The City *of*
SAN DIEGO

Mira Mesa Community Plan Update

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT

September 2022

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The City of SAN DIEGO

Planning Department
Environmental Policy & Public Spaces
Planning Division

DRAFT
PROGRAM ENVIRONMENTAL IMPACT REPORT

SCH No. TBD

SUBJECT: Mira Mesa Community Plan Update

Applicant: City of San Diego Planning Department

DRAFT DOCUMENT – September 6, 2022

PROJECT DESCRIPTION:

The proposed Mira Mesa Community Plan Update and associated discretionary actions (collectively referred to as the "project") entails a comprehensive update to the Mira Mesa Community Plan, which is intended to guide future development of the Mira Mesa Community Plan area (Community Plan area). In addition to adoption of the Mira Mesa Community Plan Update, the project includes: adoption of amendments to the General Plan to incorporate the Community Plan land use designations and update the Economic Prosperity Element including Figure EP-1, Industrial and the Prime Industrial Land, for the Community Plan area; adoption of a Rezone Ordinance rezoning land within the Community Plan area to be consistent with the Mira Mesa Community Plan Update; adoption of an Ordinance amending the San Diego Municipal Code Section 132.1402 to adopt a new Community Plan Implementation Overlay Zone (CPIOZ) for the Community Plan area; amendment to the City's Land Development Manual Historical Resources Guidelines; approval of a request for adjustments to the inland boundary of the Coastal Zone pursuant to Public Resources Code Section 30103(b) and 14 C.C.R. Section 13255.2 et seq. by the California Coastal Commission; and certification of the PEIR and adoption of Findings, Statement of Overriding Considerations, and Mitigation, Monitoring and Reporting Program for the project. These actions together with the proposed Mira Mesa Community Plan Update form the project for this PEIR.

The project entails a comprehensive update to the Mira Mesa Community Plan, which is intended to guide future development in the Community Plan area. It articulates an overall vision, designates land uses, and provides a comprehensive set of policies for new development within the Community Plan area. The project provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network, implementation of urban design, recommendations preserving and enhancing natural open space and historic and cultural resources, and the prioritization and provision of public facilities within the Mira Mesa community. The project maintains existing employment areas and identifies new and

expanded mixed-use urban village areas that would allow increased density and residential uses. The project also enhances community connections with a comprehensive network of complete streets, urban paths, and paseos.

PROJECT LOCATION:

Mira Mesa is located in the north-central portion of the City of San Diego in western San Diego County. The Community Plan area encompasses approximately 10,729 acres and is bounded by Interstate (I)-805 on the west and I-15 on the east, Marine Corps Air Station (MCAS) Miramar to the south, and Los Peñasquitos Canyon and the surrounding communities of Torrey Hills, Carmel Valley, Del Mar Mesa, and Rancho Peñasquitos to the north.

The Community Plan area is a developed, urbanized community, and is predominantly developed with residential, mixed-use, office/research and development, and light industrial uses. Other uses include retail commercial and educational land uses. Development is concentrated on the relatively flat mesa top that characterizes most of the landform within the Community Plan area. Three major canyons traverse the community, including Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon.

ENVIRONMENTAL DETERMINATION:

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

Based on the analysis conducted for the project described above, the City of San Diego has prepared the following Draft PEIR in accordance with CEQA. The analysis conducted identified that the proposed project could result in significant and unavoidable impacts in the area of **Air Quality and Odor; Historical, Archaeological, and Tribal Cultural Resources; Noise; Public Services and Facilities; Public Utilities; Transportation; and Visual Effects and Neighborhood Character. All other impacts analyzed in this Draft PEIR were found to be less than significant.**

This document has been prepared by the City of San Diego's Planning Department and is based on the City's independent analysis and determinations made pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA) and Section 128.0103(a) and (b) of the San Diego Municipal Code.

RESULTS OF PUBLIC REVIEW:

( ) No comments were received during the public input period.

( ) Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.

( ) Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.

Rebecca Malone

Rebecca Malone, AICP, Program Manager
Planning Department

September 6, 2022
Date of Draft Report

Date of Final Report

Analyst: Elena Pascual, Planning Department

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the Draft PEIR and were invited to comment on its accuracy and sufficiency. Copies of the Draft PEIR and any technical appendices may be reviewed in the office of the Planning Department or purchased for the cost of reproduction.

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Councilmember Moreno, District 8
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Daniel Monroe, Senior Planner

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Claudia Brizuela, Senior Traffic Engineer

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Mira Mesa Community Plan Update

Program Environmental Impact Report

Lead Agency:

9485 Aero Drive, MS 413
San Diego, CA 92123

SEPTEMBER 2022

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Acronym/Abbreviation	Definition
AB	Assembly Bill
ACM	asbestos-containing material
AIA	airport influence area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	The California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CH_4	methane
City	City of San Diego
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
County	County of San Diego
CPIOZ	Community Plan Implementation Overlay Zone
CPU	Mira Mesa Community Plan Update
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEH/HMD	County of San Diego Department of Environmental Health, Hazardous Materials Division
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESA	federal Endangered Species Act
ESL	Environmentally Sensitive Lands

Acronym/Abbreviation	Definition
FEMA	Federal Emergency Management Agency
First Update	First Update to the Climate Change Scoping Plan: Building on the Framework
General Plan	City of San Diego General Plan
GHG	greenhouse gas
H&SC	California Health and Safety Code
I-	Interstate
IWRP	Integrated Water Resources Plan
LCFS	Low Carbon Fuel Standard
LDM	City of San Diego Land Development Manual
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MHPA	Multi-Habitat Planning Area
MLD	Most Likely Descendant
MPO	metropolitan planning organizations
MS4	Municipal Separate Storm Sewer System
MSCP	Multiple Species Conservation Program
MWD	Metropolitan Water District
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NESHPA	National Emission Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOx	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSLU	noise sensitive land use
O_3	ozone
OPR	Governor's Office of Planning and Research
PCE	Perchloroethylene
PEIR	Program Environmental Impact Report
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
PMP	Parks Master Plan
PPV	peak particle velocity
PRC	Public Resources Code
psi	pounds per square inch
PUD	Public Utilities Department
RAQS	Regional Air Quality Strategy
RCRA	Resource Conservation and Recovery Act of 1976
Regional Plan	San Diego Forward: The Regional Plan
RHNA	Regional Housing Needs Allocation

Acronym/Abbreviation	Definition
ROG	reactive organic gases
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SAP	City of San Diego MSCP Subarea Plan
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCIC	South Coast Information Center
Scoping Plan	Climate Change Scoping Plan: A Framework for Change
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SDPD	San Diego Police Department
SDUSD	San Diego Unified School District
Second Update	2017 Climate Change Scoping Plan Update
SFHA	Special Flood Hazard Area
SIP	California State Implementation Plan
SO_2	sulfur dioxide
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminant
TCR	tribal cultural resource
TPA	Transit Priority Area
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VPHCP	Vernal Pool Habitat Conservation Plan
Water Authority	San Diego County Water Authority
WMP	Waste Management Plan
WQIPs	water quality improvement plans
WSA	Water Supply Assessment

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EXECUTIVE SUMMARY

This Program Environmental Impact Report (PEIR) for the proposed Mira Mesa Community Plan Update (CPU) and associated discretionary actions (collectively referred to throughout this PEIR as the "proposed project" or "proposed CPU") has been prepared by the City of San Diego (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.) and in accordance with the City's CEQA Significance Determination Thresholds (2022).

The proposed project analyzed within this PEIR is a comprehensive update of the Mira Mesa Community Plan. The proposed CPU incorporates relevant policies from the City of San Diego General Plan (General Plan), and provides a long-range, comprehensive policy framework and vision for growth and development in the Mira Mesa community. The proposed CPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network; implementation of urban design guidelines; recommendations preserving and enhancing natural open space and historical and cultural resources; and prioritization and provision of public facilities within the Mira Mesa community.

This PEIR is intended to inform decision-makers and the general public of the potential significant environmental impacts of the proposed project. The PEIR also considers the availability of mitigation measures to minimize significant impacts and evaluates reasonable alternatives to the proposed CPU that may reduce or avoid one or more significant environmental effects.

ES.1 PROPOSED PROJECT

ES.1.1 PROJECT LOCATION AND SETTING

Mira Mesa is located in the north-central portion of the City. The Community Plan area encompasses approximately 10,729 acres and is bounded by Interstate (I-) 805 on the west and I-15 on the east, Marine Corps Air Station (MCAS) Miramar to the south, and Los Peñasquitos Canyon and the surrounding communities of Torrey Hills, Carmel Valley, Del Mar Mesa, and Rancho Peñasquitos to the north.

The Community Plan area is a developed, urbanized community, and is predominantly developed with residential, mixed-use, office/research and development, and light industrial uses. Other uses include retail commercial and educational. Development is concentrated on the relatively flat mesa top that characterizes most of the landform within the Community Plan area. Three major canyons traverse the community, including Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon.

ES.1.2 PROJECT DESCRIPTION

The proposed project entails a comprehensive update to the Mira Mesa Community Plan, which is intended to guide future development in the Mira Mesa Community Plan area. It articulates an overall vision, designates land uses, and provides a comprehensive set of policies for new development within the Mira Mesa community. The proposed CPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network, implementation of urban design, recommendations preserving and enhancing natural open space and historic and cultural resources, and the prioritization and provision of public facilities within the Mira Mesa community. The proposed CPU maintains existing employment areas and identifies new and expanded mixed-use urban village areas that would allow increased density and residential uses. The proposed CPU also enhances community connections with a comprehensive network of complete streets, urban paths, and paseos. Buildout of the proposed CPU would result in approximately 143,000 residents and approximately 58,741 dwelling units.

Implementation of the proposed project requires adoption of the proposed Mira Mesa Community Plan Update and other associated discretionary actions, including the following:

- Adoption of the Mira Mesa Community Plan Update;
- Adoption of the amendments to the General Plan to incorporate the Community Plan Update land use designations and update the Economic Prosperity Element including Figure EP-1, Industrial and Prime Industrial Land, for the Mira Mesa Community Plan area;
- Adoption of a Rezone Ordinance rezoning land within the Mira Mesa Community Plan area to be consistent with the Community Plan Update;
- Adoption of an Ordinance amending the San Diego Municipal Code (SDMC) Section 132.1402 to adopt a new Community Plan Implementation Overlay Zone (CPIOZ) for the Mira Mesa Community Plan area;
- Amendment to the City's Land Development Manual Historical Resources Guidelines;
- Approval of a request for adjustments to the inland boundary of the Coastal Zone pursuant to Public Resources Code Section 30103(b) and 14 C.C.R. §13255.2 et seq. by the California Coastal Commission;
- Certification of the Mira Mesa Community Plan Update, amendment to the General Plan Economic Prosperity Element, amendments to the SDMC to rezone land in and adopt a CPIOZ for the Mira Mesa Community Plan area, and amendment to the Land Development Manual Historical Resources Guidelines by the California Coastal Commission; and

- Certification of the PEIR and adoption of the Findings, Statement of Overriding Considerations, and Mitigation, Monitoring and Reporting Program for the proposed CPU.

