_{2.5}$, and ozone. The nonattainment status of regional pollutants is a result of past and present development within the SDAB, and this regional impact is cumulative rather than attributable to any one source. Cumulative projects throughout the air basin generate construction and operational air pollutant emissions that contribute to air quality impacts. The thresholds of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable incremental contribution to the existing cumulative air quality conditions. These thresholds are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable state and federal ambient air quality standards. If a project's emissions would be less than those threshold levels, the project would not be expected to result in a considerable incremental contribution to the significant cumulative impact.

The proposed project and the other projects in the SDAB would contribute particulates and the ozone precursors VOC and NO_X to the area during short-term construction. As described in Section 4.1, *Air Quality*, emissions during project construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Construction emissions would be less than the significance thresholds. Therefore, the project's construction emissions would not be cumulatively

considerable, and the impact would be less than significant. Long-term emissions also would be well below regional thresholds and, therefore, not cumulatively considerable. Since the project would be well below regional thresholds and, therefore, not cumulatively considerable, its emissions would be consistent with assumptions in the RAQS and SIP, and long-term emissions would not produce a cumulatively significant impact to air quality or human health. As discussed in Section 4.1, no exceedances of the CO standard or substantial generation of TACs would occur. The project also would not result in the creation of odors affecting a substantial number of people. These impacts would be less than significant and not cumulatively considerable.

5.2.2 Biological Resources

The geographic scope for the analysis of cumulative impacts related to biological resources is defined as the La Mesa Subarea HCP/NCCP Plan study area (City 1998). The La Mesa Subarea Plan identifies MSCP-covered species and sensitive habitat for protection from cumulative development in the City. Similar to the proposed project, any cumulative projects in the City that would impact biological resources would be required to mitigate impacts to below a level of significance to the extent feasible. If mitigation would not reduce impacts to a less than significant level, then the combination of multiple projects impacting biological resources could result in a significant cumulative impact.

As discussed in Section 4.2, *Biological Resources*, of this EIR, implementation of the proposed project has the potential to cause significant adverse impacts related to special status species, specifically nesting and migratory birds and sensitive communities, including freshwater marsh, willow woodland, and wetlands. Mitigation measures BIO-1 and BIO-2 would be implemented to ensure that the proposed project would not result in significant impacts to these biological resources. These measures would also reduce the proposed project's potential cumulative impacts to nesting and migratory birds and sensitive communities to a less than significant level.

The project would also result in impacts to state and federal jurisdictional waters and wetlands associated with the proposed improvements to Alvarado Creek. A "no net loss" policy has been established for wetlands by state and federal resource agencies; therefore, the project is required (BIO-3) to establish/re-establish jurisdictional habitat at a minimum 1:1 ratio. Other projects that would impact wetlands would be required to mitigate impacts as well, at ratios commensurate with the type and location of the impacts, pursuant to the MSCP and regulatory agency requirements, thereby ensuring that cumulative impacts would result in no net loss of wetlands. Pursuant to BIO-3, and the implementation of applicable mitigation for other projects, construction of the project and other cumulative projects would not result in the net loss of jurisdictional resources. Accordingly, the project would not result in a cumulatively considerable contribution to loss of jurisdictional waters and wetlands. Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact to biological resources.

5.2.3 Cultural and Tribal Cultural Resources

The geographic area for the analysis of cumulative impacts related to historical resources is defined as the City of La Mesa and immediately surrounding lands. The Historic Preservation Element of the adopted La Mesa General Plan provides policies and objectives for the preservation of the City's historic sites, buildings, and districts (City 2012a). The City's Historic Preservation Ordinance (LMMC Title 25) implements the goals of the Historic Preservation Element of the General Plan, and establishes specific regulations regarding alteration or demolition of a historic landmark, contributing structure within a

historic district, cultural resources included in the Historic Resources Inventory, and cultural resources listed on the Potential Landmark Registry. If known historic resources would be impacted by any of the cumulative projects identified in Table 5-1, that individual cumulative project would be required to mitigated potentially significant impacts in accordance with the City's Historic Preservation Ordinance and CEQA. Therefore, a significant cumulative impact related to historical resources would not occur.

The geographic area for the analysis of cumulative impacts related to cultural and tribal cultural resources is defined as the San Diego region. Multiple cumulative projects would involve excavation and other ground-disturbing activities, which allows for the potential for discovering previously unknown buried archaeological resources and human remains. As discussed in Section 4.3, *Cultural and Tribal Cultural Resources*, of this EIR, the proposed project could result in potentially significant impacts to unknown buried archaeological resources. However, mitigation measure CUL-1, consisting of cultural monitoring during grading of any native soils, would be implemented to ensure that the proposed project would not result in significant impacts to these resources. This mitigation measure would also reduce the proposed project's potential cumulative impacts to unknown buried cultural resources. Tribal outreach has resulted in concurrence that the proposed mitigation for the site are adequate and no need for additional consultation was identified. Thus, the project is not expected to contribute to cumulative impacts within the region to cultural and cultural tribal resources, and with the application of similar cultural resources/tribal assessment, consultation and monitoring requirements to the other cumulative projects as well, cumulative impacts to historical and tribal resources would be less than significant.

5.2.4 Geology and Soils

The geographic context for the analysis of cumulative impacts related to geology and soils is the City of La Mesa and immediately surrounding lands. Geology and soil features can be very specific to certain locations and sites, but can also have broad reaching elements, such as faults and underlying bedrock formations. However, potential geologic or soil hazards resulting from development are generally localized to the site and immediate surrounding lands rather than a broad reaching area. In this way, potential cumulative impacts resulting from seismic and geologic hazards would be minimized on a site-by-site basis to the extent that standard construction methods and code requirements provide. Throughout the City, cumulative projects would also be susceptible to similar geologic hazards. The specific geologic condition of each individual project site, soil type, and project excavation requirements would dictate the severity of the potential geologic risks.

As described in Section 5.4, *Geology and Soils*, all potential site-specific geotechnical impacts would be avoided or reduced below a level of significance through conformance with geotechnical recommendations and established regulatory standards. Specifically, with the exception of erosion/ sedimentation (as discussed below), potential geology and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other planned or proposed development. That is, issues including ground rupture, ground acceleration, liquefaction and related effects, landslides/slope stability, expansive/corrosive soils, subsidence/ shrinkage, settlement, and shallow groundwater would involve effects to (and not from) the site and/or are specific to on-site conditions. Accordingly, addressing these potential hazards for the project would involve using measures to conform to existing requirements and/or site-specific design and construction. Because of the site-specific nature of these potential hazards and the measures to address them, as well as the fact that the listed cumulative projects would also be subject to the noted

standards, associated potential cumulative impacts related to the identified geology and soils issues would be less than significant.

During construction of the project, graded areas would be exposed to potential erosion and sedimentation impacts. Project-related erosion and sedimentation could contribute to associated cumulative effects in concert with other existing and future development in the project vicinity. Project implementation, however, would include a number of avoidance and minimization measures related to erosion and sedimentation impacts, including the types of BMPs described in Section 4.7*, Hydrology and Water Quality*. These (or other appropriate) measures in the project SWPPP would ensure conformance with applicable federal (NPDES), state and local regulatory standards related to erosion and sedimentation, and would reduce any project-related contribution to cumulative impacts involving construction-generated erosion and sedimentation to below cumulatively significant levels.

As described in Section 4.7, erosion and sedimentation are not considered to be significant long-term concerns at the project site, as developed areas would be stabilized through installation of associated structures/hardscape and landscaping. As the cumulative projects listed in Table 5-1 would exhibit similar long-term conditions, the project would not result in a cumulatively considerable contribution to long-term erosion and sedimentation.

Overall, cumulative projects would be subject to the same regulations and engineering practices as the project, such as the City's grading ordinance, storm water regulation and associated BMPs, as well as CBC requirements. Potential cumulative impacts related to geology and soils would be less than significant.

5.2.5 Greenhouse Gas Emissions

The geographic scope of consideration for GHG emissions is global, as such emissions contribute, on a cumulative basis, to global climate change. By nature, GHG impacts are cumulative as they are the result of combined worldwide emissions over many years, and additional development would incrementally contribute to this cumulative impact. The discussion presented in Section 4.5, *Greenhouse Gas Emissions*, also serves as the project's cumulative impact analysis.

As detailed in that section, a number of plans, policies, and regulations have been adopted for the purpose of reducing cumulative GHG emissions. The project would be a TOD and has incorporated a number of sustainable features into its design to reduce overall emissions, reflecting the types of measures recommended by public agencies to reduce the magnitude of GHG emissions and help California achieve its statewide goals. The project would be consistent with the City's CAP, and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, the project would not result in a cumulatively considerable contribution to impacts related to GHG emissions.

5.2.6 Hazards and Hazardous Materials

For the most part, hazardous materials impacts are site-specific and would not combine with impacts from other projects to result in cumulative impacts. Therefore, the geographic scope for the analysis of cumulative impacts related to hazardous materials is defined as the project site and adjacent properties. The cumulative projects listed in Table 5-1 consist of residential, commercial, and office uses; none of the cumulative projects propose industrial land uses or other land uses that would require the

transportation, use, or disposal of hazardous materials other than oil and hydrocarbons during construction and standard cleaning and landscaping products during operation. All cumulative projects would be required to comply with all applicable federal, state, and local regulations related to the handling and storage of hazardous materials, including the requirements for spill containment and cleanup procedures. Proper handling and storage of hazardous materials would minimize the potential for accidental spills, while implementation of spill containment and cleanup procedures would prevent significant hazard to the public or the environment in the event of accidental spills. Any cumulative project that proposes development of a potential hazardous materials site would be required to remediate the existing site contamination consistent with applicable regulations. Therefore, significant cumulative impacts related to hazardous materials would not occur.

The geographic context for the analysis of cumulative impacts related to airport safety hazards is the AIA of Montgomery-Gibbs Executive Airport, within which the proposed project is located. All cumulative projects would be subject to the ALUCP, which would require compliance with development limitations within in the noise, safety, airspace protection, and overflight notification zones of Montgomery-Gibbs Executive Airport's AIA. Therefore, a significant cumulative impact related to airport safety hazards would not occur.

The geographic context for the analysis of cumulative impacts related to emergency response and evacuations plans and wildland fires is the City of La Mesa and immediately surrounding areas. The cumulative projects listed in Table 5-1 may require temporary roadway closures during construction that could cumulatively impede emergency access and/or evacuation routes throughout La Mesa. As discussed in Section 4.6, *Hazards and Hazardous Materials*, of this EIR, the proposed project may require that the segment of Alvarado Road that passes in front of the project site be temporarily closed during construction, but this would not impede emergency access or evacuation routes, as other routes would be available. Thus, implementation the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact related to emergency response and evacuation plans. In addition, some cumulative projects would be developed in wildland-urban interface areas that could cumulatively increase risks associated with wildland fires. The proposed project is located within a highly developed urban area of La Mesa, which is not considered at high risk for wildland fires. Therefore, implementation the proposed project would not contribute to a significant cumulative impact related to wildland fires.