The intent of the proposed CPU is to: establish a vision for Mira Mesa as a vibrant, walkable, amenity-rich community of villages and employment clusters that continue to facilitate an overall clean, safe, and healthy community for residents, workers, and visitors of all ages and abilities. The proposed CPU contains the following chapters:

- **Land Use & Economic Prosperity**: The Land Use & Economic Prosperity chapter provides a land use plan that retains key employment lands while creating flexibility in other areas for compatible live/work/play villages. This chapter works in concert with the other chapters in the Community Plan to provide a cohesive vision for Mira Mesa's built- and natural-environments. The proposed CPU land uses will support job growth and a diversity of employment types in addition to increased residential capacity.
- **Mobility**: The Mobility chapter describes the future pedestrian, bicycle, transit, and vehicular roadway network, and lists planned roadway modifications. It also includes policies for increased connections, alternative modes of transportation, and strategic roadway improvements that could improve existing roadway function, as well as policies regarding Transportation Demand Management and Intelligent Transportation Systems.
- **Public Services, Facilities, and Safety:** The Public Services, Facilities, and Safety chapter outlines the community facilities needed to ensure that appropriate levels of public facilities and services are maintained. The related policies identify those public facilities and services needed to serve existing and future residents, including educational facilities, public safety services, and infrastructure systems.
- **Historic Preservation:** The Historic Preservation chapter provides a summary of the prehistory and history of the Mira Mesa Community Plan area and establishes policies to support the identification and preservation of the historical, archaeological, and tribal cultural resources of the community. The policies aim to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.
- **Parks, Recreation, and Open Space:** The Parks, Recreation, and Open Space chapter describes opportunities for active recreation, trail connections to passive recreation, and the parks needs for the community while protecting and preserving natural areas and sensitive biological resources.
- **Urban Design:** The Urban Design chapter provides requirements and recommendations for achieving high-quality design of the built environment and the proposed community

connections. It addresses the design of the public realm (rights-of-way, streetscapes, signage, public open spaces, etc.), as well as site design and building orientation.

- **Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ):** The Urban Villages and CPIOZ chapter identifies seven urban village areas that are pedestrian-friendly and well-connected to activity areas and transit. This chapter also describes the new CPIOZ-Type A and associated Supplemental Development Regulations (SDRs) that apply to the urban village areas in the Mira Mesa Community Plan area. In the urban village areas, development that is consistent with the Community Plan, the base zone regulations, and the SDRs identified in the CPIOZ can be processed ministerially.

ES.2 PROJECT OBJECTIVES

In accordance with CEQA Guidelines Section 15124(b), the following specific objectives for the proposed project support the underlying purpose of the project, assisted the City as lead agency in developing a reasonable range of alternatives to evaluate in this PEIR, and will ultimately aid the lead agency in preparing findings and overriding considerations, if necessary. The primary objectives of the proposed project are the following:

- Sustain and enhance employment areas, including industrial and commercial office uses within the Community Plan Area to support the City's economy;
- Provide for a vibrant employment and residential community by establishing mixed-use villages along major corridors with a range of housing types and employment uses within a distinctive, pedestrian-oriented setting;
- Provide housing, employment, and commercial uses in proximity to existing and proposed transit, including bus transit and light-rail, by focusing growth in the planned Urban Villages;
- Enhance community connectivity by creating urban pathways, linear parks, paseos, complete streets, and mobility hubs to link land uses and activity centers throughout the community of Mira Mesa;
- Enhance community identity and the pedestrian environment through land use, urban design, specific pedestrian improvements such as pedestrian bridges and expanded sidewalks, and linear parks to retrofit the existing superblocks and to create an inviting destination for residents, businesses, and visitors;
- Provide parks, plazas, and promenades that promote a healthy, active community and provide multiple benefits as areas for recreation, community events, and connections by developing park facilities near employment centers and Urban Villages and keeping pace with population growth;

- Create a robust mobility system of high-quality facilities and connections that promote more transportation choices for pedestrians, bicyclists, and transit users within the community of Mira Mesa and integrate the Urban Villages;
- Locate housing in select areas near employment centers, such as the Urban Villages, to improve jobs-housing balance and sustainability in support of the City's Climate Action Plan; and
- Preserve open space areas and important natural resources, including vernal pools, drainages, sensitive habitat, and steep slopes.

ES.3 AREAS OF CONTROVERSY

The Notice of Preparation was distributed on July 19, 2021, for a 30-day public review and comment period, and a public scoping meeting was held on August 5, 2021. Through these scoping activities, the proposed project was determined to have the potential to result in significant environmental impacts to the following issue areas: air quality and odor; biological resources; geology and soils; greenhouse gas emissions; historical, archaeological, and tribal cultural resources; hazards and hazardous materials; hydrology and water quality; land use; noise; public services and facilities; public utilities; transportation; and visual effects and neighborhood character. The Notice of Preparation and comment letters are included in this PEIR as Appendix A.

As discussed in this PEIR, environmental impacts that were determined to be significant and unavoidable that may generate controversy have been identified in the issue areas of air quality and odor; historical, archaeological, and tribal cultural resources; noise; public services and facilities; public utilities; and transportation, insofar as they may be controversial to the general public, public agencies, and/or stakeholders. Table ES-1 lists significant and unavoidable impact, summarizes the results of the impact analysis, and lists applicable mitigation measures.

ES.4 ALTERNATIVES

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

Alternatives to the proposed project are evaluated in Chapter 8, 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 (Adopted Community Plan); Alternative 1 (Medium Density Alternative); and Alternative 2 (Lowest Density Alternative).

ES.4.1 NO PROJECT ALTERNATIVE (ADOPTED COMMUNITY PLAN)

Under the No Project Alternative, the adopted Mira Mesa Community Plan would continue to guide development. The adopted community plan identifies the major issues relevant to Mira Mesa and provides a framework to guide the future growth and development of the community.

The purpose of evaluating the No Project Alternative is to allow decision makers to compare the potential impacts of approving the proposed project with the potential impacts of not approving the proposed project. The No Project Alternative represents what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved. Compared to the proposed project, buildout of the No Project Alternative would lessen potentially significant impacts associated with air quality and odor, noise, and public services and facilities.

ES.4.2 ALTERNATIVE 1 (MEDIUM DENSITY ALTERNATIVE)

Alternative 1, Medium Density Alternative, reduces the proposed residential density at each of the proposed Urban Villages along Mira Mesa Boulevard, including Mira Mesa Gateway, Mira Mesa Town Center, Plaza Sorrento, Pacific Heights Boulevard, and Barnes Canyon Road. Buildout of Alternative 1 would result in an estimated 17,070 single family units and 33,465 multi-family units. Compared to the proposed CPU, Alternative 1 proposes the same amount of single family units, but would reduce the number of multi-family units by approximately 8,206 units. Alternative 1 would result in a similar buildout of all other land uses, such as industrial and commercial, compared to the proposed CPU. Alternative 1 would include all other policies, land use designations, and mobility improvements included in the proposed CPU, and would implement the General Plan's City of Villages Strategy to a lesser extent than the proposed CPU by retaining the Urban Villages, but at a lower residential density. Compared to the proposed project, buildout of Alternative 1 would lessen potentially significant impact associated with noise and public services and facilities.

E.S.4.3 ALTERNATIVE 2 (LOWEST DENSITY ALTERNATIVE)

Alternative 2 reduces new residential capacity compared to the proposed CPU. Buildout of Alternative 2 would result in an estimated 17,070 single family units and 29,220 multi-family units. Compared to the proposed CPU, Alternative 2 proposes the same amount of single-family units, but

would reduce the number of multi-family units by approximately 12,451 units. Alternative 2 would result in a similar build-out of all other land uses, such as industrial and commercial, compared to the proposed CPU. Alternative 2 would include all other policies, land use designations, and mobility improvements included in the proposed project, and would implement the General Plan's City of Villages Strategy but to a lesser extent than the proposed CPU by retaining the Urban Villages at a lower residential density. Compared to the proposed project, buildout of Alternative 2 would lessen potentially significant impact associated with noise and public services and facilities.

E.S.4.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines requires an environmental impact report to identify the environmentally superior alternative. The No Project Alternative was determined to have the least number of significant impacts, making it the environmentally superior alternative. However, CEQA Guidelines Section 15126.6(e)(2) states 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 overall environmental impacts of Alternatives 1 and 2 and their compatibility with the proposed project's goals and objectives, Alternative 1 (Medium Density Alternative) was determined to be the environmentally superior alternative for this PEIR.

E.S.5 SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES THAT REDUCE THE IMPACT

Table ES-1, Summary of Impacts and Proposed Mitigation, 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 5, Environmental Analysis. Chapter 5 also includes discussions of proposed policies that would reduce identified impacts. Chapter 6, Cumulative Impacts, includes an analysis of cumulative impacts of the proposed project for each issue.

Pursuant to CEQA Guidelines Section 15126, all components associated with the proposed project are considered in this PEIR at the program level when evaluating potential impacts on the environment, including the construction of future development and supporting facilities and utilities.

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Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
Air Quality			
Conflicts with or Obstructs Air Quality Plans: *Would the proposed project conflict with or obstruct the implementation of the applicable air quality plan?*	Because the proposed project would result in greater density, future emissions associated with buildout of the Mira Mesa Community Plan Update (CPU) area would be greater than future emissions associated with buildout of the adopted land uses. Therefore, emissions of ozone precursors (volatile organic compound [VOC] and nitrous oxide [NOx]) would be greater than what is accounted for in the Regional Air Quality Strategy (RAQs) and impacts would be significant.	Mitigation measure MM-AQ-1 as identified in Section 5.1.6	Significant and unavoidable
Air Quality Standards*: Would the proposed project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?*	At the program-level, the proposed project would exceed air quality standards during both construction and operation. Impacts would be significant.	Construction-related impacts: Mitigation measures MM-AQ-2, and MM-AQ-3 as identified in Section 5.1.6 Operational-related impacts: None feasible	Significant and unavoidable
Sensitive Receptors: *Would the proposed project expose sensitive receptors to substantial pollutant concentrations, including toxins?*	Implementation of the proposed CPU would not result in a localized carbon monoxide hotspot and would not expose sensitive receptors to elevated levels of toxic air contaminants during construction or operation. Impacts would be less than significant.	None required	Less than significant
Odors: *Would the proposed project create objectionable odors 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. Therefore, impacts associated with odors would be less than significant.	None required	Less than significant
Biological Resources			
Sensitive Species: *Would the proposed project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies, or regulations, or by the CDFW or USFWS?*	Implementation of the proposed CPU has the potential to impact sensitive plant and wildlife species either directly through the loss of habitat (including critical habitat) and/or direct take, or indirectly by placing development in or adjacent to sensitive habitat. Potential impacts to federal- or state-listed species, MSCP Covered Species, Narrow Endemic Species, plant species with a CNPS Rare Plant Rank of 1 or 2, and wildlife species included on the CDFW's Special Animals List would be significant. Potential impacts to sensitive species and/or designated critical habitat of listed species would be mitigated in accordance with City's ESL Regulations, Biology Guidelines, and the provisions of the MSCP SAP and VPHCP. Potential impacts on birds covered by the Migratory Bird Treaty Act would be avoided by adherence to the requirements of this law. Further, sensitive species in the CPU area are concentrated in the MHPA, which is comprised of topography such as canyons, creeks, and steep hillsides. The proposed CPU designates these areas as Open Space to be preserved from intensive development consistent with the City's MSCP SAP. Through implementation of the existing regulatory framework, impacts to sensitive species would be less than significant.	None required	Less than significant
Sensitive Habitats: *Would the proposed project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual, or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?*	Future projects implemented in accordance with the proposed CPU could potentially have an impact on sensitive upland (Tier I, Tier II, Tier IIIA, and Tier IIIB) and wetland habitat that is present within the CPU area. Future development under the proposed CPU would undergo environmental review, including compliance with the City's ESL Regulations prior to disturbance of those lands. Further, sensitive habitat in the CPU area is concentrated in the MHPA, which is comprised of topography such as canyons, creeks, and steep hillsides. The proposed CPU designates these areas as Open Space to be preserved from intensive development consistent with the City's MSCP SAP. Through compliance with the established development standards contained in the City's ESL Regulations, Biology Guidelines, VPHCP, MSCP SAP, and MHPA Land Use Adjacency Guidelines, impacts to sensitive vegetation communities would be less than significant.	None required	Less than significant
Wetlands: *Would the proposed project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pools, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?*	Future projects implemented in accordance with the proposed CPU could potentially have an impact on wetlands or other jurisdictional areas that are present within the CPU area. If impacts on wetlands would occur, they would be regulated by the U.S. Army Corps of Engineers in accordance with Section 404 of the CWA, the RWQCB in accordance with Section 401 of the CWA, the CDFW under Section 1600 of the California Fish and Game Code, and the City in accordance with the City's Biology Guidelines, ESL Regulations, VPHCP, and MSCP SAP. Further, wetlands in the CPU area are concentrated in the	None required	Less than significant