5.2.7 Hydrology and Water Quality

The geographic scope for analysis of impacts related to hydrology and water quality is the San Diego HU, one of 11 major drainage areas identified in the RWQCB Basin Plan. Lands and water bodies within the watershed are part of an interrelated hydrologic system, such that modifications to a portion of a watershed or water pollution produced by development in one location may result in hydrology and water quality impacts that affect other water bodies in the watershed.

To the extent that other projects listed in Table 5-1 would be developing/operating at the same time as the project, related construction and operation activities could contribute to potential cumulative hydrology and water quality impacts associated with runoff generation, flooding hazards, drainage alteration, hydromodification, and water quality concerns. As described in Section 4.7, *Hydrology and Water Quality*, implementation of the project (as well as the cumulative projects listed in Table 5-1) would require conformance with a number of regulatory requirements related to hydrology and water quality, including applicable elements of the CWA, NPDES, City storm water standards, Porter-Cologne

Water Quality Control Act, FEMA floodplain standards, and RWQCB Basin Plan. Based on such conformance, including implementation of related project design measures, all identified project-level hydrology and water quality impacts associated with the project would be effectively avoided or reduced below a level of significance.

The described regulatory requirements constitute a regional effort to implement hydrology and water quality protections through a watershed-based program designed to meet applicable criteria such as Basin Plan Beneficial Uses and Water Quality Objectives. To this end, these standards require the implementation of efforts to reduce runoff/contaminant discharges and related effects to the MEP, with the NPDES Municipal Permit identifying the specific goals of limiting or prohibiting storm water and non-storm water discharges, and promoting attainment of water quality objectives necessary to support designated beneficial uses. The City has implemented requirements to meet these goals (and other applicable regulatory criteria) in the form of the associated storm water standards, as well as related education, planning, and enforcement procedures. Based on the described regional/watershed-based approach required for hydrology and water quality issues in existing regulatory standards, as well as the fact that conformance with these requirements would be required for all identified projects within the cumulative projects area (including the project), cumulative hydrology/water quality impacts would be less than significant.

5.2.8 Land Use

The geographic scope for the land use cumulative analysis includes the City of La Mesa. Land uses and development patterns are typically established in local land use planning documents specific to jurisdictions but can have implications on surrounding areas.

Cumulative projects with the City would be required to comply with the General Plan. Projects that are not consistent with existing land use designations would require approval of a General Plan amendment, as applicable. Projects that require a General Plan amendment are required to demonstrate conformance with pertinent goals, policies, and recommendations. Through adoption of the proposed Specific Plan, the proposed project would be consistent with the General Plan as is demonstrated for the project in Section 4.8 of this EIR. As the project would not result in a significant impact related to consistency with applicable planning documents, the project would not result in a cumulatively considerable contribution to a land use compatibility impact.

5.2.9 Noise

The geographic scope for this analysis is the area immediately surrounding the project site and roadways that would be used by resident vehicles. Generally, noise impacts are limited to the area directly surrounding the noise generator, as noise attenuates with distance and only has the potential to combine with other noise sources in the immediate vicinity.

The project would temporarily elevate existing ambient noise levels at adjacent and nearby residentially zoned properties from construction noise. It would be unlikely that construction equipment use from development in nearby areas would occur simultaneously with project construction activities, especially within distances close enough to the same NSLUs to further elevate noise levels. Cumulative projects in close proximity to the project site include three smaller multi-family development projects to the south (cumulative projects 2, 11, and 16 in Table 5-1 and Figure 5-1), which are currently in the plan review or discretionary review stage and would likely not be under construction at the same time as the project. In

addition, construction activities from the proposed project and cumulative projects would be required to comply with municipal code Section 10.80.100 that regulates construction activities. Therefore, cumulative construction noise and vibration impacts would not occur.

In addition, the implementation of cumulative development projects would have the potential to increase ambient noise from new operational noise. As described in Section 4.9, *Noise,* the project would not exceed the LMMC noise limits and would comply with the land use compatibility guidelines contained in the General Plan Noise Element. Operational noise from other projects in the area would also have to comply with these limits. With compliance with the LMMC limits, the project's contribution to ambient noise level increases would not be cumulatively considerable.

5.2.10 Paleontological Resources

The geographic scope for analysis of potential paleontological resource impacts generally consists of the coastal plain of San Diego County, where paleontological resources similar to those that could occur on the project site have the potential to occur. Cumulative projects that require substantial excavation have the potential to result in disturbance to paleontological resources. These projects would be subject to state and local regulations requiring the recovery and curation of paleontological resources. As such, significant paleontological resource impacts resulting from future development would be mitigated on a project-by-project basis.

The project has the potential to result in disturbance of paleontological resources during excavation activities. On-site monitoring during grading and submittal of a monitoring results report or letter is required, along with fossil recovery and curation, as detailed in mitigation measure PAL-1. With implementation of the required paleontological mitigation program, the project would not result in a cumulatively considerable contribution to paleontological resource impacts.

5.2.11 Public Facilities and Services

The geographic scope for analysis of public facilities and services is the City of La Mesa and immediately surrounding areas. The provision of public services and facilities is often specific to jurisdictional providers or confined by set service boundaries and funding specifications. Public services and facilities generally serve residents on a community-wide basis. Typically, changes in development influence the demand for public services and related facilities to be provided within a local city, county, or service district.

As discussed in Section 4.11, *Public Facilities and Services*, La Mesa is a member of the Heartland Fire and Rescue and maintains three fire stations that offer operations and emergency medical services. The City provides a full-service law enforcement program for its residents. The proposed project and 22 of the cumulative projects listed in Table 5-1 include residential development that could introduce new residents into the City. The total number of residential units proposed from the cumulative projects excluding the proposed project is 1,068 units citywide. Including the proposed project, the number of proposed new residential units would potentially be 2,018 (with addition of 950 units). Therefore, the project could contribute to an increased need of public services such as fire protection, police protection, schools, parks, and other public facilities.

However, similar to the project, cumulative projects would be required to pay development impact fees and generate sales and property taxes over time, that would help to offset the additional costs to public

service providers. These fees allow the City to have a source of funding available to provide new or additional facilities necessary to achieve and maintain adequate public service provision per population-based requirements and development as it occurs within an area. Development impact fees would be required to be paid prior to building permit issuance. Therefore, the potential for cumulative environmental impacts associated with public services and facilities effects would be minimized. For these reasons, the project would not result in a cumulatively considerable contribution to impacts related to public services and facilities.

5.2.12 Public Utilities

The geographic scope for the public utilities cumulative analysis is the La Mesa region. Public utilities can be specific to jurisdictions; however, some service providers offer service throughout a region and across multiple jurisdictions. Thus, changes in development influence the demand for utilities across the region and can drive the need for new or expanded utility infrastructure. Pending and future projects would be required to analyze public utilities demand and supply to avoid conflicts and provide upgrades or development impact fees toward new infrastructure facilities, as needed.

The project's water demand has been considered in conjunction with other past, present, and reasonably foreseeable future development in the City through the WSA. This analysis determined that sufficient water supplies would be available to serve the project in conjunction with other development. The project also would not result in the need for new or altered off-site water systems.

As discussed in Section 4.12, *Public Utilities*, a Sewer Study (Fuscoe 2020b) was conducted for the project to determine the impact the project would have on City's sewer infrastructure. The study concluded that the existing public sewer lines that would receive project flows have capacity to accommodate the project. Existing wastewater conveyance and treatment infrastructure would be adequate to serve the project and cumulative development projects.

The project and cumulative projects would be required to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The project would not result in a need for new off-site public utility systems or infrastructure or require substantial alterations to existing off-site utilities or infrastructure. The existing off-site utilities systems that currently serve the project area would be sufficient in serving the project. Therefore, the project would not result in a cumulatively considerable contribution to public utilities impacts when viewed together with past, present, and reasonably foreseeable future projects.

5.2.13 Transportation

The geographic scope for the analysis of cumulative impacts related to transportation is defined as the City of La Mesa and immediate surrounding areas. The VMT analysis presented in Section 4.13, *Transportation*, evaluates cumulative impacts for the Horizon Year (2035) conditions, which considers project traffic and project-implemented roadway improvements to forecasted 2035 conditions, based on the SANDAG Series 13 regional model.

As discussed in Section 4.13, project impacts related to VMT would be considered less than significant due to its proximity to a major transit stop. The project would not result in significant adverse cumulative impacts with respect to consistency with transportation plans, transportation design hazards

or emergency access. Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact to transportation.

5.2.14 Visual Resources

The geographic scope for the visual resources cumulative analysis includes the City of La Mesa, primarily focused on the viewshed of the proposed project, which generally encompasses the I-8 corridor and portions of the residential neighborhoods to the south and north. This area is mostly built out with commercial and transportation facilities near the project site and residential uses in the outlying areas of the viewshed. Implementation of the project and identified cumulative projects would continue to add to the sense of an urban community; however, this development would be required to be visually compatible with the surrounding neighborhood character and utilize appropriate architecture, materials, and development patterns as necessary for consistency with the aesthetic goals, principles, and objectives of the General Plan as detailed in Section 4.14, *Visual Resources*.

Due to the urbanized nature of the area, there are no designated scenic vistas or panoramic views located within the project vicinity, and the project site is not visible from any of them except for Mount Helix. However, the project site is barely visible in the distance from this vista; the on-site palm trees can be seen in the distance, but they are not visually prominent and other existing on-site features are not apparent. Several of the cumulative projects listed in Table 5-1 are also visible from Mount Helix, but implementation of the proposed project would not interfere with views of the cumulative projects from Mount Helix.