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
	MHPA, including canyons, and creeks. The proposed CPU designates these areas as Open Space to be preserved such that development is sited on the least sensitive area consistent with the City's MSCP SAP. Per the City's ESL Regulations and Biology Guidelines, impacts to wetlands should be avoided and a wetland buffer is required around all wetlands as appropriate to protect the functions and values of the wetland (City of San Diego 2018). Through implementation of the existing regulatory framework, impacts to wetlands would be less than significant.		
Wildlife Movement*: Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Subarea Plan, or impede the use of native wildlife nursery sites?*	Regional and local wildlife corridors that exist within the CPU area are surrounded by existing development and are within the Open Space land use designation which would not be changed by the proposed CPU. Future development within the CPU area would undergo environmental review to determine potential impacts on wildlife corridors, and impacts would be mitigated in accordance with the City's ESL Regulations, Biology Guidelines, and MSCP SAP. Therefore, the proposed CPU would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP SAP, or impede the use of native wildlife nursery sites. Impacts would therefore be less than significant.	None required	Less than significant
Conservation Planning: *Would the proposed project result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP Subarea Plan area or in the surrounding region?*	Future development in accordance with the proposed CPU would be subject to compliance with applicable current and future local, state, and federal policies, guidelines, directives, and regulations, including but not limited to, the state and federal Endangered Species Act, the San Diego County MSCP, the City's ESL Regulations, Biology Guidelines, and the City's MSCP SAP and VPHCP. In addition, the proposed CPU includes policies aimed at resource protection and preservation of the MHPA. Future development within the CPU area would be evaluated for compliance with these requirements and necessary avoidance and mitigation measures would be determined at the project level. Adherence to the above policies, guidelines, directives, and regulations would avoid future significant impacts. Therefore, the proposed CPU would not result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP SAP area or in the surrounding region. Impacts would therefore be less than significant.	None required	Less than significant
Geology and Soils			
Seismic Hazards: *Would the proposed project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides?*	Future development activities within the CPU area would be required to comply with applicable regulatory/industry standard and codes, including the California Building Code (CBC) and San Diego Municipal Code (SDMC), to reduce potential seismic hazards to an acceptable level of risk. Thus, while the CPU area would be subject to seismic events, potential hazards associated with ground shaking and seismically induced hazards such as ground failure, liquefaction, landslides, and dam failure would be reduced through implementation of site-specific geotechnical requirements and site design associated with future development within the CPU area. Additionally, the proposed project would not result in any changes to the Miramar Reservoir dam or otherwise increase the potential for dam failure to occur within the CPU area. Therefore, impacts related to seismic hazards would be less than significant.	None required	Less than significant
Erosion and Sedimentation: *Would the proposed project result in substantial soil erosion or loss of topsoil?*	Future development projects implemented within the CPU area would be required to comply with applicable regulatory/industry standards and codes, including the SDMC (grading requirements), the City's Stormwater Program, and National Pollutant Discharge Elimination System requirements to reduce potential impacts related to erosion and sedimentation hazards to an acceptable level of risk. Therefore, impacts would be less than significant.	None required	Less than significant
Geologic Instability: *Would the proposed project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the proposed CPU, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*	Future development projects implemented within the CPU area would be required to comply with applicable regulatory/industry standards and codes, including the SDMC and CBC, to reduce potential impacts related to geologic instability to an acceptable level of risk. Potential hazards associated with instability would be addressed by the site-specific recommendations contained within geotechnical investigations as required by the SDMC. Therefore, impacts would be less than significant.	None required	Less than significant
Greenhouse Gas Emissions			

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
Greenhouse Gas Emissions: *Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*	The proposed project would increase aggregate greenhouse gas (GHG) emissions over those of the adopted Community Plan at buildout; however, this increase in GHG is a direct result of the implementation of Climate Action Plan (CAP) Strategies and the General Plan's "City of Villages" strategy, which focuses growth in certain areas. Increasing residential and commercial density in transit corridors and villages within a Transit Priority Area (TPA) would support the City in achieving the regional GHG emissions reduction targets of the CAP, and thus, impacts associated with GHG emissions would be less than significant.	None required	Less than significant
Conflicts with Plans or Policies: *Would the proposed project conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?*	The proposed project would develop compact, walkable Urban Villages close to transit connections and consistent with smart growth principles. The CPU supports the multimodal strategy of the SANDAG Regional Plan through improvements to increase bicycle, pedestrian, and transit access. Policies and goals contained within the proposed CPU Land Use, Parks, Recreation, and Open Space, and Economic Prosperity and Mobility sections would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. The proposed CPU incorporates goals and policies intended to support the General Plan and CAP policies and thus, impacts associated with GHG emissions would be less than significant.	None required	Less than significant
Historical, Archaeological, and Tribal Cultural Resources			
Historic Built Environment*: Would the proposed project result in an alteration, including the adverse physical or aesthetic effects and/or the destruction of a historic building (including an architecturally significant building), structure, object, or site?*	Future development and redevelopment under the proposed project could result in the alteration of a historical resource, where implementation of the proposed project would result in increased development potential. While the SDMC and polices in the proposed CPU provide for the regulation and protection of designated and potential historical resources, it is not possible to ensure the successful preservation of all historic built environment resources within the CPU area. Implementation of projects within the CPU area could result in an alteration of a historic building, structure, object, or site where an increase in density is proposed beyond the adopted Community Plan or current zoning. Thus, potential impacts to historic buildings, structures, or sites would be significant and unavoidable.	None feasible	Significant and unavoidable
Archaeological Resources: *Would the proposed project result in a substantial adverse change in the significance of a prehistoric or historic archaeological resource, a religious or sacred use site, or the disturbance of any human remains, including those interred outside of formal cemeteries?*	Implementation of projects within the CPU area could adversely impact prehistoric or historic archaeological resources, including religious or sacred use sites and human remains. While existing regulations, the SDMC and proposed CPU policies would provide for the regulation and protection of archaeological resources and human remains and avoid potential impacts, it is not possible to ensure the successful preservation of all archaeological resources where new development may occur. Therefore, potential impacts to prehistoric or historic archaeological resources, religious or sacred use sites, and human remains from implementation of the proposed project would be significant and unavoidable.	Mitigation measure MM-HIST-1 as identified in Section 5.5.6	Significant and unavoidable
Tribal Cultural Resources: *Would the proposed project result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:* 1 *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or,* 2 *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*	Implementation of projects within the CPU area could adversely tribal cultural resources. While existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of tribal cultural resources, it is not possible to ensure the successful preservation of all tribal cultural resources. Therefore, potential impacts to tribal cultural resources would be significant and unavoidable.	Mitigation measure MM-HIST-1 as identified in Section 5.5.6	Significant and unavoidable

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
	Hazards and Hazardous Materials		
Wildland Fire Risk: *Would the proposed project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*	Future development implemented in accordance with the proposed CPU would be subject to regulatory requirements related to fire hazards and prevention including standards associated with vegetative (brush) management, such as selective removal/thinning and planting of fire-resistant plantings to create appropriate buffer zones around development, as well as incorporating applicable fire-related design elements, including fire-resistant building materials, fire/ember/smoke barriers, automatic alarm and sprinkler systems, and provision of adequate water flow for fire protection and emergency access. Therefore, impacts associated with wildfire hazards would be less than significant.	None required	Less than significant
Hazardous Emissions Near Schools: *Would the proposed project result in hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?*	Future development implemented in accordance with the proposed project would be subject to applicable regulatory/industry and code standards and requirements related to health hazards from hazardous materials, including as they relate to proximity to schools. For any new schools that could be constructed within 0.25 miles of a facility that emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste, the school district or private school entities would be responsible for planning, siting, building, and operating the schools. It would be the responsibility of the school district to perform an in-depth analysis of any potential hazards at the project level. Therefore, impacts to schools from hazardous materials, substances, or waste would be less than significant.	None required	Less than significant
Emergency Plan Consistency: *Would the proposed project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*	Implementation of the proposed project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; therefore, impacts would be less than significant.	None required	Less than significant
Hazardous Materials Sites: *Would the proposed 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, create a significant hazard to the public or environment?*	Future development implemented in accordance with the proposed project would be required to adhere to applicable regulatory/industry and code standards related to health hazards from hazardous materials. In accordance with City, State, and federal requirements, any new development that involves contaminated property would necessitate the cleanup and/or remediation of the property in accordance with applicable requirements and regulations. This includes obtaining clearance from the applicable regulatory agencies for remediation efforts at applicable locations, including the three listed open cases within and adjacent to the CPU area. Therefore, impacts would be less than significant.	None required	Less than significant
Aircraft Hazards: *Would the proposed project expose people or structures to a significant risk of loss, injury, or death from off-airport aircraft operational accidents?*	Future development projects within the CPU area would be subject to the requirements of the Marine Corps Air Station (MCAS) Miramar Airport Land Use Consistency Plan (ALUCP), including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. Through compliance with these requirements and implementation of the proposed project policies that require future projects to be reviewed for compatibility with the safety zones, noise contours, and airspace protection surfaces identified in the applicable ALUCP, potential hazards from airport operations would not expose people or structures to a significant risk of loss, injury, or death, from off-airport aircraft operational accidents. Therefore, impacts would be less than significant.	None required	Less than significant
	Hydrology and Water Quality		
Flooding and Drainage Patterns: *Would the proposed project result in flooding due to an increase in impervious surfaces, changes in absorption rates, drainage patterns, or the rate of surface runoff?*	Future development projects implemented within the CPU area would be subject to the requirements of the National Pollutant Discharge Elimination System, the City's Stormwater Standards Manual, and the SDMC Stormwater Runoff and Drainage Regulations. In addition, the proposed CPU includes policies that encourage development with sustainable design elements to capture and infiltrate water on site. Through adherence to the regulatory framework, augmented by the proposed CPU policies regarding sustainable design features, impacts related to flooding from surface runoff would be less than significant	None required	Less than significant
Flood Hazard Areas: *Would the proposed project place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map which would impede or redirect flood flows?*	Future development in accordance with the proposed project would be subject to applicable SDMC and Federal Emergency Management Agency (FEMA) requirements to ensure protection from flooding. Future development projects located within the mapped 100-year floodplain would undergo project-level analysis to determine the effects to base flood elevations and ensure that no flooding, erosion, or sedimentation impacts occur on or off site. Thus, impacts related to flood hazard areas would be less than significant.	None required	Less than significant

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
Water Quality: *Would the proposed project result in a substantial increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body?*	Future construction activities associated with the proposed project would be subject to applicable requirements in the General Construction Permit or a Stormwater Pollution Prevention Program/Water Pollution Control Plan, which would address the potential for the transport of pollutants in runoff water during construction activities. Future projects would also be subject to the requirements in the City's stormwater regulations, Stormwater Standards Manual, Jurisdictional Runoff Management Plan, and Municipal Separate Storm Sewer System Permit, which would require that all future projects meet minimum stormwater requirements to protect water quality. Thus, through compliance with the existing regulatory framework addressing protection of water quality, impacts related to water quality would be less than significant.	None required	Less than significant
Groundwater: *Would the proposed project deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge?*	Current stormwater regulations, which encourage the infiltration of stormwater runoff and the protection of water quality, would allow for groundwater recharge and would protect the quality of groundwater resources. As such, it is not anticipated that the proposed CPU would deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge. Thus, impacts related to groundwater would be less than significant.	None required	Less than significant
Land Use			
Conflicts with Applicable Plans: *Would the proposed project conflict with the environmental goals, objectives, or guidelines of a General Plan or Community Plan or other applicable land use plan or regulation and, as a result, cause an indirect or secondary environmental impact?*	The proposed project would serve to implement General Plan policies at a local level, specific to the community character and needs, and is generally consistent with the goals and policies of each element of the General Plan. Additionally, the proposed project is consistent with the applicable land use planning documents that address land use, resource management, and development in the Mira Mesa community. Development that implements the proposed CPU would be required to comply with the Historical Resources Regulations. The amendment to the Historical Resources Guidelines included with the CPU that will add Tier 2 and Tier 3 communities to the list of areas exempted from review of structures 45 years old or older is supported by the findings of the Focused Reconnaissance Survey and is permitted by Section 143.0212 of the Historical Resources Regulations and the Historical Resources Guidelines. Thus, implementation of the proposed project would not conflict with the City's Historical Resources Regulations. As such, the proposed project would result in less-than-significant environmental impacts related to conflicts with applicable planning documents. Thus, impacts would be less than significant.	None required	Less than significant
Conflicts with the MSCP Sub Area Plan and VPHCP: *Would the proposed project conflict with the provisions of the City's Multiple Species Conservation Program (MSCP) Subarea Plan or other approved local, regional, or state habitat conservation plan?*	The majority of open space in the Community Plan area is within the MHPA area. The proposed project would incorporate the goals of resource protection outlined in the MSCP Subarea Plan and the VPHCP. In addition, the proposed project would facilitate future development which would be required to comply with the MHPA Land Use Adjacency Guidelines to prevent conflict with preservation of the MHPA. Impacts would be less than significant.	None required	Less than significant
Consistency with an Adopted ALUCPs: *Would the proposed project result in land uses which are not compatible with an adopted Airport Land Use Compatibility Plan (ALUCP)?*	The entirety of the Community Plan area is within either Airport Influence Area (AIA) Review Area 1 or Review Area 2 for MCAS Miramar. Future development associated with the proposed project would be required to comply with all requirements of the Airport Land Use Compatibility Overlay Zone, and would be reviewed by the City and/or the ALUC for consistency with the ALUCP requirements on a project-by-project basis. Compliance with land use compatibility regulations would ensure the proposed project would not conflict with an adopted ALUCP, and impacts would be less than significant.	None required	Less than significant
Community Division: *Would the proposed project physically divide an established community?*	The proposed project would encourage future physical development to occur in mixed-use Urban Villages centered around existing development areas. The proposed project would be consistent with the existing development pattern by maintaining residential neighborhoods and industrial areas, while facilitating connectivity of employment opportunities, commercial centers along major thoroughfares, and residential or mixed-use neighborhoods. As such, the proposed project would not physically divide a community and impacts would be less than significant.	None required	Less than significant
Noise			
Ambient Noise and Land Use Compatibility: *Would the proposed project result in or create a significant increase in the existing ambient noise levels?*	The primary source of noise in the CPU area is traffic. Implementation of the proposed project would introduce new land uses that would generate traffic that would result in a substantial noise generation. Because implementation of the proposed project would result in a substantial increase in ambient noise due to traffic and noise sensitive land uses (NSLUs) could be exposed to vehicular traffic noise levels in excess of the City's Land Use–Noise Compatibility Guidelines, impacts would be significant.	None feasible	Significant and unavoidable

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
Airport Noise: *Would the proposed project result in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP?*	Although the General Plan Noise Element has an exterior noise compatibility level of 60 community noise level equivalent (CNEL) or less for residential uses, noise levels up to 70 CNEL for multifamily residential are considered conditionally compatible, as long as interior noise levels can be attenuated to 45 CNEL or less. Because new residential development may be exposed to exterior noise levels from aircrafts that exceed the Land Use – Noise Compatibility Guidelines, aircraft noise impacts would be significant.	None feasible	Significant and unavoidable
On-site Generated Noise – San Diego Municipal Code: *Would the proposed project result in the exposure of people to noise levels which exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code?*	The City regulates specific noise level limits allowable between land uses including the requirement for noise studies, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. Through enforcement of the Noise Abatement and Control Ordinance, impacts would be less than significant.	None required	Less than significant
Construction Noise: *Would the proposed project result in the exposure of people to significant temporary construction noise?*	Construction noise attributed to future projects in the CPU area would be regulated by the SDMC, and construction noise impacts due to the implementation of the proposed project would be determined by a specific project's compliance with the limits specified in the SDMC. Future infill projects, such as those allowed under the proposed project, may be located in close proximity to existing and future NSLUs. Construction activities related to implementation of the project could potentially generate short-term noise levels in excess of 75 dBA energy equivalent level (12-hour) at adjacent properties. The ability for future projects to conform to the noise ordinance cannot be determined at the programmatic level. Noise impacts from construction activities are therefore considered significant.	Mitigation measure MM-NOI-1 as identified in Section 5.9.6	Significant and unavoidable
Vibration: *Would the proposed project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*	New development in the CPU area could include future construction activities that would use vibratory construction equipment and could expose future sensitive receptors to substantial vibration levels. Impacts due to groundborne vibration could be significant.	Mitigation measure MM-NOI-2 as identified in Section 5.9.6	Significant and unavoidable
Public Services and Facilities			
Public Facilities: *Would the proposed project promote growth patterns resulting in the need for and/or provision of new or physically altered public facilities (including police protection, fire/life safety protection, parks or other recreational facilities, schools, or libraries), the construction of which could cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives?*	Implementation of the proposed CPU would not result directly in the construction of new or expanded facilities; however, the future facilities that are proposed in the CPU, as well as the CPU's policy framework and SDRs which supports the expansion of public services and facilities in order to adequately serve the growing population in the community, would facilitate the future construction of new or expanded police stations, fire stations, libraries, schools, and parks and recreational facilities. Buildout of the proposed CPU would result in population growth which could increase demand on existing facilities and necessitate the construction of new or expanded facilities in order to maintain public services at the desired performance standards. Environmental review would occur at the time of project review and approval for each future facility. As the location and need for potential future facilities cannot be determined at this time, it is unknown what specific impacts may occur associated with the future construction and operation of such facilities. Thus, as it cannot be ensured all impacts associated with the construction and operation of potential future facilities would be mitigated to less than significant, impacts would remain significant and unavoidable.	None feasible	Significant and unavoidable
Deterioration of Existing Neighborhood Parks and Recreational Facilities: *Would the proposed project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*	The proposed project would result in a buildout of approximately 58,741 dwelling units and a population of approximately143,000 residents by 2050. In order to maintain the Value Standard established by the City of San Diego for parks and recreational facilities, the community of Mira Mesa would be required to provide park facilities totaling 14,300 Recreational Value Points upon buildout under the proposed CPU. The existing and planned park facilities at this time totals 11,196 Recreational Value Points, leaving a deficit of recreational facilities. Due to the increase in population and the deficit of appropriate recreational facilities, it is possible the increased use of the facilities could result in substantial physical deterioration. The proposed CPU contains policies and SDRs that support the maintenance of existing facilities, as well as the provision of new facilities as the community grows, which would serve to reduce the impact; however, it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for recreational facilities. Thus, impacts would remain significant and unavoidable	None feasible	Significant and unavoidable
Construction or Expansion of Recreational Facilities: *Would the proposed project include recreational facilities or require the*	Implementation of the proposed project would result in a deficit of population-based recreation facilities. While the proposed CPU contains policies and SDRs that would support and require the development of future park/recreational	None feasible	Significant and unavoidable

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	facilities and includes planned park facilities in the community, the proposed CPU would not directly result in the construction of these planned facilities. Nonetheless, the proposed CPU's policies and SDRs would facilitate the future development of parks and recreational facilities, the construction of which could result in physical environmental impacts. While these impacts would be assessed during project-level environmental review, it cannot be ensured the impacts would be less than significant. Therefore, impacts would remain significant and unavoidable.		
	Public Utilities		
Water Supply: *Would the proposed project use excessive amounts of water beyond projected available supplies?*	Based on the findings of the water supply assessment (WSA), there is sufficient water supply to serve the existing and projected demands associated with implementation of the proposed CPU, and future water demands within the Public Utilities Department's (PUD's) service area in normal, single-dry year, and multiple-dry year forecasts. Therefore, impacts on water supply would be less than significant.	None required	Less than significant
Utilities: *Would the proposed project promote growth patterns resulting in the need for and/or provision of new or physically altered utilities, the construction of which could cause significant environmental impacts in order to maintain service ratios, or other performance objectives?*	**Stormwater Infrastructure** Systematic improvements and replacement of the public stormwater facilities throughout the CPU area are expected to take place as needed due to aging and substandard infrastructure. Upgrades such as increasing capacity and replacement of existing stormwater pipelines are an ongoing process performed by the City's Stormwater Department under its Municipal Waterways Maintenance Plan. The proposed CPU also includes policy 6.15 which calls for improvements to existing storm drain outfalls and drain discharge systems. Future stormwater improvement projects, as well as future development projects proposed within the CPU area, would be reviewed by the City to identify and determine any significant adverse effects to the City's stormwater system, as well as any significant environmental impacts associated with the installation of new stormwater infrastructure. Given the programmatic nature of the proposed CPU, and lack of site-specific information regarding potential new stormwater infrastructure at this time, this impact would remain significant and unavoidable as impacts associated with the improvements to existing stormwater facilities and the construction and operation of future stormwater facilities cannot be determined at this time. **Sewer Infrastructure** Systematic improvements to sewer facilities throughout the CPU area are expected to be provided as gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing sewer pipelines and mains are an ongoing process. Upgrades to sewer infrastructure are administered by the City's PUD and are handled on a project-by-project basis. Future development projects proposed within the CPU area would be reviewed by the City to identify and determine any significant adverse effects to the City's sewer facilities, as well as any significant environmental impacts associated with the installation of new sewer facilities. Given the programmatic nature of the proposed CPU, and the lack of site-specific information regarding improvements to existing sewer infrastructure and potential new sewer facilities, this impact would remain significant and unavoidable as impacts associated with improvements to existing sewer infrastructure and the construction and operation of future sewer facilities are not known at this time. **Water Infrastructure** Systematic improvements to water facilities throughout the CPU area are expected to be provided as gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing water pipelines and mains are an ongoing process. Upgrades to water infrastructure are administered by the City's PUD and are handled on a project-by-project basis. Future development projects proposed within the CPU area would be reviewed by the City to identify and determine any significant adverse effects to the City's water distribution system, as well as any significant environmental impacts associated with the installation of new water infrastructure. Nevertheless, given the lack of site-specific information regarding potential new water facilities, this impact would remain significant and unavoidable as impacts associated with the construction and operation of future water infrastructure are not known at this time. **Communication Systems**	None feasible	Significant and unavoidable