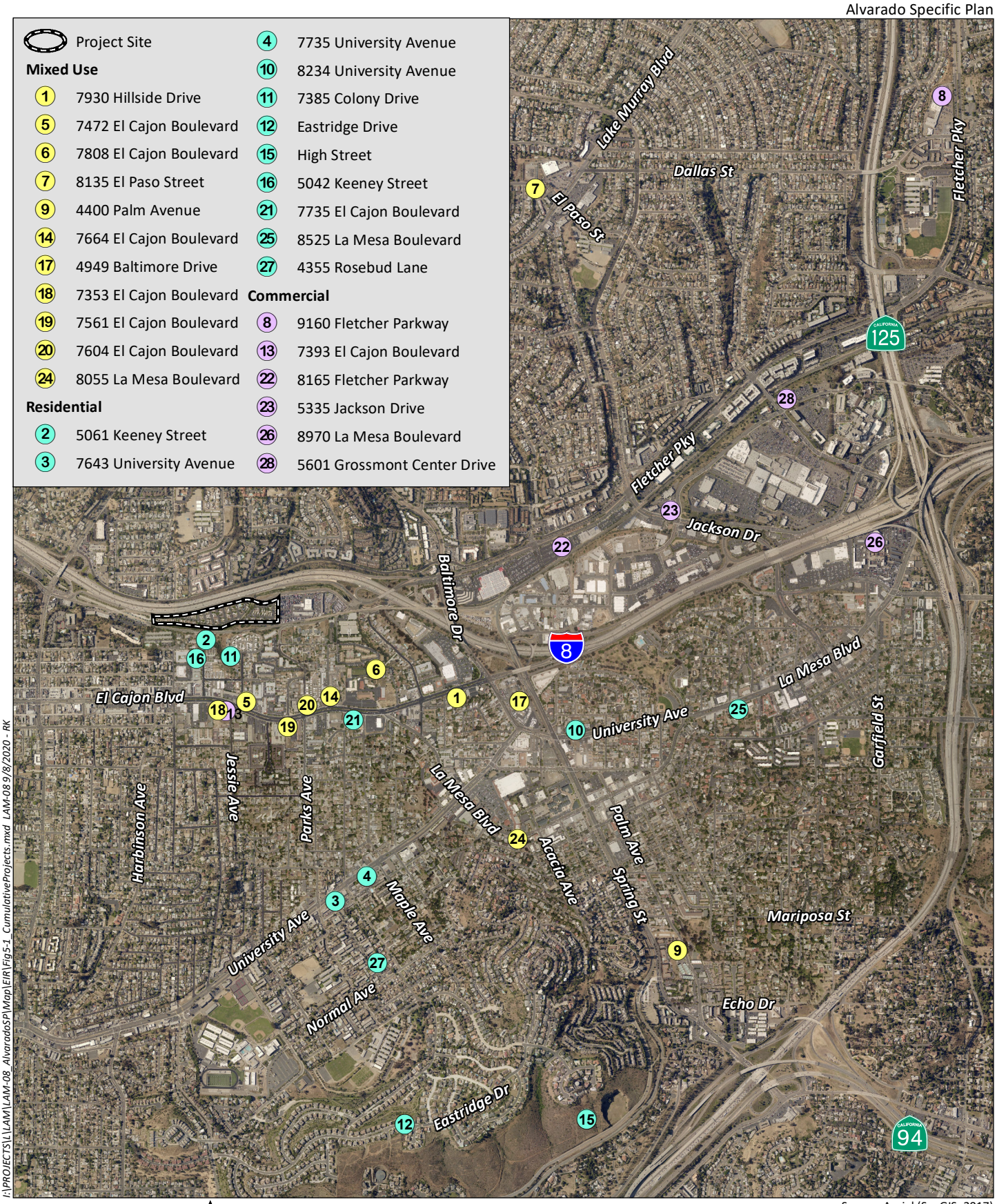
The project site is not located within the Scenic Preservation Overlay Zone, Hillside Overlay Zone, or other identified visually sensitive areas. Furthermore, the project site does not contain any features that would be part of a scenic vista, nor does it provide any expansive views of notable regional landforms. There are very limited views of Cowles Mountain from the project site and the surrounding areas, including the cumulative projects listed at 5061 Keeney Street and 7385 Colony Drive. However, existing urban development and natural topography largely obstruct views of Cowles Mountain. Intermittent views of Cowles Mountain would continue to be provided from the cumulative project sites after construction of the project. Therefore, the project would not result in a cumulatively considerable contribution to significant cumulative impacts related to scenic vistas would occur.

The project would change the mostly open and low-scale, developed nature of the site to a higher density development comprised of multi-story residential buildings. The resulting change in visual character and visual quality would not be adverse because (1) the project would not substantially alter existing site topography or landforms; (2) the project would be consistent with existing development patterns in the project area as it would add another multi-family development along the I-8 corridor; (3) the project would not introduce a new land use or new type of building form that does not currently exist in the immediate area; (4) although the project would be at a greater scale than surrounding development, the design and configuration of buildings and landscaping would reduce massing effects; (5) the project site is located in an urbanized area that is identified as suitable for redevelopment with higher development intensities; (6) the visual quality from public viewpoints would be increased based on the added visual interest and increased visual unity, vividness, and intactness; and (7) the project would be consistent with applicable scenic quality goals, objectives, and policies. Cumulative development would not represent a substantial cumulative degradation in visual quality. While visual character within the project area would continue to change over time in accordance with the applicable

planning documents, visual impacts as a result of implementation of the project would not be cumulatively considerable.

Additionally, as discussed in Section 4.14, the proposed project would result in additional sources of lighting. Several of the cumulative projects listed in Table 5-1 would also result in additional sources of lighting in the region. However, the cumulative projects closest to the proposed project include residential developments that would not be considered substantial on a citywide or regional scale due to the urbanized nature of the region. Therefore, the project would not result in a cumulatively considerable contribution to significant cumulative impacts related to light and glare.

When considered with other reasonably foreseeable projects in the viewshed vicinity, the project would not result in a cumulatively considerable contribution to impacts to visual resources.



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0 2,000 Feet

Source: Aerial (SanGIS, 2017)

HELIX Environmental Planning

Cumulative Projects

Figure 5-1

6.0 OTHER MANDATORY DISCUSSION AREAS

This chapter addresses the issues of effects found not to be significant, growth inducement, significant effects which cannot be avoided if the proposed project is implemented, and significant irreversible environmental changes.

6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

Based upon initial environmental review, the City has determined that the project would not have the potential to cause significant impacts associated with the following issue areas:

- Agriculture and Forestry Resources;
- Energy;
- Mineral Resources;
- Population and Housing; and
- Wildfire

6.1.1 Agriculture and Forestry Resources

The project site is developed and contains an RV resort. No active agricultural operations are present on the site or in the project vicinity. Based on farmland mapping prepared by the California Department of Conservation (CDC) California Important Farmland Finder, the project site and surrounding areas are not identified as containing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. According to the California Important Farmland Finder, the project site and surrounding areas are classified as Urban and Built-Up Land (CDC 2016). Therefore, implementation of the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

The Williamson Act is only applicable to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland, or at least 40 acres of land not designated as Prime Farmland. The Williamson Act is designed to prevent the premature and unnecessary conversion of open space lands and agricultural areas to urban uses. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land for use as agricultural or related open space. The project site is approximately 12 acres in size and is not classified as Prime Farmland. As stated above, the project site and surrounding areas are classified as Urban and Built-Up Land, where the Williamson Act does not enforce development restrictions. Therefore, the project site is not subject to a Williamson Act Contract. Based on the above considerations, the project is not anticipated to have impacts relative to the conversion of farmland to non-agricultural uses because no such uses exist within the project site or vicinity.

No forestland occurs within the project area or immediate vicinity that would conflict with implementation of the proposed project. Therefore, implementation of the proposed project would not result in the loss or conversion of farmland or forestland. No impacts to agricultural or forestry resources would occur.

6.1.2 Energy

6.1.2.1 Construction-related Energy Use

Energy used for construction would primarily consist of fuels in the form of diesel and gasoline. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction and would include the transportation of construction materials and construction worker commutes. Heavy-duty construction equipment associated with construction activities, haul trucks involved in the removal or construction and demolition materials, and smaller support equipment (such as lighting) would consume petroleum-based fuel. Construction workers would travel to and from the project site throughout the duration of construction, presumably in gasoline-powered vehicles.

While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. The petroleum consumed during project construction would also be typical of similar construction projects and would not require the use of new petroleum resources beyond what are typically consumed in California. Based on these considerations, construction of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, the project would be built and operated in accordance with existing, applicable regulations, which include, but are not limited to, the California Green Building Standards Code and CARB regulations. Construction equipment and operation equipment would be maintained to allow for continuous energy-efficient operations. The project would therefore not conflict with the City's CAP, and impacts associated with construction-related energy use would be less than significant.

6.1.2.2 Operation-related Energy Use

Electricity, natural gas, water demand, and wastewater generation, as well as anticipated VMT associated with the existing land use and operation of the project, were calculated in CalEEMod, using CalEEMod defaults and features such as project size and location. Table 6-1, *Estimated Annual Energy Consumption at Buildout (Operational)*, summarizes this information and converts the values to British thermal units (BTU) for energy comparison purposes. The existing annual energy consumption associated with the current RV resort was deducted from the energy consumption estimated for the project to yield the net energy use resulting from implementation of the proposed project. As shown in Table 6-1, the project would result in a net increase in annual energy consumption of approximately 107,241 BTU.

Table 6-1
ESTIMATED NET ANNUAL ENERGY CONSUMPTION AT BUILDOUT (OPERATIONAL)

Source	Quantity	BTU
Existing Land Use Operations		
Electricity	699,753 (kWh)	2,388
Natural Gas	2,979,497 (kBtu)	2,979
Water/Wastewater	162,372 (kWh)	554
Transportation	93,731 (gallons)	12,192
	Total Existing Annual Energy Consumption	**18,113**
Project Operations		
Electricity	6,984,030 (kWh)	23,831
Natural Gas	7,090,760 (kBtu)	7,091
Water/Wastewater	1,010,199 (kWh)	3,447
Transportation	699,204 (gallons)	90,985
	Total Proposed Annual Energy Consumption	**125,354**
	Net Total Annual Energy Consumption (Project minus Existing)	**107,241**

Source: HELIX 2020b
kWh= kilowatt hours; kBTU= kilo-British thermal units; BTU = British thermal units

While the project would increase the consumption of energy related to electricity, natural gas, water, and wastewater, the increase is consistent with the energy projections for the state and the region. The project would also include the following sustainable design features, which would also help to ensure the project's gas/water/wastewater energy usage is not excessive or wasteful:

- Native and drought-tolerant landscape materials and plant species to reduce water usage;
- Low-flow sprinkler heads, drip irrigation, and automatic weather-sensitive controllers in irrigation systems to reduce water usage;
- Light-colored stone pavers to reduce heat absorption;
- Provision of electric vehicle charging stations; and
- Energy-conserving lighting to reduce electricity consumption.

As shown in Table 6-1, transportation is the greatest source of energy consumption. Energy is used for transportation in the form of fuel for vehicular trips. While the project would increase the consumption of gasoline and diesel proportionately with projected population growth, the increase is consistent overall with the energy projections for the state and the region. The project also would incorporate a number of project design features and assumptions that would lower vehicular traffic trips, and therefore energy consumption rates related to private vehicular transportation to help ensure the project's transportation-related energy usage is not excessive or wasteful:

- Increased transit accessibility and within a TPA;
- Provision of electrical vehicle charging stations; and

- Provision of a pedestrian and bicycle facilities links on-site uses and connect to existing or planned bicycle and pedestrian facilities contiguous with the project site.

Additionally, operation of the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The California Energy Code Building Energy Efficiency Standards include provisions applicable to all buildings, residential and nonresidential, which are mandatory requirements for efficiency and design. The project would be consistent with the requirements of Title 24 through implementation of energy-reduction measures, such as energy efficient lighting and appliances. As described in Section 4.8 of this EIR, the project would be consistent with applicable energy conservation goals and policies within the General Plan. Therefore, impacts related to operation-related energy use would be less than significant.

6.1.3 Mineral Resources

According to the Conservation and Sustainability Element of the City's General Plan, the City is not identified as having significant mineral resources (City 2012a). Approximately 98 percent of the City's land area has been developed with residential and commercial land uses. The project site is currently developed as an RV resort; no existing or past mineral extraction facilities are located on the project site or in the immediate vicinity. Additionally, the project area is not known as a locally important mineral resource recovery site and is not delineated on any plan for mineral resource recovery uses. The site has not been associated with mineral mining, and therefore, no impacts to the loss of a known mineral resource or locally important mineral resource recovery site would occur.

6.1.4 Population and Housing

The project site is currently developed with an RV resort containing 174 full-hookup RV spaces that would be removed with implementation of the project. However, the RV resort serves a combination of short-term and extended stay visitors, so implementation of the project would not displace a significant number of people or eliminate a large number of housing units. Additionally, the RVs are mobile in nature and would be able to move to another location. Furthermore, the project proposes the construction of housing, so there would not be a net loss in housing.