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
	No specific communications systems improvements are proposed as part of the CPU; however, certain policies may encourage the future development of communications infrastructure such as proposed CPU Policies 3.42 and 3.43 which direct the City to facilitate the implementation of Intelligent Transportation Systems and emerging technologies, and Policy 4.6 which directs the City to work with utility providers to accelerate the undergrounding of overhead communication lines and electrical distribution lines within residential neighborhoods. As individual development projects are initiated under the proposed CPU, coordination with communications utility providers would occur as part of project design and review process to identify any needed improvements to communication facilities. Future communications systems infrastructure would undergo a project-level review by the City to determine any significant environmental impacts associated with the installation of this infrastructure. Nevertheless, given the lack of site-specific information regarding potential new communications systems infrastructure, this impact would remain significant and unavoidable as impacts associated with the construction and operation of future communications systems are not known at this time.		
Solid Waste Management: *Would the proposed project result in impacts to solid waste management, including the need for the construction of new solid waste infrastructure including organics management, materials recovery facilities, and/or landfills; or result in a land use plan that would not promote the achievement of the waste diversion goals targeted in AB 341 and the City's Climate Action Plan?*	It is anticipated that implementation of the proposed project would increase the solid waste management needs within the CPU area due to increased population and development. The proposed CPU would provide more concentrated land uses within portions of the CPU area which would result in an increase in solid waste generated. When land uses are more concentrated, per-unit environmental impacts associated with solid waste management, such as collection truck miles per ton collected, are reduced. Greater efficiencies and expanded opportunities for the recycling of marginally marketable items becomes more feasible. Future development projects implemented within the CPU area would be required to comply with the solid waste regulations of the SDMC. In addition, any future discretionary development exceeding the City's 60-ton solid waste threshold must prepare a waste management plan (WMP) targeting a 75% waste reduction. Implementation of WMPs at the project level would ensure consistency with Assembly Bill 341 and the City's CAP. Therefore, impacts to solid waste management from implementation of the proposed CPU would be less than significant.	None required	Less than significant
Transportation			
Conflicts with Current Plans/Policies: *Would the proposed project conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities?*	**Pedestrian Facilities** The proposed project would be consistent with and would implement the General Plan's safety and accessibility, connectivity, and walkability policies. Pedestrian-focused policies contained in the proposed CPU include enhancements to pedestrian travel within the CPU area, such as implementing the multi-use urban pathway system, constructing sidewalk and intersection improvements, and installing missing sidewalks and curb ramps. In addition, the impact fee study (IFS) for the proposed project would include planned pedestrian improvements to install curb ramps, sidewalks, and audible pedestrian signals to meet ADA standards. Implementation of the proposed project would not restrict or impede pedestrian connectivity and would not conflict with any adopted policies or plans addressing pedestrian facilities. Thus, impacts would be less than significant.	None required	Less than Significant
	Bicycle Facilities The proposed project includes facilities that build on those identified in the Regional Bike Plan and City of San Diego Bicycle Master Plan, while also identifying new recommendations and improving upon existing facilities through an emphasis on protected facilities such as multi-use paths and cycle tracks. Bicycle-focused policies contained in the proposed CPU are consistent with current Regional and City plans that include providing and supporting a continuous network of safe, convenient, and attractive bicycle facilities throughout the community, and enhancing safety, comfort, and accessibility for all levels of bicycle riders. The proposed project supports improvements such as wayfinding marking, bicycle signals, buffered bicycle lanes, and protected bicycle facilities. Implementation of the proposed CPU would not restrict or impede bicycle connectivity and would not conflict with any adopted policies or plans addressing bicycle facilities. Thus, impacts would be less than significant.		
	Transit Facilities		

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
	The General Plan includes policies for supporting the provision of higher-frequency transit services and implementing transit priority measures to help bypass congested areas. Transit-focused policies contained in the proposed CPU support implementation of the transit improvements identified in the Regional Plan by prioritizing the transit system and improving efficiency of transit services. The proposed project includes implementation of transit priority signals on key transit corridors and roadway right-of-way specifically for high-quality transit facilities. In addition, the proposed project provides for a complete bicycle and pedestrian network connecting with and improving access to transit. Thus, implementation of the proposed CPU would not interfere with implementation of planned transit improvements and would provide policy support for their implementation. Impacts related to conflicts with plans or policies addressing existing or planned transit facilities would be less than significant. **Roadway Facilities** The proposed project would support goals and policies included in the General Plan, to provide a balanced, multimodal transportation network where each travel mode can contribute to an efficient network of services meeting varied user needs. The General Plan advocates for interconnected street networks within and between communities, and the proposed project would support this effort by creating a walkable and bicycle-friendly environment and supporting transit as a primary mode of travel for many users. Roadway improvements include, but are not limited to, repurposing vehicle travel lanes to provide protected bicycle facilities and flexible lanes for SMART corridors, signal operational improvements for corridor management, reserving right-of-way to implement multi-use paths, and providing bicycle and pedestrian signal enhancements to improve safety. Implementation of the proposed CPU would not conflict with any adopted policies or plans addressing roadway facilities. Thus, impacts would be less than significant.		
Hazardous Design Features: *Would the proposed project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*	The design of roadways in the CPU area would be required to conform with applicable Federal, State and City of San Diego design criteria which contain provisions to minimize roadway hazards. Compliance with these standards and design to the satisfaction of the City of San Diego's City Engineer would avoid roadway hazards. Impacts would be less than significant.	None required	Less than Significant
Vehicle Miles Traveled: *Would the proposed project result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual??*	**Residential Land Uses** With the proposed CPU, Mira Mesa's Resident VMT per capita is 65.3% of the Base Year regional average and under the 85% threshold (i.e., 15% below the Base Year regional average) for this efficiency metric. Therefore, the transportation impacts related to residential uses are considered less than significant. **Employment Land Uses** With the proposed project, the average employee VMT per employee for Mira Mesa is greater than the 85% threshold. However, the citywide average employee VMT per employee is below the 85% threshold under the proposed project. Mira Mesa's employee VMT per employee for the proposed project is 97.2% of the Base Year regional average, and therefore, the transportation impacts related to employment uses are considered significant. Overall, the proposed CPU's lower residential and employment related VMT compared to the Base Year is largely because the proposed CPU was designed to self-mitigate by increasing the transportation efficiency in the community guided by the General Plan and Climate Action Plan. The proposed CPU is also consistent with the City of San Diego's Complete Communities initiative, which includes planning strategies that work together to create incentives to build homes near transit, provide more mobility choices, enhance opportunities for places to walk, bike, relax and play, and more quickly bring neighborhood benefits where needed the most. As a result, the proposed project improves not only the community's VMT efficiencies, but also the citywide VMT efficiencies for the resident VMT per capita and the employee VMT per employee. Nevertheless, impacts are considered significant. **Retail Land Uses** According to the Governor's Office of Planning and Research (OPR) recommendations, a retail impact is considered significant when there is a net increase in total area (i.e., Mira Mesa CPU area) VMT related to the new retail and commercial uses that could be developed with the adoption of the proposed CPU. Mira Mesa Total Retail VMT is anticipated to increase	None feasible	Residential Land Uses: Less than Significant Employment Land Uses: Significant and unavoidable Retail Land Uses: Less than Significant

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
	with the buildout of the proposed project when compared to the present condition due to the higher-density redevelopment that could occur in all of the seven Urban Village areas where future retail is anticipated to serve nearby residences and places of employment. It is anticipated that further redevelopment would maintain and possibly expand neighborhood and community-serving retail. This potential increase in VMT, although related to retail, is not regionally serving retail and therefore the increase in retail trips would result in short trips as they are anticipated to originate and end within the community. Per OPR's Technical Advisory "local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than significant transportation impact." Furthermore, when evaluating Employee and Resident (per capita) VMT, both metrics account for the employee and resident tour VMT. Tour VMT includes trips made by employees and residents within the community to retail uses in addition to all other trips they make on a daily basis. At a programmatic level without site specific details regarding retail uses, it is anticipated that retail uses complying with the proposed project would be community serving. Thus, retail VMT has already been accounted for in the Employee and Resident (per capita) VMT, and, consistent with OPR's guidance, retail VMT impacts would be less than significant.		
Inadequate Emergency Access: *Would the proposed project result in inadequate emergency access?*	A Traffic Control Plan/Permit would be implemented on a future project-by-project basis for any lane closures in the public right-of-way or driveway closures, which would ensure access at all times, including emergency service providers. Site design of future development would be subject to the emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Additionally, the proposed CPU aims to improve circulation and mobility throughout the CPU area. This includes the development and implementation of a comprehensive Intelligent Transportation System, which would help better manage and improve the local transportation system, including incident and emergency response. Therefore, the project would not create significant impediments for emergency access, and impacts would be less than significant.	None required	Less than significant
Visual Effects and Neighborhood Character			
Scenic Vistas or Views: *Would the proposed project result in a substantial obstruction of a vista or scenic view from a public viewing area as identified in the proposed Mira Mesa Community Plan?*	The proposed CPU identifies future trail improvements/extensions and new pocket parks, linear parks, parklets, and scenic overlooks that will provide public access to scenic views of the CPU area's canyons and natural resources, and includes policies that emphasize views to the CPU area's natural resources, coastal views and open space areas. Although development in the CPU area is anticipated to be concentrated in the proposed Urban Village areas and would occur within existing developed areas, it cannot be known at this program-level of analysis without site-specific plans whether future redevelopment will result in a substantial obstruction of the scenic overlooks identified in the proposed CPU. Thus, impacts would remain significant and unavoidable and no feasible mitigation measures are available at this time.	None feasible	Significant and unavoidable
Neighborhood Character: *Would the proposed project result in a substantial alteration (e.g., bulk, scale, materials or style) to the existing or planned (adopted) character of the area?*	The proposed CPU includes policies intended to direct future development in a manner that improves the community's sense of place by transitioning towards a pedestrian-friendly community with unique districts and villages. The proposed CPU-planned Urban Villages are primarily focused on infill development with a mix of compact uses, and mobility improvements support a pedestrian-oriented area with connections to transit and employment. This shift in character from a predominantly commercial and industrial employment center to a higher density, mixed-use Urban Village and employment hub would not substantially adversely alter the existing neighborhood character of the CPU area as whole. Impacts would be less than significant.	None required	Less than significant
Landform Alteration: *Would the proposed project result in a substantial change in the existing landform?*	It is anticipated that future development in accordance with the proposed project would not result in substantial landform alteration because the CPU area is largely developed with existing urban land uses concentrated on the relatively flat mesa top that characterizes most of the CPU area. While the proposed CPU would intensify some uses, the proposed CPU contains policies to ensure that redevelopment takes into account existing landforms. As future development projects within the CPU area are proposed, they would be reviewed to determine whether grading plans demonstrate compliance with the City's SDMC regarding grading and if a permit is required. Thus, impacts related to landform alteration would be less than significant.	None required	Less than significant

Table ES-1
SUMMARY OF IMPACTS AND PROPOSED MITIGATION

Environmental Issue	Impact	Mitigation	Significance After Mitigation
Light and Glare: *Would the proposed project create substantial light or glare which would adversely affect daytime or nighttime views in the area?*	With adherence to the City's outdoor lighting and glare regulations, the MHPA Land Use Adjacency Guidelines and MCAS Miramar ALUCPs lighting and glare regulations, impacts associated with lighting and glare would be less than significant.	None required	Less than significant
Loss of Distinctive or Landmark Trees: *Would the proposed project result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the proposed Mira Mesa Community Plan?*	No designated distinctive or landmark trees occur within the CPU area. Mature stands of trees can be found on the floor of canyon areas; however, such areas are not proposed for development. The proposed CPU includes policies that promote the planting of new trees, and future development within the CPU area would be subject to City Council Policy 900-19, which provides for the protection of street trees. Therefore, impacts related to the loss of distinctive or landmark trees would be less than significant.	None required	Less than significant

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1.0 INTRODUCTION

This Program Environmental Impact Report (PEIR) for the proposed Mira Mesa Community Plan Update (CPU) and associated discretionary actions (collectively referred to throughout this PEIR as the "proposed project" or the "proposed CPU") has been prepared on behalf of the City of San Diego (City) in compliance with the California Environmental Quality Act (CEQA) Statute and Guidelines (Public Resources Code, Section 21000 et seq. and California Code of Regulations, Title 14, Section 15000, et seq.) and in accordance with the City's CEQA Significance Determination Thresholds (City of San Diego 2022a).

The project analyzed within this PEIR is a comprehensive update of the Mira Mesa Community Plan. The proposed CPU incorporates relevant policies from the City of San Diego General Plan (General Plan), and provides a long-range, comprehensive policy framework and vision for growth and development in the Mira Mesa community. The proposed CPU provides community-specific policies that further refines the General Plan policies with respect to the distribution and arrangement of land uses and the local street and transit network, implementation of urban design guidelines, recommendations preserving and enhancing natural open space and historical and cultural resources, and the prioritization and provision of public facilities within the Mira Mesa community.

The proposed CPU is a component of the General Plan; it expresses the vision, goals, and policies contained within the elements of the General Plan through the provision of more refined, community-specific recommendations. Technical and planning studies have been prepared and considered in the development of the proposed CPU addressing a range of issues. The proposed CPU contains a land use map and a mobility network map that will guide future public and private development in the community, as well as policy guidance on land use and economic prosperity; mobility; urban design; parks, recreation, and open space; historic preservation; public services, facilities, and safety; and urban villages and community plan implementation overlay zone.

1.1 PEIR PURPOSE AND INTENDED USES

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 proposed 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 proposed project

on the environment, whenever feasible. Alternatives to the proposed project are presented to evaluate alternative land use scenarios, policies, and/or regulations that would further reduce or avoid significant impacts associated with the project.