The proposed project entails a master development plan for a phased TOD consisting of multi-family residential and resident-serving commercial uses. In total, an estimated 850 to 950 residential units would be constructed at buildout. There is a recognized housing shortage both in San Diego County and statewide that is contributing toward rising rents and housing costs. According to the 2010 Census, the City's population increased approximately four percent in the ten years since the 2000 Census. Additionally, according to SANDAG's 2050 Regional Growth Forecast, the City is anticipated to experience a 38-percent increase in population between 2008 and 2050 (SANDAG 2011). The City's population continues to grow and there is a need of new housing units to accommodate the growth in the City's population. Therefore, the additional 850 to 950 residential units proposed by the project would help to meet the existing and anticipated need for additional housing in La Mesa. The additional housing would likely be used to meet existing population growth and would not be expected to influence an increase in population growth in the region.

Based on the preceding analysis, no adverse population and housing impacts would be associated with the project. In fact, the proposed addition of housing would help the City accommodate the increasing population.

6.1.5 Wildfire

The project site is located in a region of the County that experiences warm wet winters and hot dry summers with occasional droughts. According to the Safety Element of the City's General Plan, wildland fires occur in rural areas where development interfaces with undeveloped areas. Although the City is an urban community, wildland fires are present in the remaining pockets of undeveloped open area including, the open space portions of Eastridge, and Mount Helix (City 2012a). The project site is developed, but there is a small strip of undeveloped open space directly south of the site (i.e., Alvarado Creek banks and channel). However, the undeveloped open space is small and isolated, so it does not present significant risks of wildland fire to the project site.

The City of La Mesa acknowledges and reinforces the County of San Diego's Multi-jurisdictional Hazard Mitigation Plan, which identifies risks and ways to minimize damage caused by natural and humanmade disasters. The project would be included in this plan because the project site is located within the city limits. The project site is accessed via Alvarado Road. During construction, heavy construction-related vehicles could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). However, delays would be both minor and temporary. Additionally, operation of the proposed project would involve minimal and infrequent traffic in and out of the project site and would not result in interference with emergency response access. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Additionally, implementation of the project would not exacerbate wildfire risks or require the installation or maintenance or associated infrastructure that may exacerbate fire risk. The project does involve several public improvements, including frontage road improvements to Alvarado Road (including new sidewalk, curb and gutter, streetlights, a pedestrian bridge, and a pedestrian connection to the trolley station), relocation of existing utility lines, sewer system upgrades, and improvements to Alvarado Creek. However, such improvements would not cause wildfire risks at the project site to substantially increase from existing conditions. Therefore, impacts related to wildfire would be less than significant.

6.2 GROWTH INDUCEMENT

CEQA Guidelines Section 15126.2(e) requires that EIRs include an evaluation of potential growth inducement impacts to "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." This can include projects which remove obstacles to population growth, such as through the provision of expanded public utility capacity that may allow additional construction in the associated service area (e.g., the major expansion of a wastewater treatment plant). The referenced CEQA Guidelines section also notes that "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

6.2.1 Short-term Effects

During the project construction phase, demand for various construction trade skills and labor would increase. It is anticipated that this demand would be met by the local labor force and would not require importation of a substantial number of workers that could cause an increased demand for temporary or permanent housing in this area.

6.2.2 Long-term Effects

As discussed in Section 6.1.4, *Population and Housing*, the City's population continues to grow and there is a need of new housing units to accommodate the anticipated growth. Similarly, the population of the region has been increasing at twice the rate of the production of new housing in the region, and the City is behind in the production of its Regional Housing Needs Allocation (RHNA) allocation for 2010 – 2020 of 1,722 new units. Consistent with an urbanized, largely built-out community, La Mesa has experienced relatively little housing growth since 1990. The housing stock in the City grew from 24,154 units in 1990 to 26,167 units in 2010, or an eight percent increase over 20 years (City 2012a). Based on the SANDAG Series 13 Growth Forecast (SANDAG 2013b), the housing stock in La Mesa only slightly increased by 2020, which creates a shortfall in the RHNA allocation.

The proposed development of up to 950 multi-family residential units would provide much needed housing within the City to respond to the existing housing shortage in La Mesa, as well as in San Diego County and statewide, consistent with the City's RHNA. The project would not directly or indirectly increase population growth in the region. No significant pressure on local housing supply or demand is expected from development of the project. Proposed residential development would accommodate growth and demand that is already occurring within the region. The project site is currently developed with a RV resort and is surrounded by existing development and infrastructure. The project would not require the extension or expansion of roadways, public services, utilities, or infrastructure into areas currently without service. As a result, development of the project would not remove any physical barriers to growth. Therefore, growth inducement would not be significant as a result of the project.

6.3 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires an EIR to identify significant environmental effects that cannot be avoided if a project is implemented. As discussed in Chapter 4.0, *Environmental Analysis*, implementation of the project would result in significant impacts to Biological Resources, Cultural and Tribal Cultural Resources, Hazards and Hazardous Materials, and Paleontological Resources. Each of these impacts would be reduced to below a level of significance through the identified mitigation. Therefore, the project would not result in any significant unavoidable environmental effects.

6.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126(d) of the State CEQA Guidelines requires an evaluation of significant irreversible environmental changes which would occur should a project be implemented. Irreversible environmental changes typically fall into three categories: (1) primary impacts, such as the use of nonrenewable resources (i.e., 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. Section 15126.2(d) of the State CEQA Guidelines states that irretrievable commitments of resources should be evaluated to assure that current consumption of such resources is justified.

6.4.1 Primary Impacts Related to Nonrenewable Resources

Section 15126.2(d) of the CEQA Guidelines states that irretrievable commitments of resources should be evaluated to assure that current consumption of such resources is justified.

Implementation of the proposed project would not result in significant irreversible impacts to agricultural land or forestry resources, mineral deposits, and energy resources, as described in Section 6.1. Although the project would impact sensitive biological resources (riparian habitat) and potential jurisdictional areas, mitigation for the impacts would generate a net gain in resource quality by providing for on-site mitigation (as approved by the responsible resource agencies during the permitting process). Water bodies in the project area include Alvarado Creek which bisects the project site and continues downstream to the San Diego River. Implementation of the project would include improvements to Alvarado Creek to control flood and storm water flows within the channel, as well as to enhance the creek as an open space amenity and natural feature. As discussed in Section 5.7, *Hydrology and Water Quality*, the project would comply with applicable regulations and implementation of construction and post-construction BMPs to prevent and/or treat pollutant discharge into receiving waters.

The project would entail the commitment of energy and non-renewable resources, such as energy in the form of electricity, energy derived from fossil fuels, natural gas, construction materials (i.e., concrete, asphalt, sand and gravel, petrochemicals, steel, and lumber and forest products), potable water, and labor during the construction phases. The project features a number of sustainability elements to minimize its consumption of energy and non-renewable resources, as described in Section 6.1.2 and associated impacts would be less than significant. Nevertheless, use of these resources on any level would have an incremental effect on the regional consumption of these commodities, and therefore result in long-term, irretrievable losses of non-renewable resources, such as fuel and energy.

Cultural and paleontological resources could potentially be disturbed during project grading, but would be salvaged, as necessary, and any resources encountered would be recovered in accordance with mitigation, as described in Sections 4.3, *Cultural and Tribal Cultural Resources*, and 4.10, *Paleontological Resources.* Impacts to paleontological and cultural resources would not result in irreversible changes to those resources.

6.4.2 Secondary Impacts Related to Access to Previously Inaccessible Areas

The project would not involve road or highway improvements that would provide access to previously inaccessible areas. The proposed pedestrian and bicycle facilities would increase accessibility and connectivity, but such facilities would not connect areas that are not currently inaccessible. Therefore, implementation of the proposed project would not result in a significant irreversible impact with regard to access to previously inaccessible areas.

6.4.3 Impacts Related to Environmental Accidents

With respect to environmental accidents, and as further discussed in Section 4.6, *Hazards and Hazardous Materials*, of this EIR, potential impacts related to hazardous materials and associated health hazards from implementation of the proposed project would be avoided or reduced to below a level of significance through mandatory conformance with applicable regulatory/industry standards and codes and identified mitigation. The project site is located in a developed area with a generally low potential for wildfire hazards, as described in Section 6.1.5. Further, no major environmental accidents or hazards are anticipated to occur as a result of project implementation, with incorporation of the mitigation discussed in Section 4.6.

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7.0 ALTERNATIVES

7.1 INTRODUCTION

Section 15126.6(a) of the State CEQA Guidelines requires that EIRs describe "…a reasonable range of alternatives to a project, or the location of a 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." Section 15126.6(f) of the State CEQA Guidelines further states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The State CEQA Guidelines provide several factors that should be considered with regard to the feasibility of an alternative. Those factors include: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated).

7.2 SUMMARY OF PROJECT OBJECTIVES AND SIGNIFICANT EFFECTS

In accordance with State CEQA Guidelines Section 15126.6(a), the project alternatives are assessed relative to their ability to: (1) meet the basic objectives of the project; and (2) avoid or substantially lessen the significant effects of the project. As there are no identified significant unavoidable environmental effects associated with the project, this alternatives analysis considers a comparative analysis of the project's less than significant effects with mitigation measures incorporated.

7.2.1 Project Objectives

As described in Section 3.1 of this EIR, *Project Goals and Objectives*, the following are the primary goals and objectives of the project:

1. Address the City's housing supply needs by providing for the development of a mix of housing types to maximize the advantages of locating new infill housing in close proximity to existing regional transportation facilities, including the adjacent 70th Street Trolley Station, connecting bus routes, and freeway access;

2. Establish a land use plan that would improve public safety in the project area by providing public improvements at current City standards for Alvarado Road, construct channel improvements to address flooding conditions from Alvarado Creek, and relocation and improvement of existing sanitary sewer system infrastructure within the Alvarado Creek Flood Channel;

3. Provide high quality student housing with a short and direct link to San Diego State University from the 70th Street Trolley Station;

4. Establish a land use plan that would transform the site with private development and public improvements that would serve as a new and positive gateway image for the community;

5. Construct and maintain a multi-modal circulation system for vehicles, bicycles, and pedestrians to enhance accessibility and support active transportation and public transit use;

6. Transform Alvarado Creek within the Specific Plan Area into an urban creek and open space feature within a planned residential community;

7. Provide an environmentally sustainable residential development through the implementation of features such as energy conservation, sustainable landscape, water conservation, and support for alternative transportation, consistent with the City's CAP; and

8. Create a unified private development plan that is consistent with the City's General Plan and SANDAG's San Diego Forward: The Regional Plan.

7.2.2 Significant Impacts of the Proposed Project

Based on the evaluations in Section 4.0 of this EIR, *Environmental Analysis*, the project would result in significant but mitigable impacts related to the environmental resources areas discussed below.