CEQA Guidelines Section 15168 defines a PEIR as an Environmental Impact Report (EIR) that may be prepared to address a series of related actions that can be characterized as one large project. A PEIR may serve as the EIR for subsequent activities or implementing actions under the program, including future development of public and private projects, to the extent the PEIR includes an adequate analysis of the potential environmental impacts of those subsequent projects as specifically and comprehensively as possible. If, in examining future actions for development within the CPU area pursuant to CEQA Guidelines Section 15162, the City finds no new effects could occur, or no new mitigation measures would be required other than those analyzed and/or required in the PEIR, the City can approve the activity as being within the scope covered by this PEIR, and no new environmental documentation would be required.

This PEIR is specifically intended to implement Section 15183 of the CEQA Guidelines dealing with subsequent approvals of projects which are consistent with a community plan for which a PEIR has been prepared. CEQA Guidelines Section 15183(a) states:

> CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies.

In accordance with CEQA Guidelines Section 15183(b), the City will conduct a consistency review for each subsequent project implemented under the proposed CPU to determine if any impacts:

- Are peculiar to the subsequent project or the parcel on which the subsequent project would be located;
- Are not analyzed as significant effects in the Mira Mesa CPU PEIR;
- Are potentially significant off-site impacts and cumulative impacts which were not discussed in the Mira Mesa CPU PEIR; or
- Are previously identified significant effects which, as a result of substantial new information which was not known at the time the Mira Mesa CPU PEIR was certified, are determined to have a more severe adverse impact than discussed in the prior PEIR.

If the consistency review determines that any of the above conditions apply, the subsequent project would be subject to additional environmental review required by CEQA. If the consistency review

concludes that an impact is not peculiar to the parcel or to the subsequent project, has been addressed as a significant effect in the Mira Mesa CPU PEIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, as contemplated by CEQA Guidelines Section 15183(f), then an additional EIR need not be prepared for the subsequent project solely on the basis of that impact.

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 EIR).

1.2 PEIR LEGAL AUTHORITY

1.2.1 LEAD AGENCY

The City is the lead agency for the project pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The lead agency, as defined by CEQA Guidelines Section 15367, is the public agency which has the principal responsibility for carrying out or approving a project. On behalf of the lead agency, the City's Planning Department conducted a preliminary review of the proposed project and determined that a PEIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City.

1.2.2 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 in the following subsections.

1.2.2.1 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 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 0.5 acres

require an individual permit under Section 404 of the CWA. 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 (EPA). No permits from the USACE are required for the City's approval of the proposed CPU; however, future development projects may require review and/or USACE permits.

1.2.2.2 U.S. Fish and Wildlife Service

Acting under the federal Endangered Species Act (ESA), 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 permitting process. The role of USFWS is limited to areas covered by the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP). The MSCP SAP covers 85 species and the core biological resources areas are identified within the City's Multi-Habitat Planning Areas (MHPA). Within the CPU area, identified MHPA lands are located within Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon. For listed species covered by the City's MSCP SAP, the USFWS has granted take authorization to the City in accordance with the requirements of the MSCP Implementing Agreement, executed between the City, USFWS, and the California Department of Fish and Wildlife (CDFW) in 1997. For future projects that are consistent with the City's MSCP SAP, the City has the authority to grant permits for take of covered species and a separate permit is not required from USFWS and CDFW (collectively the wildlife agencies). For listed species not included on the MSCP covered species list, the wildlife agencies retain permit authority. No permits from USFWS are required for the City's approval of the proposed CPU; however, development projects implemented under the proposed project may require review and/or USFWS permits in the future.

1.2.2.3 California Department of Fish and Wildlife

CDFW regulates activities that alter the bed, banks, or floor of any watercourse/stream, pursuant to Section 1600 et seq. of the California Fish and Game Code (CFGC), and has the authority to reach an agreement with an agency or private party proposing such alteration (streambed alteration agreement). CDFW generally evaluates information gathered during the preparation of environmental documentation and attempts to satisfy any permit concerns in these documents. Where state-listed threatened or endangered species not covered by the City's MSCP SAP occur on a project site, CDFW would be responsible for the issuance of a Memorandum of Understanding to ensure the conservation, enhancement, protection, and restoration of state-listed threatened or endangered species and their habitats. No permit from or streambed alteration agreement with CDFW is required for the City's approval of the proposed CPU; however, development projects implemented under the proposed project may require review and/or CDFW permits or agreements in the future.

1.2.2.4 California Department of Transportation

The CPU area is adjacent to facilities operated and maintained by the California Department of Transportation (Caltrans), including Interstate (I-) 15 and I-805. No permits from Caltrans are required for the City's approval of the proposed CPU; however, Caltrans approval would be required for any encroachments or construction of facilities in a Caltrans right-of-way associated with future projects within the CPU area.

1.2.2.5 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 San Diego RWQCB is responsible for permitting, compliance, and other activities to reduce pollutants in municipal, construction, and industrial storm water runoff. This includes 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, as well as ensuring that all other Regional MS4 permit requirements are met. No permits from the San Diego RWQCB are required at this time; however, future development projects within the CPU area may require review and/or CWA Section 401 certifications.

1.2.2.6 Airport Land Use Commission

The San Diego County Regional Airport Authority serves as Airport Land Use Commission (ALUC) and is responsible for adopting Airport Land Use Compatibility Plans (ALUCPs) for public and military airports in San Diego County. 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. An ALUCP focuses on a defined area around each airport known as the Airport Influence Area (AIA). The AIA is comprised of noise, safety, airspace protection and overflight factors, in accordance with guidance from the state. The ALUC prepared the MCAS Miramar ALUCP consistent with the noise and safety recommendations contained in the Marine Corps Air Station (MCAS) Miramar Air Installation Compatible Use Zone (AICUZ) Study.

The City of San Diego is required to submit the proposed CPU and rezone map to the ALUC for a consistency determination with the MCAS Miramar ALUCP. The City implements the noise, safety, overflight, and airspace protection factors in the MCAS Miramar ALUCP with the supplemental development regulations contained in the Airport Land Use Compatibility Overlay Zone (SDMC Chapter 13, Article 2, Division 15), which also include the Code of Federal Regulations Part 77 requirement to provide notification to the Federal Aviation Administration (FAA).

1.3 EIR TYPE, SCOPE, CONTENT, AND FORMAT

1.3.1 TYPE OF EIR

This EIR has been prepared as a PEIR, as defined in CEQA Guidelines Section 15168. In accordance with CEQA, this PEIR examines the environmental impacts of the proposed project, which comprise a series of actions. The combined actions can be characterized as one large project for the purpose of environmental review in this PEIR and are herein collectively referred to as the "proposed project" or the "proposed CPU". The PEIR focuses on the physical changes in the environment that would result from the adoption and implementation of the proposed project, described in Chapter 3.0, Project Description, including anticipated general impacts that could result during future construction and operation.

1.3.2 PEIR SCOPE AND CONTENT

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 circulated on July 19, 2021, and a scoping meeting held online via Zoom on August 5, 2021. The Notice of Preparation, comment letters received in response to the Notice of Preparation, and comments made during the scoping meeting are compiled in Appendix A of this PEIR. Through these scoping activities, the proposed project was determined to have the potential to result in significant environmental impacts to the following issue areas:

- Air Quality and Odor
- Biological Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Historical, Archaeological, and Tribal Cultural Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services and Facilities
- Public Utilities
- Transportation
- Visual Effects and Neighborhood Character

The intent of this PEIR is to determine whether implementation of the proposed project could have a significant effect on the environment through analysis of the issues identified during the scoping process. The environmental analysis for the proposed project is presented in the Environmental Analysis chapter in this PEIR (Chapter 5.0, Sections 5.1 through 5.13). Each environmental issue area discussed in this chapter includes a presentation of threshold(s) of significance for the particular issue area under evaluation based on the CEQA Guidelines and the City's CEQA Significance

Determination Thresholds (City of San Diego 2022a), an impact statement, an assessment of potential project impacts, a summary of the significance of project impacts, and a mitigation measure framework, as appropriate.

Pursuant to CEQA Guidelines Section 15126, all discretionary actions associated with the proposed CPU are considered at the program-level in this PEIR when evaluating potential impacts on the environment, including the construction of future developments, supporting facilities, and infrastructure. Impacts are identified as direct or indirect, and short-term or long-term, and are assessed on a plan-to-ground basis. The plan-to-ground analysis addresses the changes or impacts that would result from implementation of the proposed project compared to existing ground conditions. In some cases, the proposed CPU is also compared with the adopted Community Plan to provide context and background for the analysis.

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 6.0, Cumulative Impacts. Chapter 7.0, 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 8.0, Alternatives, includes a discussion of alternatives that could avoid or reduce potentially significant environmental effects associated with implementation of the proposed project.

In general, current data is used to describe existing conditions, and in cases where current data is not available, the most recent known data is used. The horizon year of 2050 represents the target year of the proposed CPU when projects and programs are anticipated to be fully implemented. In reality, full implementation of the proposed CPU may take more or less than 30 years.

1.3.3 PEIR FORMAT

A brief overview of the various chapters of this PEIR is provided below:

- **Executive Summary** (CEQA Guidelines Section 15123). Provides a summary of the PEIR and a brief description of the project, identifies areas of controversy and issues to be resolved by the decision-makers, and includes a summary table identifying significant impacts, proposed mitigation measures, and the significance of the impact after mitigation. A summary of the project alternatives and a comparison of the potential impacts of the alternatives with those of the project is also provided.

- **Chapter 1.0, Introduction**. Contains an overview of the legal authority, purpose, and intended uses of the PEIR, as well as its scope and content. 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 proposed project's regional context, location, and existing physical environmental conditions, characteristics and land use within the CPU area. An overview of available public infrastructure and services, as well as the proposed CPU's relationship to relevant plans, is also provided in this chapter. The purpose of the Environmental Setting Chapter is to provide an understanding of the significant effects of the proposed project and its alternatives by describing the baseline physical conditions by which impact significance determinations are made. This provides the public and decision makers with the most accurate and understandable picture of the proposed project's likely near-term and long-term impacts. The Environmental Setting Chapter provides background information relevant to each environmental impact issue area further addressed in Sections 5.1 through 5.13 of this PEIR. Within the Environmental Analysis Chapter, the applicable environmental setting discussion contained in Chapter 2.0 is referenced to avoid repetition.
- **Chapter 3.0, Project Description** (CEQA Guidelines Section 15124). Provides a detailed discussion of the proposed project, including the location, background, objectives, technical, economic, and environmental characteristics, key features, and environmental design considerations, all agency decisions, and intended uses of this PEIR.
- **Chapter 4.0, Regulatory Framework**. Provides a summary of the applicable federal, state, and local environmental laws and requirements relevant to each issue area discussed in detail in Sections 5.1 through 5.13 of this PEIR.
- **Chapter 5.0, Environmental Analysis** (CEQA Guidelines Section 15126). Provides a detailed evaluation of potential environmental impacts associated with the proposed project for environmental issues determined through the initial review and public scoping processes to be potentially significant. The analysis of each issue begins with a reference to the environmental setting and regulatory framework provided in Chapters 2.0 and 4.0, respectively, and a statement of specific thresholds used to determine the significance of impacts, followed by an evaluation of potential impacts. If significant impacts are identified, feasible mitigation measures to avoid or reduce any significant impacts are identified. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is provided.
- **Chapter 6.0, 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 significant when viewed in connection with the effect of past projects, the effects of other current projects, and the effects of probable future projects.

- **Chapter 7.0, Other Mandatory Discussion Areas**.
    - **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 CPU area, as well as in the region, either directly or indirectly.
    - **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 agricultural and forestry resources, energy, mineral resources, paleontological resources, and population and housing would not be significant.
    - **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 5.0. This section 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 CPU.
- **Chapter 8.0, Alternatives** (CEQA Guidelines Section 15126.6). Provides a description and comparative analysis of alternatives to the proposed project.
- **Chapter 9.0, References Cited**. Lists all of the reference materials cited in the PEIR.
- **Chapter 10.0, Individuals Consulted/List of Preparers** (CEQA Guidelines Section 15129). Identifies the individuals consulted during preparation of the PEIR and lists the individuals who prepared the PEIR.