Implementation of the project could result in potentially significant biological resources impacts to sensitive species (Cooper's hawk and other raptor species) and nesting birds, sensitive vegetation (freshwater marsh and willow woodland), jurisdictional waters and wetlands (freshwater marsh, willow woodland, and non-wetland waters/streambed), and consistency with habitat conservation plans (La Mesa HCP/NCCP Subarea Plan due to potential impacts MSCP-covered species). Impacts would be reduced to below a level of significance through the mitigation measures (BIO-1 through BIO-3) described in Section 4.2.6.

The project has the potential to impact subsurface archaeological and tribal cultural resources that may be located underground within the site. This impact would be reduced to below a level of significance through implementation of an archaeological monitoring program during project construction, followed by the preparation and submittal of a monitoring report, as described in mitigation measure CUL-1 in Section 4.3.6.

Implementation of the proposed project could result in a potentially significant hazards impact during demolition activities associated with release of ACM and/or LBP. Impacts would be reduced to below a level of significance through implementation of an ACM and LBP survey and disposal, as described in mitigation measure HAZ-1 in Section 4.6.6.

Implementation of the proposed project could result in a potentially significant impact to unknown paleontological resources given the entire project site is underlain by Stadium Conglomerate Formation, which is assigned a high paleontological resource sensitivity rating. This impact would be reduced to below a level of significance through implementation of paleontological monitoring program during project construction, followed by the preparation and submittal of a monitoring report, as described in mitigation measure PAL-1 in Section 4.10.6.

7.3 ALTERNATIVES CONSIDERED BUT REJECTED

Section 15126.6(c) of the State CEQA Guidelines requires that an EIR identify alternatives that were considered and rejected as infeasible, and briefly explain the reasons for their rejection. Alternatives

considered but rejected from further study for the project include the Project Location Alternative, Existing Zoning Alternative, and Senior Housing Alternative as outlined below.

7.3.1 Project Location Alternative

The State CEQA Guidelines recommend that off-site alternative locations be considered if relocating the project would result in the avoidance of significant impacts of a project. There are no significant and unavoidable environmental impacts anticipated from project implementation; therefore, relocation of the project would not avoid a significant impact of the project. However, relocation of the project to another site could potentially result in a substantial reduction or avoidance of an impact that would be reduced to less than significant with the incorporation of the mitigation measures that have been identified for the project. Factors that need to be considered when identifying an off-site location for the project include the size of the site, sensitive environmental resources on the site, its location relative to major transportation corridors (e.g., I-8) and regional transit facilities, the General Plan land use designation, and ability to meet the project objectives.

The project applicant has owned the project site for over 20 years and has operated the RV resort as a "non-conforming" use, which means that the current use is permitted until such time that it is removed. However, the long-term vision has been to redevelop the site with a high-density multi-family residential use as contemplated in the General Plan. The General Plan describes long-term goals and policies encouraging redevelopment and revitalization of the Specific Plan area with more intensive infill development, the need for missing and updated public improvements, and provision of flood protection facilities for the Specific Plan area. The project applicant considered this prior to the purchase of the project property.

Primary considerations for selecting the project location included properties that could accommodate a housing development near existing infrastructure and regional transportation and transit opportunities, and at a site that was previously developed. As a result, the project location on a previously developed site within an existing area located adjacent to a major freeway corridor (i.e., the I-8 freeway) and within a half mile of transit opportunities was selected. Most of the areas in La Mesa are developed and there are no similar properties in the area that would support the project. No alternative locations were identified for the project that could meet the project objectives and substantially reduce project impacts, and therefore this alternative is rejected.

7.3.2 Existing Zoning Alternative

The Existing Zoning Alternative corresponds with the maximum development allowed under the existing underlying Light Industrial and Commercial Service (CM) zoning of the project site. Per municipal code Section 24.06.010, the CM zone is intended to include heavy commercial activity and light industrial services. As a result, this alternative would entail an entirely different land use than the proposed project, as the only allowable residential use within this zone is one caretaker apartment for each business entity. Based on the commercial and light industrial uses, this alternative would be expected to result in greater impacts to transportation as these uses typically generate more daily traffic trips than residential uses. VMT would also be expected to be greater because residential uses would not be developed at the site, which is within a TPA and Smart Growth area. Given the anticipated increase in traffic tips and VMT, air emissions and GHG would also be greater than residential uses.

The Existing Zoning Alternative would not provide the much needed additional housing within the City to respond to the existing housing shortage in La Mesa, as well as in San Diego County and statewide. Additionally, development under this alternative would not be TOD or capitalize on the site's proximity to adjacent transit facilities in accordance with SANDAG's Regional Plan. In consideration of the above discussion and because this alternative would not meet any of the project objectives, the Existing Zoning Alternative is rejected and not carried forward.

7.3.3 Senior Housing Alternative

During the public circulation of the NOP, members of community suggested providing senior housing as a major component of the project (refer to Appendix A). The population of seniors (age 65 and older) within La Mesa is generally higher compared to the region. Approximately 17.1 percent of the existing population of La Mesa comprises seniors compared to approximately 14.4 percent in the San Diego region (SANDAG 2019c and 2019d). The percentage of seniors in La Mesa is forecasted to increase to 23.1 percent in 2035 compared to 19.2 percent in the region, and 23.4 percent in 2050 compared to 19.7 percent in the region (SANDAG 2013b and 2013c). Based on the current and projected population of seniors in La Mesa, there is a market demand for senior housing, especially for for-rent senior units. Senior housing facilities are ideally located in or near village or town centers because they would provide seniors with easier access to essential services, such as a pharmacy, food market, shops, banks and general merchandise within a close distance to their home. Although the project site is located adjacent to transit facilities, the site is not within or near commercial areas that provide any of the noted essential services. Moreover, mixing senior housing with non-senior housing and particularly student housing within the same development would not ideally be compatible or preferable by these residential sectors.

This alternative would achieve all of the identified project objectives. It would not, however, avoid or substantially lessen the significant effects of the project. Therefore, this alternative was rejected from further consideration.

7.4 PROPOSED PROJECT ALTERNATIVES

The following three alternatives are carried forward and evaluated in this analysis:

- No Project Alternative;
- Reduced Density Alternative; and
- Phase 1 Only Alternative.

The following rationale was considered when developing this range of alternatives:

- The No Project Alternative is required per State CEQA Guidelines Section 15126.6(e). It provides a basis for comparing the impacts that would occur if the project were approved, relative to what would occur if the project were not approved.
- The Reduced Density Alternative and Phase 1 Only Alternative are included in this section to evaluate whether any impacts would be reduced substantially when compared to the project.

These alternatives represent a reasonable range of alternatives, as defined in the State CEQA Guidelines, because they provide feasible alternate development patterns that would reduce (but not eliminate) the significant impacts associated with the project. The impacts associated with these alternatives are compared to those identified for the project in the following analysis, and the alternatives are assessed relative to their ability to meet the basic objectives of the project, with an overview of project and alternative impacts provided in Table 7-1, *Comparison of Project and Alternative Impacts*, located at the end of this section.

7.4.1 No Project Alternative

7.4.1.1 Description

Section 15126.6(e) of the State CEQA Guidelines provides that the "no project" analysis "shall discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if a project were not approved, based on current plans and consistent with available infrastructure and community services." For a development project, the "no project" alternative is defined as the circumstance under which the project does not proceed and a comparison of the environmental effects of the property remaining in its existing state against the environmental effects associated with the project. Accordingly, the No Project Alternative assumes that the project would not be adopted, no multi-family residential buildings would be constructed, and no public improvements to Alvarado Creek, Alvarado Road, or utilities would be constructed. The existing RV resort would remain as well as other existing conditions described in Chapter 2 of this EIR.

7.4.1.2 Environmental Analysis

Air Quality

No demolition, grading, construction, or new development would occur under the No Project Alternative. Therefore, this alternative would not have the potential to increase air pollutant emissions from the site as would occur with the project. Although air quality impacts would not be significant under the project, this alternative would result in lower environmental effects associated with air quality during construction because no new construction or demolition would occur.

No demolition, grading, construction, or additional development would occur under the No Project Alternative. Therefore, this alternative would not have the potential to increase the existing air pollutant emissions associated with the existing use of the site as an RV resort. This is compared to the project for which impacts would be less than significant with no mitigation required. No new construction or demolition air pollution emissions or long-term, daily vehicle trip emissions would occur, compared to the project, for which such emissions would occur. No air quality impacts would occur under the No Project Alternative. In terms of long-term, regional effects, potential benefits related to reduced vehicle trips/miles due to placement of higher-density multi-family residential uses in close proximity to transit with easy access to public transportation options as well as improvements in connectivity between pedestrian, bicycle, and transit modes would not occur.

Biological Resources

Under this alternative, the project site would remain as it currently exists, mostly developed and disturbed with some areas of natural vegetation along and within Alvarado Creek. No development would occur and there would be no impact to biological resources. The No Project Alternative would

avoid impacts to biological resources resulting from the project, including sensitive species (Cooper's hawk and other raptor species) and nesting birds, sensitive vegetation (freshwater marsh and willow woodland), jurisdictional waters and wetlands (freshwater marsh, willow woodland, and non-wetland waters/streambed), and consistency with habitat conservation plans (La Mesa HCP/NCCP Subarea Plan due to potential impacts MSCP-covered species). The benefits of an improved Alvarado Creek associated with restoration and hydrology would not be realized with this alternative.

Cultural and Tribal Cultural Resources

Under the No Project Alternative, no excavation or grading activities would occur and the potential for impacts to unknown subsurface historical resources (including Native American resources and remains) from implementation of the project would be avoided. As described in Section 4.3, *Cultural and Tribal Cultural Resources*, of this EIR, the identified potential for impacts to archaeological and tribal cultural resources associated with implementation of the project would be significant but mitigable with the implementation of a monitoring program. No archaeological and tribal cultural resources impacts are associated with the No Project Alternative.

Geology and Soils

The No Project Alternative would not result in additional development or related disturbance on the project site, with no associated impacts related to geology and soils. Neither the project nor this alternative would result in significant impacts associated with geologic hazards and conditions; however, this alternative would have even less potential for geology impacts as there would be no excavation or grading on the site and no introduction of additional structures or people to the site. The less than significant impacts of the project would be avoided. It should also be noted that the project site would remain subject to a number of existing geologic hazards under the No Project Alternative (e.g., seismic ground shaking), as described in Section 4.4, *Geology and Soils*.

Greenhouse Gas Emissions

Similar to air quality, this alternative would not result in new GHG emissions or impacts over the existing contributions from the current use of the site as an RV resort. This is compared with the project which is anticipated to have less than significant GHG emissions associated with construction and operation of the project. It also, however, would not result in implementation of strategies to reduce regional GHG emissions, such as concentrating high-density residential development near a transit station and improving connectivity with and between alternative modes of travel, including bicycle and pedestrian travel and improved access to transit.

Hazards and Hazardous Materials

As described in Section 4.6, *Hazards and Hazardous Materials*, the site contains existing buildings that potentially could contain ACM and/or LBP based on their construction date. This presents potential health hazards during construction due to the potential for release of these hazardous building materials into the environment that could adversely affect the health of construction personnel and nearby sensitive receptors (i.e., residents and school children). These potential adverse effects would be addressed through implementation of a mitigation measure requiring a pre-construction hazardous building materials survey and if required, appropriate remediation in compliance with regulatory requirements during the demolition and removal of the buildings to prevent the release of such materials. Project impacts would be less than significant with mitigation. The No Project Alternative

would leave the project site in its current condition; the existing buildings would remain along with any potentially hazardous building materials present on them. Although there would be no development activities and no impact would occur thus avoiding the potentially significant impact of the project, a potential benefit of the project to remove potentially hazardous materials would not be realized with this alternative.