Technical reports, used as a basis for much of the environmental impact analysis in the PEIR, have been summarized in the PEIR and are included as appendices to this PEIR. The technical reports prepared for the proposed project and their location in the PEIR are listed in the Table of Contents.

1.3.4 INCORPORATION BY REFERENCE

As permitted by CEQA Guidelines Section 15150, this PEIR has referenced several technical studies and reports. Information from these documents has been briefly summarized in this PEIR, and their relationship to this PEIR is described. These documents are included in Chapter 9.0, References Cited, are hereby incorporated by reference, and are available for review at the City's Planning

Department offices located at 9485 Aero Drive, San Diego, California 92123. Included within the list of materials incorporated by reference into this PEIR are the following:

- City of San Diego General Plan (City of San Diego 2021)
- City of San Diego Final PEIR for the General Plan (City of San Diego 2008)
- City of San Diego Housing Element FY2021–FY2029 (City of San Diego 2020)
- City of San Diego Municipal Code (City of San Diego 2022b)
- City of San Diego Climate Action Plan (City of San Diego 2022c)
- City of San Diego Multiple Species Conservation Program Subarea Plan (City of San Diego 1997)
- City of San Diego Vernal Pool Habitat Conservation Plan (City of San Diego 2017)

1.4 PEIR PROCESS

The City, as CEQA lead agency, is responsible for the preparation and review of this PEIR. The PEIR review process occurs in two basic stages. The first stage is the Draft PEIR, which offers the public the opportunity to comment on the document, and the second stage is the Final PEIR.

1.4.1 DRAFT PEIR

In accordance with the San Diego Municipal Code (SDMC) Section 128.0306 and CEQA Guidelines Section 15105, the Draft PEIR is distributed for review to the public and interested and affected agencies for a review period of 45 days. The purpose of the review period is to allow the public an opportunity to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided and mitigated" (CEQA Guidelines Section 15204). SDMC Section 128.0307 allows the Planning Director to approve requests for additional public review time from the affected officially recognized community planning group, in this case the Mira Mesa Community Planning Group. Approval of additional review time shall not exceed 14 calendar days.

The Draft PEIR and related technical studies are available for review during the public review period at the offices of the Planning Department, located at 9485 Aero Drive, San Diego, California 92123, and on the City's CEQA webpage:

http://www.sandiego.gov/ceqa/draft

1.4.2 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, Findings of Fact, and 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 and adopt the Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations as being complete and in accordance with CEQA.

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2.0 ENVIRONMENTAL SETTING

This chapter provides a description of the proposed Mira Mesa Community Plan Update's ("proposed project or "proposed CPU") regional context, location, and existing physical environmental conditions, characteristics and land use within the CPU area. An overview of available public infrastructure and services, as well as the proposed CPU's relationship to relevant plans, is also provided in this chapter. The proposed CPU's environmental setting will normally constitute the baseline physical conditions by which impact significance determinations are made. The Environmental Setting Chapter provides background information relevant to each environmental impact issue area further addressed in Sections 5.1 through 5.13 of this PEIR.

2.1 REGIONAL LOCATION AND COMMUNITY BOUNDARIES

Mira Mesa is located in the north-central portion of the City of San Diego (City) in western San Diego County (Figure 2-1, Regional and Vicinity Map). The Mira Mesa CPU area encompasses approximately 10,729 acres and is bounded by Interstate (I-) 805 on the west and I-15 on the east, Marine Corps Air Station (MCAS) Miramar to the south, and Los Peñasquitos Canyon and the surrounding communities of Torrey Hills, Carmel Valley, Del Mar Mesa, and Rancho Peñasquitos to the north.

Community Setting

Mira Mesa is located within the north-central portion of the City and is accessible from two major freeways: I-805 to the west and I-15 to the east. Mira Mesa was annexed to the City in 1958 and its first residential construction occurred in 1969. Between 1976 and 2016, Mira Mesa added approximately 47,634 residents and approximately 17,363 housing units (City of San Diego 2018). Approximately 26.6% of the CPU area is designated as residential, followed by open space (approximately 23.2%), and industrial (approximately 20.8%), with smaller portions of the CPU area designated for commercial, parks and recreation, and institutional uses, and Specific Plans (City of San Diego 2018).

Development is concentrated on the relatively flat mesa top that characterizes most of the landform within the CPU area. Three major canyons traverse the community, including Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon. While neighborhood boundaries are not officially defined, the proposed CPU describes the following four subareas based on historical documents, maps, neighborhood organizations, and resident perceptions:

- **Mira Mesa** is a mix of single-family and multifamily housing with large commercial centers along Mira Mesa Boulevard and associated public and recreational facilities.

- **Carroll Canyon** contains El Camino Memorial Cemetery, Fenton Technology Park, and 3Roots San Diego, a transit-oriented master planned community. Stone Creek, a second transit-oriented master planned community, is also proposed in the Carroll Canyon subarea. Environmental review and City Council approval of the Stone Creek Master Plan will be a separate action from the proposed CPU.
- **Sorrento**, also referred to as Sorrento Valley and Sorrento Mesa, is a nationally recognized technology and life science hub with research, office, light manufacturing, and residential areas.
- **Miramar** is one of the largest industrial and manufacturing areas in the City of San Diego, just north of MCAS Miramar.

2.2 EXISTING PHYSICAL CHARACTERISTICS

2.2.1 AIR QUALITY

Potential air quality and odor impacts associated with implementation of the proposed CPU are discussed in Section 5.1, Air Quality and Odor, of this PEIR.

The CPU area is located within the San Diego Air Basin (SDAB) of the San Diego Air Pollution Control District (SDAPCD). The topology of SDAB is unique and varied and drives pollutant levels. To the west are beaches and the Pacific Ocean, to the south is Tijuana, Mexico, and the Baja California Peninsula, to the near east are the mountains, to the far east is the desert (the Salton Sea Air Basin), and to the north is the South Coast Air Basin (the greater Los Angeles-Riverside-San Bernardino area). SDAB is not classified as a contributor to high levels of air pollutants, but is instead classified as a transient recipient, or an air basin that receives pollutants transported from other air basins. When winds are from the north, transport pollutants like ozone (O_3), nitrogen oxides, and volatile organic compounds are transported from the South Coast Air Basin. Winds from the south transport many of the same pollutants from Tijuana, Mexico (Appendix B).

2.2.1.1 Climate

The climate of San Diego is classified as Mediterranean but is incredibly diverse because of the region's topography. Temperature, humidity, precipitation, and wind all affect local air quality. The Pacific High pressure system dominates the climate and results in mild, dry summers and mild, wet winters. San Diego has, on average, 201 days above 70°F annually. Relative humidity is higher in the morning and lower in the afternoon but is around 69% on average.

The Pacific High drives the prevailing winds in the SDAB. The winds tend to blow onshore in the daytime and offshore at night. In the summer, an inversion layer is created over the coastal areas and increases the O_3 levels. Mira Mesa experiences this inversion layer effects. In the winter,

San Diego often experiences a shallow inversion layer which tends to increase carbon monoxide (CO) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) concentration levels due to the increased use of residential wood burning.

In the fall months, SDAB is often impacted by Santa Ana winds. These winds are the result of a high-pressure system over the Nevada-Utah region that overcomes the westerly wind pattern and forces hot, dry winds from the east to the Pacific Ocean that blow the air basin's pollutants out to sea. However, a weak Santa Ana can transport air pollution from the South Coast Air Basin and greatly increase San Diego O_3 concentrations. (NOAA 2019; SCAPCD 2018, 2019).

2.2.1.2 Air Pollutants of Concern

Federal and state laws regulate air pollutants emitted into the ambient air by stationary and mobile sources. These regulated air pollutants are known as "criteria air pollutants," and are categorized by primary and secondary standards. Primary standards are a set of limits based on human health effects. Secondary standards are another set of limits intended to prevent environmental and property damage. Criteria air pollutants are defined by state and federal law as a risk to the health and welfare of the general public.

The following specific descriptions of health effects for each of the air pollutants that could potentially be associated with the proposed project construction and operation are based on information provided by the U.S. Environmental Protection Agency and California Air Resources Board (CARB) (see Appendix B).

Ozone. O_3 is considered a photochemical oxidant, which is a chemical that is formed when volatile organic compounds and nitrogen oxides (both by-products of fuel combustion) react in the presence of ultraviolet light. O_3 is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from ozone exposure.

Reactive Organic Gases. Reactive organic gases (ROGs; also known as volatile organic compounds) are compounds composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of ROGs. Other sources of ROGs include evaporative emissions from paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROGs, but rather by reactions of ROGs to form secondary pollutants such as O_3.

Carbon Monoxide. CO is a by-product of fuel combustion. CO is an odorless, colorless gas, and it affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen

that can be carried to the body's organs and tissues. CO may cause health effects to those with cardiovascular disease and may also affect mental alertness and vision.

Nitrogen Dioxide. NO_2 is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 may also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges have been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs. Diesel particulate matter is classified as a carcinogen by the California Air Resources Board (CARB).

Sulfur dioxide. Sulfur dioxide (SO_2) is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Lead in the atmosphere occurs as particulate matter. With the phase-out of leaded gasoline, large manufacturing facilities have become the primary sources of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Sulfates. Sulfates are the fully oxidized ionic form of sulfur. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to Sulfur Dioxide (SO_2) during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms and an increased risk of cardio-pulmonary

disease. Sulfates are particularly effective in degrading visibility and because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide. Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at high levels results in acute respiratory distress or even death. In 1984, a CARB committee concluded that the ambient standard for H_2S is adequate to protect public health and to significantly reduce odor annoyance.

Vinyl Chloride. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants and hazardous waste sites, due to microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness and headaches. Long-term exposure to vinyl chloride through inhalation and oral exposure causes liver damage.

Visibility-Reducing Particles. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings and small droplets of liquid. These particles vary greatly in shape, size and chemical composition and can be made up of many different materials such as metals, soot, soil, dust and salt. These particles in the atmosphere obstruct the range of visibility. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze.

2.2.1.3 Existing Air Quality

Attainment Designations

The U.S. Environmental Protection Agency and CARB designate air basins for their attainment status. 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. SDAB currently meets all NAAQS for all criteria pollutants except ozone and meets the CAAQS for all criteria pollutants except ozone, PM_{10} and $PM_{2.5}$. The SDAB currently also falls under a federal maintenance plan for CO because it was redesignated from nonattainment. The current federal and state attainment status for the SDAB is provided in Table 2-1, Federal and State Air Quality Designation.

Table 2-1
San Diego Air Basin - Federal and State Air Quality Designations

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment[1]	Nonattainment
Carbon Monoxide	Attainment [Maintenance Plan due to prior Nonattainment]	Attainment
PM_{10}	Unclassifiable[2]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassifiable
Visibility	No Federal Standard	Unclassifiable

Source: Appendix B, CARB 2016, USEPA 2015, USEPA 2020, SDAPCD 2016, SCAPCD 2022

[1] The federal 1-hour standard for Ozone (1-Hour) was no longer in effect as of June 15, 2005. This standard is revoked but is referenced in many State Implementation Plans.

[2] Unclassifiable is when available data does not support a designation of attainment or nonattainment at the time of designation

Monitored Air Quality

The 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 (collectively the AAQS). The CPU area does not have an air quality monitoring station. The closest monitoring station with published historical data is the San Diego – Kearny Villa Road monitoring station, which is approximately 2.5 miles south of Mira Mesa at 6125A Kearny Villa Road. The air quality in Mira Mesa, especially at a specific location, will vary from the monitoring stations. However, the monitoring stations provide insight into the local region's air quality. This station monitors the following criteria air pollutants: O_3, NO_2, PM_{10}, and $PM_{2.5}$. Air quality data collected at the San Diego – Kearny Villa Road monitoring station for the years 2019 through 2021 are shown in Table 2-2, Summary of Air Quality Monitoring Data.