Neither the project nor this alternative would result in significant impacts associated with airport hazards; however, this alternative would have even less potential for such impacts as there would be substantially less people residing at the site compared to the development of up to 950 multi-family residential units.

The project would have a less than significant impact with respect to wildfire and emergency response/evacuation, as described in Section 4.6, and because no development would occur under this alternative, no impacts would occur. However, under this alternative, a potential benefit of improving Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles would not be realized.

Hydrology and Water Quality

As the No Project Alternative would not result in additional development, it would not result in potential impacts related to the generation of impervious surfaces, increases in runoff rates/ amounts, storm drain capacity, flooding, erosion/sedimentation, hydromodification, drainage alteration, and water pollutants. All of these impacts under the project would, however, be avoided or reduced below a level of significance through implementation of proposed design measures and required conformance with applicable regulatory/industry standards.

As the No Project/No Development Alternative would not result in additional development, it would not result in potential impacts related to the generation of impervious surfaces, increases in runoff rates/ amounts, storm drain capacity, flooding, erosion/sedimentation, hydromodification, drainage alteration, and water pollutants. No action would be taken and no impacts would occur. Drainage and water quality conditions on the project site would remain as they currently are. As described in Section 4.7, *Hydrology and Water Quality*, of this EIR, the project would increase impervious surfaces on the project site, alter drainage patterns, and introduce uses that could generate pollutants and impact the quality of storm water runoff. These potential hydrology and water quality impacts associated with the project would be less than significant, however, conformance with applicable storm water standards and water quality regulations (including the NPDES Construction General, Municipal and Groundwater permits) would be required.

If the project site operates in its current state under this alternative, it would continue to generate associated urban contaminants similar to those described for the project. Based on the construction date of current on-site development, it is anticipated that no associated volume/flow-based or other pollutant control BMPs are present, and that the related long-term storm water pollutant generation from the site could, therefore, be more detrimental to water quality under the No Project Alternative than for the project (which would include pollutant control BMPs in conformance with associated regulatory requirements). Additionally, the proposed improvements to Alvarado Creek would not occur under this alternative and thus, the existing drainage and flood issues associated with the site that would be addressed with the project would remain and could continue to worsen over time (particularly since the channel would not be improved and cleared of non-native vegetation and debris). Therefore,

although hydrology and water quality impacts associated with the No Project Alternative would be less than significant because no development would occur, they would be greater than the project impacts.

Land Use

Under the No Project Alternative, the existing uses and physical conditions on the project site would remain. The RV resort would continue to operate as a non-conforming use and Alvarado Creek, Alvarado Road, the overhead utility lines, and existing sewer facilities would remain in their current condition and configuration. While the RV resort is not consistent with the General Plan and zoning designations for the site, it is permitted at the site based on its non-conforming use status. Thus, as with the proposed project, no land use plan consistency impacts would occur. However, this alternative would not implement or further express the goals, objectives, or policies of the General Plan. Furthermore, it would not support goals in SANDAG's Regional Plan that encourage high-density development in proximity to transit facilities. As with the project, this alternative would not physically divide an established community. No significant land use impacts are anticipated with the project, and none would occur under this alternative.

Noise

As described in Section 4.9, *Noise*, of this EIR, noise impacts associated with the project would be less than significant. The No Project Alternative would not result in demolition or construction activities or new stationary and mobile noise sources in the vicinity of existing noise-sensitive land uses. Therefore, no impact would occur, and no mitigation would be required. The existing noise conditions on the project site would continue and there would be no new noise sources at the site that could potentially impact off-site uses.

Paleontological Resources

Under the No Project Alternative, project development would not occur, and no other development/disturbance activities would be implemented. Accordingly, no associated impacts to paleontological resources would result, and impacts identified to the Stadium Conglomerate Formation (moderate to high resource potential) from implementation of the project would be avoided. As described in Section 4.10, *Paleontological Resources*, of this EIR, the noted impacts to paleontological resources associated with implementation of the project would be reduced below a level of significance through the required monitoring program.

Public Facilities and Services

The less than significant impacts of the project with respect to public services such as police, fire, parks, and library services, would not occur under this alternative. No development would occur under the No Project Alternative that would increase population, resulting in a need to expand public services and facilities. Impacts related to demand for these services also would be less than significant for the project.

Public Utilities

As the No Project Alternative would not alter the intensity of development on the project site, it would not result in demand for additional water, sewer, solid waste disposal, or other utility services. Impacts related to demand for these services also would be less than significant for the project. Under this

alternative, a potential benefit of relocated the existing overhead utility lines that traverse the site underground would not be realized.

Transportation

As no development is proposed under this alternative, no additional traffic beyond existing conditions would be generated and no impact would occur. Similarly, because no development would occur, there would be no associated transportation design hazard impacts.

The No Project Alternative would not result in construction-related traffic impacts, as no construction would occur. In addition, the project improvements to pedestrian and bicycle facilities, as well as improved access to the adjacent 70th Street Trolley Station, would not be implemented with this alternative. Thus, while there would be no impacts because no development would occur, the No Project Alternative would not be consistent with applicable transportation plans, including the General Plan Circulation Element and Bicycle Facilities and Alternative Transportation Plan. Furthermore, it would not be consistent with SANDAG's Regional Plan that encourage high-density development in proximity to transit facilities.

The project would have a less than significant impact with respect to emergency access, as described in Section 4.13, *Transportation*, of this EIR, and because no development would occur under this alternative, no impacts would occur. However, under this alternative, a potential benefit of improving Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles would not be realized.

Visual Resources

The No Project Alternative would retain existing visual conditions at the site. This alternative would not result in the introduction of new residential structures, enhanced landscaping, or architectural design that would improve the relationship of the project site to the surrounding areas. Views from the freeway and adjacent residential neighborhoods would continue to be the developed RV resort and the stand of mature palm trees. As this alternative would not result in any site improvements that would change the existing visual environment, no impacts to visual resources would occur.

7.4.1.3 Conclusion

The No Project Alternative would avoid significant but mitigable impacts to biological resources, cultural and tribal cultural resources, hazards and hazardous materials, and paleontological resources identified for the project. It would also avoid all other impacts of the project related to air quality, geology and soils, GHG emissions, hydrology and water quality, land use, noise, public facilities and services, public utilities, transportation, and visual resources, which would be less than significant for the project. However, the benefits of the proposed project would not be realized under the No Project Alternative, including the following:

- Long-term, regional benefits of reduced air and GHG emissions related to reduced vehicle trips/miles due to placement of higher-density multi-family residential uses in close proximity to transit as well as improvements in connectivity between pedestrian, bicycle, and transit modes;

- Alvarado Creek would not be improved to resolve drainage and flooding issues, and would not be restored with riparian vegetation;

- The project site would not be improved with volume/flow-based or other pollutant control BMPs to treat storm water runoff before being conveyed to Alvarado Creek; and
- The project would potentially remove hazardous building materials that may be present on existing on-site buildings.

Based on the preceding analysis and the fact that no development of any of the project features would occur with the No Project Alternative, this alternative would fail to meet any of the basic project objectives listed above in Section 7.2.1.

7.4.2 Reduced Density Alternative

7.4.2.1 Description

There were no feasible residential development alternatives identified that could eliminate any of the impacts associated with the project. Therefore, an alternative was selected for analysis that would potentially lessen project impacts and would result in a feasible development for the applicant to implement. The Reduced Density Alternative would involve a similar development proposal to the project, but with a 25-percent reduction in the number of residential units. Specifically, this alternative considers the development of 712 multi-family residential units along with up to 15,000 SF of resident-serving commercial space. The public improvements to Alvarado Creek, Alvarado Road, and utility facilities proposed as part of the project also would occur under this alternative. Under this alternative, the development footprint and number of buildings would be the same as the project; however, buildings would include fewer floors of residential built on the podium.

7.4.2.2 Environmental Analysis

Air Quality

Demolition, grading, and construction activities would occur under the Reduced Density Alternative and would generate air emissions during construction and operation; however, air emissions during both construction and operations would be incrementally less overall when compared to the project, because fewer units would be constructed. Emissions during grading would be expected to be similar as it is anticipated that most of the site would still need to be graded and a substantial amount of excavation would still be needed to remove existing fill materials that are unsuitable for building foundations. The Reduced Density Alternative would generate less daily vehicle trips than the project. As vehicle emissions would be the predominant source of operational emissions, this alternative would be expected to generate less air pollution than the project. Overall, both the project and the Reduced Density Alternative would have less than significant air quality impacts, but the impacts associated with the alternative would be slightly less than those associated with the project.

Biological Resources

Under the Reduced Density Alternative, the site would be redeveloped with the same land uses as the project and with a similar development footprint; however, with 25-percent fewer homes. Impacts to sensitive species (Cooper's hawk and other raptor species) and nesting birds, sensitive vegetation (freshwater marsh and willow woodland), jurisdictional waters and wetlands (freshwater marsh, willow woodland, and non-wetland waters/streambed), and consistency with habitat conservation plans (La Mesa HCP/NCCP Subarea Plan due to potential impacts MSCP-covered species) that would require

mitigation under the project would likely still occur in order to implement the residential development and Alvarado Creek improvements. Both the project and the Reduced Density Alternative would result in similar significant but mitigable impacts to biological resources, with similar mitigation requirements.

Cultural and Tribal Cultural Resources

As described in Section 4.3, *Cultural Resources and Tribal Cultural Resources*, of this EIR, no significant on-site cultural resources were identified, but there is the potential for unknown resources to be discovered during on-site grading. The noted impacts to cultural and tribal cultural resources associated with implementation of the project would be reduced below a level of significance through mitigation measures requiring monitoring of specific ground disturbance activities. Ground disturbance associated with development of the Reduced Density Alternative would be slightly less than that associated with the project, because it is likely that slightly less grading would be required. Therefore, the likelihood of encountering cultural resources would be similar, but slightly less than the project. Both scenarios would have a significant but mitigable potential for impacts to unidentified prehistoric or ethnohistoric resources (including Native American resources and remains), with the same mitigation requirements for construction monitoring.

Geology and Soils

Both the project and the Reduced Density Alternative would be required to comply with the applicable recommendations of an on-site geotechnical investigation, and it is expected that these recommendations would be very similar for both of these scenarios. Both would require a similar amount of grading, including excavation and recompaction of much of the existing on-site fill materials to create suitable building foundations, although grading could be slightly less for the alternative. This alternative would expose 25 percent fewer buildings and people to geologic hazards on the project site should a seismic event occur. Impacts would be less than significant for both the project and this alternative, with slightly less impacts anticipated for the alternative.

Greenhouse Gas Emissions

The Reduced Density Alternative would result in site-specific GHG emissions associated with construction and operation of the project, but at a reduced amount associated with the 25 percent reduction in the number of residential units. As a result, GHG impacts would remain less than significant but would be incrementally reduced under this alternative when compared to the project due to a reduction in traffic trips and development intensity.

Hazards and Hazardous Materials

As described in Section 4.6, *Hazards and Hazardous Materials*, the existing on-site buildings have potential to contain ACM and/or LBP. These conditions present potential health hazards during construction due to the potential for release of these materials to adversely affect the health of construction personnel and nearby sensitive receptors (residents and school children). These potential adverse effects would be addressed through implementation of a mitigation measure requiring a pre-construction hazardous building materials survey and if required, appropriate remediation in compliance with regulatory requirements during the demolition and removal of the buildings to prevent the release of such materials. Project impacts would be less than significant with mitigation. The Reduced Density Alternative would implement a similar, but slightly less intense, residential development on the project site, that would also require the removal of the existing buildings.

Accordingly, the impacts and required mitigation would be the same for this alternative as for the project. Both types of development would be required by law to properly store, use, and dispose of hazardous substances used in the course of construction and long-term maintenance of the developed site.

The project would have a less than significant impact with respect to airport hazards and this alternative would have a slightly less potential for such impacts given the lower building heights, 25 percent reduction in residential units, and associated reduction in the number of people residing at the site.

It is anticipated that this development alternative would result in a similar transportation infrastructure to that associated with the project. This would include similar benefit of improving Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles. The project and this alternative would have a similar, less than significant impact with respect to wildfire and emergency response/evacuation.

Hydrology and Water Quality

The Reduced Density Alternative would result in the same type of development as the project, except there would be 25 percent less development. Potential impacts related to the generation of impervious surfaces, increases in runoff rates/amounts, storm drain capacity, flooding, erosion/sedimentation, hydromodification, drainage alteration, and water pollutants would generally be similar given that the development footprint and number of buildings would be the same as the project. As described in Section 4.7, *Hydrology and Water Quality*, of this EIR, hydrology and water quality impacts associated with the project would be less than significant as conformance with City storm water standards, water quality regulations (including the NPDES Construction General, Municipal and Groundwater permits) and water conservation policies would be required. As a result, the less than significant hydrology and water quality impacts associated with the Reduced Density Alternative would be similar compared to the project even though the intensity and use of the site may be slightly reduced.

Land Use

Under the Reduced Density Alternative, the existing RV resort would be removed and replaced with a residential development, similar to the project, but with 25 percent fewer residences. Like the project, this alternative would implement and further express goals, objectives, and policies of the General Plan and also would support goals in SANDAG's Regional Plan to promote higher density development near transit facilities, although to a lesser extent than the project. As with the project, this alternative would not physically divide an established community. It should be noted that this alternative would provide less housing at a time when the City is seeking to increase its available housing supply. Land use impacts would be less than significant but slightly greater than the project.

Noise

Noise impacts to surrounding development from project construction, traffic, and on-site operations were determined to be less than significant for the project. The Reduced Density Alternative would involve less construction and less long-term operational traffic, which would in turn result in reduced noise impacts compared to the project. While specific impacts to adjacent properties would depend on the design of the project, similar to the project, a reduced intensity residential development would be required to conform with applicable City noise standards.

While this alternative would involve a new site plan that could potentially locate planned residential uses farther from I-8, residential units and exterior usable spaces would still be exposed to noise from I-8 in excess of applicable noise standards, requiring noise reduction design features measures similar to those identified for the project to be incorporated into the design of this alternative. It is expected that this alternative would also need to incorporate private exterior use area noise barriers and higher STC-rated building materials to be consistent with General Plan noise-land use compatibility standards. Land use impacts associated with noise compatibility would be less than significant and similar for the project and this alternative. Overall, noise impacts associated with the Reduced Density Alternative would remain less than significant and would likely be reduced compared to the project, depending on the specific design of the alternative development.

Paleontological Resources

Under the Reduced Density Alternative, the extent of grading would be slightly reduced but the anticipated depth of excavation would be similar to the project due to the site conditions associated with the floodplain. Impacts to potential paleontological resources associated with the Stadium Conglomerate Formation (moderate to high resource potential) would, therefore, be the same as the project. Both scenarios would have a significant but mitigable potential for impacts to paleontological resources, with the same mitigation requirements for construction monitoring, as described in Section 4.10, *Paleontological Resources*.

Public Services and Facilities

Impacts related to demand for most public services and facilities, including police, fire, libraries, and parks/recreation, would be about 25 percent less under this alternative compared to the project, proportional to the reduced number of residents. Overall, the Reduced Density Alternative would place less demand on public services than the project; however, impacts under either scenario would be less than significant.

Public Utilities

As the Reduced Density Alternative would involve the construction and operation of 25 percent less development than the project, it would result in reduced demand for additional water, sewer, solid waste disposal, and other utility services. Impacts related to demand for public utilities under the project and this alternative would both be less than significant; overall, however, impacts under the Reduced Density Alternative would be comparatively less than the project.

Transportation

Development of the project site with 25 percent fewer residential units would result in a corresponding decrease in traffic compared to the project. This would result in slightly reduced traffic volumes and VMT. Both the project and this alternative would be within 0.5 mile of a major transit stop and thus, transportation impacts related to VMT would be less than significant. Moreover, this alternative would incorporate the same VMT reduction measures as the project, which would result in a further reduction in VMT.

The Reduced Density Alternative would include reduced transportation/circulation impacts during construction as less materials and equipment associated with earthwork and structural development would be needed when compared to the project. Similar to the project, no transportation hazards would

occur under this alternative. It is anticipated that this alternative would provide similar pedestrian and bicycle amenities to benefit the proposed residents and the surrounding community.

The same project improvements to pedestrian and bicycle facilities, as well as improved access to the adjacent 70th Street Trolley Station, would be implemented with this alternative. Thus, like the proposed project, the Reduced Density Alternative would be consistent with adopted transportation plans, including the General Plan Circulation Element, Bicycle Facilities and Alternative Transportation Plan, and SANDAG's Regional Plan.

Both the project and this alternative would have a less than significant impact with respect to emergency access because both would include improvements to Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles.

Overall, less than significant transportation impacts would be associated with both the project and this alternative but would be incrementally less with the Reduced Density Alternative.

Visual Resources

The Reduced Density Alternative would involve the replacement of the existing RV resort with a residential development similar to the project but with 25 percent fewer units. Depending on the layout of the project site under this alternative, it may be possible to achieve lower building heights with slightly wider setbacks from existing development; these modifications may be discernible to some nearby residents but would likely not be substantial enough to be noticeable during brief public views from such vantagepoints. While both the project and this alternative would be compatible with the surrounding community and would have less than significant impacts related to visual resources, the impacts associated with the Reduced Density Alternative would be slightly less than the impact of the project.

7.4.2.3 Conclusion

The Reduced Density Alternative would not avoid any significant but mitigable impacts associated with the project. Significant but mitigable impacts to cultural and tribal cultural resources would be slightly less than the project impacts, but the required mitigation would be the same. The project and this alternative would have essentially the same significant impacts with the same mitigation required to reduce impacts to less than significant levels relative to biological resources, hazards and hazardous materials, and paleontological resources. Less than significant impacts associated with both the project and this alternative with respect to air quality, geology and soils, GHG, noise, public services and facilities, public utilities, transportation, and visual resources would be slightly less for this alternative, while less than significant hydrology/water quality impacts would be approximately the same. The differences are primarily associated with the slightly reduced intensity of development required for this alternative. Less than significant land use impacts would be slightly greater due to the reduction in residential units that would not fully capitalize on the site's proximity to transit facilities.

As the Reduced Density Alternative would involve a reduction by 25 percent of the development intensity of the project but with the same uses and public improvements, it would meet the project objectives, but to a lesser extent than the proposed project given the reduction of residential units.

7.4.3 Phase 1 Only Alternative

7.4.3.1 Description

As stated in Section 7.5, there were no feasible residential development alternatives identified that could eliminate any of the impacts associated with the project. As with the Reduced Density Alternative, this alternative was selected for evaluation in that it would potentially lessen project impacts and would result in a feasible development for the applicant to implement. The Phase 1 Only Alternative would involve a similar development proposal to the project, as only Phase 1 would be developed on the project site. Under this alternative, the portion of the site west of Alvarado Creek would be developed with Buildings 1, 2, and 3 that would include up to 645 multi-family residential units along with some resident-serving commercial space. The buildings would the same as those of the project in terms of size, area, number of units, design, location, etc. The total area of the commercial space would be slightly less than the 15,000 SF associated with the project since three buildings would be constructed instead of four. The public improvements to Alvarado Creek, Alvarado Road, and utility facilities proposed as part of the project also would occur under this alternative. The eastern portion of the project site would not be redeveloped, and the existing RV resort would continue to operate in this portion of the site.

7.4.3.2 Environmental Analysis

Air Quality

Under the phase 1 Only Alternative, demolition, grading, and construction activities would occur and would generate air emissions during construction and operation. Emissions during both construction and operations would be less overall when compared to the project. Emissions during grading would be expected to be reduced because the eastern portion of the site would not be graded; however, there would be adjacent sensitive receptors at the existing RV resort. The Phase 1 Only Alternative would generate less daily vehicle trips than the project due to the fewer units that would be developed. As vehicle emissions would be the predominant source of operational emissions, this alternative would be expected to generate less air pollution than the project. Overall, both the project and the Phase 1 Only Alternative would have less than significant air quality impacts, but the impacts associated with this alternative would be less than those associated with the project.

Biological Resources

Under the Phase 1 Only Alternative, the western portion of the site would be redeveloped with the same land uses as the project with the same development footprint on this portion of the project site. The eastern portion of the site would not be redeveloped. Impacts to sensitive species (Cooper's hawk and other raptor species) and nesting birds, sensitive vegetation (freshwater marsh and willow woodland), jurisdictional waters and wetlands (freshwater marsh, willow woodland, and non-wetland waters/streambed), and consistency with habitat conservation plans (La Mesa HCP/NCCP Subarea Plan due to potential impacts MSCP-covered species) that would require mitigation under the project would likely still occur in order to implement the residential development and Alvarado Creek improvements. Both the project and the Phase 1 Only Alternative would result in similar significant but mitigable impacts to biological resources, with similar mitigation requirements.

Cultural and Tribal Cultural Resources

No significant on-site cultural resources were identified on the project site, but there is the potential for unknown resources to be discovered during on-site grading. As described in Section 4.3, *Cultural and Tribal Cultural Resources*, impacts to cultural and tribal cultural resources associated with implementation of the project would be reduced below a level of significance through mitigation measures requiring monitoring during certain construction activities involving ground disturbance. Ground disturbance associated with development of the Phase 1 Only Alternative would be less than that associated with the project, because less grading would be required. Therefore, the likelihood of encountering cultural resources would be similar, but slightly less than the project. Both scenarios would have a significant but mitigable potential for impacts to unidentified cultural resources, with the same mitigation requirements for construction monitoring.

Geology and Soils

Both the project and the Phase 1 Only Alternative would be required to comply with the applicable recommendations of an on-site geotechnical investigation, and it is expected that these recommendations would be very similar for both of these scenarios. They both would require grading, including excavation and recompaction of the existing on-site fill materials to create suitable building foundations, although grading would be less for the alternative. This alternative would expose fewer buildings and people to geologic hazards on the project site should a seismic event occur. Impacts would be less than significant for both the project and this alternative, with less impacts anticipated for the alternative.

Greenhouse Gas Emissions

The Phase 1 Only Alternative would result in site-specific GHG emissions associated with construction and operation of the project, but at a reduced amount given that no development would occur on the eastern portion of the site. As a result, GHG impacts would remain less than significant and would be less under this alternative when compared to the project due to a reduction in traffic trips and development intensity.

Hazards and Hazardous Materials

The existing on-site buildings have potential to contain hazardous building materials associated with ACM and/or LBP, as discussed in Section 4.6, *Hazards and Hazardous Materials*, of this EIR. These conditions present potential health hazards during construction due to the potential for release of these materials to adversely affect the health of construction personnel and nearby sensitive receptors (residents and school children). Potential adverse effects would be addressed through implementation of a mitigation measure requiring a pre-construction hazardous building materials survey and if required, appropriate remediation in compliance with regulatory requirements during the demolition and removal of the buildings to prevent the release of such materials. Project impacts would be less than significant with mitigation. The Phase 1 Only Alternative would require the removal of five of the existing six buildings. Accordingly, the impacts and required mitigation would be the same for this alternative as for the project. Both types of development would be required by law to properly store, use, and dispose of hazardous substances used in the course of construction and long-term maintenance of the developed site. It is noted that one of the existing buildings would remain under this alternative, which would potentially leave hazardous building materials on the project site.

The project would have a less than significant impact with respect to airport hazards and this alternative would have a slightly less potential for such impacts given the reduction in residential units and associated reduction in the number of people residing at the site.

Like the project, this alternative would include improvements to Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles. The project and this alternative would have a similar, less than significant impact with respect to wildfire and emergency response/evacuation.

Hydrology and Water Quality

The Phase 1 Only Alternative would result in the same type of development as the project, except there would be less development. Potential impacts related to the generation of impervious surfaces, increases in runoff rates/amounts, storm drain capacity, flooding, erosion/sedimentation, hydromodification, drainage alteration, and water pollutants would generally be similar. Although there would be a smaller development footprint and reduced impervious surfaces associated with new development, the eastern portion of the site would remain in its current condition, which is almost entirely paved.

As described in Section 4.7, *Hydrology and Water Quality*, of this EIR, hydrology and water quality impacts associated with the project would be less than significant as conformance with City storm water standards, water quality regulations (including the NPDES Construction General, Municipal and Groundwater permits) and water conservation policies would be required. As a result, the less than significant hydrology and water quality impacts associated with the Phase 1 Only Alternative would be similar compared to the project even though the intensity and use of the site would be reduced.

Land Use

Under the Phase 1 Only Alternative, the western portion of the existing RV resort would be removed and replaced with a residential development, similar to the project, but with three buildings and a corresponding reduction in the number of residential units. While this alternative would implement and further express goals, objectives, and policies of the General Plan and also would support goals in SANDAG's Regional Plan to promote higher density development near transit facilities, it would do so to a lesser extent than the project because of the fewer number of residential units that would be developed. As with the project, this alternative would not physically divide an established community. Land use impacts would be less than significant but slightly greater than the project. It should be noted that this alternative would provide less housing at a time when the City is seeking to increase its available housing supply.

Noise

Noise impacts to surrounding development from project construction, traffic and on-site operations were determined to be less than significant for the project. The Phase 1 Only Alternative would involve less construction and less long-term operational traffic, which would result in reduced noise impacts compared to the project. Impacts to adjacent properties would be similar to the project, and although an additional noise-sensitive land use would exist in the project area (the adjacent portion of the existing RV resort that would remain), this alternative would be required to conform with applicable City noise standards.

Like the project, residential units and exterior usable spaces would still be exposed to noise from I-8 in excess of applicable noise standards, requiring noise reduction design features measures similar to those identified for the project to be incorporated into the design of this alternative. It is expected that this alternative would also need to incorporate private exterior use area noise barriers and higher STC-rated building materials, in order to be consistent with General Plan noise-land use compatibility standards. Land use impacts associated with noise compatibility would be less than significant and similar for the project and this alternative. Overall, noise impacts associated with the Phase 1 Only Alternative would remain less than significant and would be similar in severity to the project.

Paleontological Resources

Under the Phase 1 Only Alternative, the extent of grading would be slightly reduced but the anticipated depth of excavation would be same as the project. Impacts to potential paleontological resources associated with the Stadium Conglomerate Formation (moderate to high resource potential) would, therefore, be the same as the project. Both scenarios would have a significant but mitigable potential for impacts to paleontological resources, with the same mitigation requirements for construction monitoring, as described in Section 4.10, *Paleontological Resources*.

Public Services and Facilities

Impacts related to demand for public services and facilities, including police, fire, libraries, and parks/recreation, would be reduced less under this alternative compared to the project because there would be fewer residential units and residents on the site with this alternative. People staying at the portion of the existing portion of the RV resort that would remain would continue to require and utilize public services and facilities. Overall, the Phase 1 Only Alternative would place less demand on public services than the project; however, impacts under either scenario would be less than significant.

Public Utilities

As the Phase 1 Only Alternative would involve the construction and operation of less development than the project, it would result in reduced demand for additional water, sewer, solid waste disposal, and other utility services compared to the project. People staying at the portion of the existing portion of the RV resort that would remain would continue to require public utility service. Impacts related to demand for public utilities under the project and this alternative would both be less than significant; overall, however, impacts under the Phase 1 Only Alternative would be less than the project.

Transportation

Development of only the western portion of the site would result in fewer residential units and a corresponding decrease in traffic compared to the project. This would equate to slightly reduced traffic volumes and VMT. Both the project and this alternative would be within 0.5 mile of a major transit stop and thus, transportation impacts related to VMT would be less than significant. Moreover, this alternative would incorporate the same VMT reduction measures as the project, which would further reduce VMT.

The Phase 1 Only Alternative would include reduced transportation/circulation impacts during construction as less materials and equipment associated with earthwork and structural development would be needed compared to the project. Similar to the project, no transportation hazards would occur under this alternative. The same project improvements to pedestrian and bicycle facilities, as well as

improved access to the adjacent 70th Street Trolley Station, would be implemented with this alternative. Thus, like the proposed project, the Phase 1 Only Alternative would be consistent with adopted transportation plans, including the General Plan Circulation Element, Bicycle Facilities and Alternative Transportation Plan, and SANDAG's Regional Plan. Both the project and this alternative would have a less than significant impact with respect to emergency access because both would include improvements to Alvarado Road that would provide improved circulation along the roadway, including for emergency vehicles. Overall, less than significant transportation impacts would be associated with both the project and this alternative but would be incrementally less with the Phase 1 Only Alternative.

Visual Resources

The Phase 1 Only Alternative would involve the replacement of the existing RV resort west of Alvarado Creek with a residential development similar to the project but with one fewer building and a reduced number of residential units. The eastern portion of the site would remain as is with a RV resort. Consequently, the bulk and scale of overall development associated with this alternative would appear to be less compared to the project from some vantage points. Building forms, heights, densities, and development envelopes would be the same as the project on the western portion of the site, as would architecture and design elements.

While both the project and this alternative would be compatible with the surrounding community and would have less than significant impacts related to visual resources, the impacts associated with the Phase 1 Only Alternative would be less than the project.

7.4.3.3 Conclusion

The Phase 1 Only Alternative would not avoid any significant but mitigable impacts associated with the project. Significant but mitigable impacts to cultural and tribal cultural resources would be slightly less than the project impacts, but the required mitigation would be the same. The project and this alternative would have essentially the same significant impacts with the same mitigation required to reduce impacts to less than significant levels relative to biological resources, hazards and hazardous materials, and paleontological resources. Less than significant impacts associated with both the project and this alternative with respect to air quality, geology and soils, GHG, public services and facilities, public utilities, transportation, and visual resources would be slightly less for this alternative, while less than significant hydrology/water quality and noise impacts would be approximately the same. The differences are primarily associated with the slightly reduced intensity of development required for this alternative. Less than significant land use impacts would be slightly greater due to the reduction in residential units that would not fully capitalize on the site's proximity to transit facilities.

As the Phase 1 Only Alternative would involve fewer buildings and residential units but with the same uses and public improvements, it would meet the project objectives, but to a lesser extent than the proposed project given the reduction of residential units.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The State CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR, which is typically selected based on an ability to avoid or substantially reduce significant environmental effects associated with the project. The guidelines also

require that if the No Project Alternative is identified as the environmentally superior alternative, another environmentally superior alternative must be identified.

The project would not result in any significant and unavoidable impacts, and mitigation measures or project design features have been identified to reduce all potentially significant impacts to a less than significant level. However, the No Project Alternative is identified as the environmentally superior alternative as this alternative would not result in any new impacts because no development would occur under this alternative. Some adverse conditions would remain (e.g., drainage and flood issues and on-site hazardous building materials) and some potential project benefits would not be realized (e.g., public improvements to Alvarado Creek, Alvarado Road, and utilities). This alternative, however, would avoid the significant but mitigable impacts associated with the project related to biological resources, cultural and tribal cultural resources, hazards and hazardous materials, and paleontological resources (refer to Table 7-1, *Comparison of Project and Alternative Impacts*). The No Project Alternative does not meet the purpose and objectives of the project, however, as outlined in Section 7.4.1.3.

Table 7-1
COMPARISON OF PROJECT AND ALTERNATIVE IMPACTS

Environmental Topic	Proposed Project	No Project Alternative	Reduced Density Alternative	Phase 1 Only Alternative
Air Quality	LS	N	LS<	LS<
Biological Resources	SM	N	SM=	SM=
Cultural Resources and Tribal Cultural Resources	SM	N	SM<	SM<
Geology and Soils	LS	N	LS<	LS<
Greenhouse Gas Emissions	LS	N	LS<	LS<
Hazards and Hazardous Materials	SM	N	SM=	SM=
Hydrology and Water Quality	LS	N	LS=	LS=
Land Use	LS	N	LS>	LS>
Noise	LS	N	LS<	LS=
Paleontological Resources	SM	N	SM=	SM=
Public Services and Facilities	LS	N	LS<	LS<
Public Utilities	LS	N	LS<	LS<
Transportation	LS	N	LS<	LS<
Visual Resources	LS	N	LS<	LS<

SM = significant but mitigable impacts; LS = less than significant impacts; N = no impacts
<= comparatively reduced impact relative to the project (if impact designation is the same and impact varies)
> = comparatively greater impact relative to the project (if impact designation is the same and impact varies)
"=" = same/similar impacts relative to the project

Of the remaining alternatives, the environmentally superior alternative would be the Reduced Density Alternative. This alternative would reduce many of the impacts of the project, except that the significant but mitigable impacts to biological resources, hazards and hazardous materials, and the less than significant hydrology and water quality impacts would be about the same for both the project and this alternative. Every other impact would be reduced with this alternative. This alternative would meet all of the identified project objectives although some to a lesser extent than the project.

The Phase 1 Only Alternative is similar to the Reduced Density Alternative in terms of potential impacts compared to the project and its ability to meet the project objectives. The main difference is that it would not reduce the less than significant noise impacts of the project like the Reduced Density Alternative would.

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