Table 2-2
Summary of Air Quality Monitoring Data

Pollutant/Standards	2019	2020	2021
Ozone (O_3)			
Days State 1-hour Standard Exceeded (0.09 ppm)	0	2	1
Days State 8-hour Standard Exceeded (0.07 ppm)	1	10	1
Days Federal 8-hour Standard Exceeded (0.07 ppm)	1	10	1
Max 1-hr (ppm)	0.08	0.12	0.1
Max 8-hr (ppm)	0.078	0.1	0.07
Nitrogen Dioxide (NO_2)			
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0
Max 1-hr (ppm)	0.046	0.052	0.060
Annual Average (ppm)	0.007	0.007	0.006
Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$)			
Annual Average (µg/m^3)	7.0	8.7	7.7
Maximum 24-Hour Sample	16.2	47.5	20.9
Maximum Exceed 24-Hour Federal Annual Average (35 µg/m^3)?	No	Yes	No

Source: SDAPCD 2021.
ppm = parts per million; µg/m^3 = micrograms per cubic meter
SDAPCD suspended monitoring of PM_{10} at the Kearny Villa station beginning in 2018.

2.2.2 BIOLOGICAL RESOURCES

Potential biological resources impacts associated with implementation of the proposed CPU are discussed in Section 5.2, Biological Resources, of this PEIR.

2.2.2.1 Vegetation Communities

There are a total of 21 generalized vegetation communities/land cover types within the CPU area as identified in the City's Biology Guidelines and Multiple Species Conservation Program (MSCP) Subarea Plan (SAP). The approximate acreages of these vegetation communities and land cover types are presented in Table 2-3, Vegetation Communities and Land Cover Types in the CPU Area, and their locations within the CPU area are shown on Figure 2-2, Vegetation Communities and Land Cover Types. Additional information is provided below, in Section 5.2 of this PEIR, and in Appendix C, Biological Resources Report.

Table 2-3
Vegetation Communities and Land Cover Types in the CPU Area

Vegetation Community/Land Cover Type	Approx. Acreage*
Wetland Vegetation Communities	
Riparian Forest and Woodland	188.4
Riparian Scrub	87.2
Freshwater Marsh	1.7
Open Water	33.2
Natural Flood Channel	6.2
Disturbed Wetland	3.8
Vernal Pools	5.3
Wetland/Riparian Enhancement/Restoration	12.3
Concrete Channel	0.1
Total Wetlands	**338.2**
Upland Land Cover Types	
Disturbed Land	657.1
Eucalyptus Woodland	23.8
Ornamental Plantings	1.1
Agriculture	3.6
Urban/Developed	7,352.1
Upland Vegetation Communities	
Native Grassland	400.8
Oak Woodland	59.7
Coastal Sage Scrub	989.2
Coastal Sage Scrub/Chaparral	7.2
Mixed Chaparral	877.8
Chamise Chaparral	22.1
Non-Native Grasslands	1.5
Total Uplands	**10,396**
Note: *wetland does not refer to U.S. Army Corps of Engineers wetlands or waters of the U.S.	

Wetland Communities

Wetlands vegetation, including riparian areas, are low-lying lands where association (i.e., saturation or inundation) with water is the primary constituent in soil development and the types of plant and animal species living in the soil and on its surface. Wetland vegetation communities vary widely due to regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors. The individual vegetation types mapped within the CPU area that are

typically recognized as wetland communities are described below, including their locations within the CPU area.

Riparian Forest and Woodland

The riparian forest and woodland classification includes all areas mapped as southern riparian forest, southern coast live oak riparian forest, southern sycamore-alder riparian forest, southern riparian woodland, and disturbed southern riparian woodland (SanGIS 2020; Helix 2019). These vegetation subcommunities have been presented together under this category based on the requirements for future impact analyses and associated avoidance, minimization, and/or mitigation measures. Each of these vegetation subcommunities is described below.

Southern riparian forest is a general vegetation community classification used for dense riparian forests that cannot be categorized into a more defined vegetation community description. It is composed of winter-deciduous, broad-leaved tree species that require water near the soil surface and is most often found along stream courses. Typically, this community contains a dense canopy of trees located within moist canyons and drainage bottoms and is dominated by species such as willows (*Salix* spp.), cottonwoods (*Populus* sp.), and western sycamore (*Platanus racemosa*). Associated understory species can include species such as mulefat (*Baccharis salicifolia*), stinging nettle (*Urtica dioica* ssp. *holosericea*), and wild grape (*Vitis girdiana*).

Southern coast live oak riparian forest refers to a dense riparian forest that is dominated by coast live oak trees, which can reach from 30 feet to over 80 feet in height, and that typically has a closed or nearly closed canopy. This vegetation community often has a poorly developed understory of shrubs but a richer herbaceous understory. Understory shrubs may include toyon, blue elderberry, and lemonadeberry, among others. The herb layer often includes California wild rose (*Rosa californica*), California blackberry (*Rubus ursinus*), poison oak, and nettles (*Urtica* spp.), and various native and non-native grasses. This habitat can be found on well-drained bottomlands and outer floodplains on fine-grained, rich alluvium.

Southern sycamore-alder riparian woodland is a tall, open, broad-leaved, winter deciduous woodland found along very rocky streams (sometimes with seasonally high-intensity flooding) and is dominated by western sycamore but often also has white alder (*Alnus rhombirolia*). This vegetation community rarely forms a closed canopy and sometimes occurs as scattered trees in a shrubby thicket of sclerophyllous and deciduous species. Other species characteristic of this vegetation community include California mugwort (*Artemisia douglasiana*), blue elderberry, poison oak, California bay (*Umbellularia californica*), and stinging nettle.

Southern riparian woodland (including the disturbed phase) is a moderate-density riparian woodland dominated by small trees and shrubs, with scattered taller riparian tree species. It is usually found along

river systems and major tributaries, where flood scour occurs. The canopy of this vegetation community often includes mature willows (*Salix* spp.), western sycamore, and Fremont cottonwood (*Populus fremontii*), with an understory of blue elderberry and broom baccharis.

Within the CPU area, there are approximately 188.4 acres of riparian forest and woodland, including approximately 33.3 acres of southern riparian forest, approximately 17.7 acres of southern coast live oak riparian forest, approximately 129.0 acres of southern sycamore-alder riparian forest, and approximately 5.4 acres of southern riparian woodland, and 3.1 acres of disturbed southern riparian woodland. Riparian forest and woodland occur primarily in the canyons within the western half of the CPU area, including Los Peñasquitos Canyon Preserve, Lopez Canyon, Carroll Canyon, Flanders Canyon, and other unnamed canyons (Figures 2-2 and 2-3).

Riparian Scrub

The riparian scrub classification includes all areas mapped as riparian scrub, southern riparian scrub, southern willow scrub, disturbed southern willow scrub, disturbed willow scrub, mulefat scrub, and sparse mulefat scrub (SanGIS 2020; Helix 2019; RECON 2015). These vegetation subcommunities have been presented together under this category based on the requirements for future impact analyses and associated avoidance, minimization, and/or mitigation measures. Each of these vegetation subcommunities is described below.

Riparian scrub is a broad-scale vegetation community category and, in San Diego, typically refers to southern riparian scrub. Southern riparian scrub refers to riparian zones that are dominated by small trees or shrubs that lack larger, taller riparian trees. It is usually found along river systems where flood scour occurs, and its distribution has expanded from increased urban and agricultural runoff. It varies from a dense, broad-leaved, winter-deciduous association dominated by several species of willow (*Salix* spp.) to an herbaceous scrub dominated by mulefat. Understory vegetation is usually composed of non-native, weedy species or understory is lacking altogether. This association may represent a successional stage leading to riparian woodland or forest, or it may be a stable vegetation community.

Southern willow scrub (including the disturbed phase and disturbed willow scrub) is a dense, broad-leaved, winter deciduous riparian thicket that is found on loose, sandy, or fine gravelly alluvium deposited near stream channels during floods. This vegetation community is typically dominated by several willow species (*Salix* spp.), sometimes with scattered, emergent western sycamore and/or Fremont cottonwood. Most southern willow scrub stands are too dense to allow much understory to develop.

Mule fat scrub (including sparse mule fat scrub) is characterized as a depauperate (poorly developed), tall, herbaceous riparian scrub that is found in intermittent stream channels with fairly coarse substrate and a moderate depth to the water table. This vegetation community is dominated

by mule fat and is maintained by frequent flooding, without which it would likely develop into a riparian forest or woodland. Other species that may occur within this vegetation community include emergent willow species (*Salix* spp.), poison oak, and stinging nettle.

Within the CPU area, there are approximately 87.2 acres of riparian scrub, including approximately 79.1 acres of riparian scrub/southern riparian scrub, approximately 6.5 acres of southern willow scrub, approximately 0.1 acres of disturbed southern willow scrub, approximately 1.4 acres of mulefat scrub, and approximately 0.1 acres of sparse mulefat scrub. Riparian scrub occurs primarily in the canyons within the western half of the CPU area, including Los Peñasquitos Canyon Preserve, Lopez Canyon, Carroll Canyon, Flanders Canyon, and other unnamed canyons (Figures 2-2 and 2-3).

Freshwater Marsh

The freshwater marsh classification includes all areas mapped as freshwater marsh and coastal and valley freshwater marsh (SanGIS 2020; RECON 2015). Freshwater marsh is a general vegetation classification that, in San Diego County, is synonymous with coastal and valley freshwater marsh. This vegetation community is dominated by perennial, emergent monocots that grow up to about 15 feet in height that often form a completely closed canopy. Freshwater marsh occurs in wetlands that are permanently flooded by standing fresh water that lacks a significant current and, thus, prolongs saturation and permits the accumulation of deep, peaty soils. Characteristic plant species associated with this vegetation community include cattails (*Typha* spp.), rushes (*Juncus* spp.), sedges (*Carex* spp., *Cyperus* spp., *Eleocharis* spp.), bulrushes (*Scirpus* spp.), and other perennial herbs.

Within the CPU area, there are approximately 1.7 acres of freshwater marsh. Freshwater marsh occurs along the northwestern boundary of the CPU area, where Los Peñasquitos Canyon and Lopez Canyon split, as well as within a small patch in the southeastern portion of the CPU area, south of the mining pond in the future Stone Creek Master Plan area (Figures 2-2 and 2-3).

Open Water

The open water classification includes all areas mapped as freshwater and open water – mining pond (SanGIS 2020; RECON 2015). Open water is synonymous with areas that have been mapped as freshwater and open water – mining pond within the CPU area. Open water includes year-round bodies of fresh water with extremely low salinity and typically includes reservoirs, lakes, ponds, and relatively large sloughs, channels, and rivers or streambeds. Open water includes portions of water bodies that are usually covered by water and contain less than 10% vegetative cover.

Within the CPU area, there are approximately 33.2 acres of open water, including approximately 1.2 acres of freshwater and approximately 32.0 acres of open water–mining pond. Open water occurs primarily within the southeastern portion of the CPU area, scattered within the Stone Creek Master

Plan boundary, with a small area also mapped in the southwestern portion of the CPU area in Carroll Canyon (Figures 2-2 and 2-3).

Natural Flood Channel

The natural flood channel classification includes all areas mapped as natural channel and streambed (Helix 2019; RECON 2015). Natural flood channel includes channels and streambeds, often part of larger drainage features that are mostly unvegetated but may have very sparse patches of riparian scrub, riparian forest, and/or riparian woodland communities. Within San Diego County, these include unvegetated portions of rivers, creeks, streams, and other drainage features.

Within the CPU area, there are approximately 6.2 acres of natural flood channel, including approximately 1.5 acres of natural channel and approximately 4.7 acres of streambed. Natural flood channel occurs in the southern portion of the CPU area, and in the eastern portion and southern portion of the 3Roots Master Plan boundary (Figures 2-2 and 2-3).

Disturbed Wetland

The disturbed wetland classification includes all areas mapped as disturbed wetland (SanGIS 2020; Helix 2019). Disturbed wetlands are areas that are permanently or periodically inundated by water and that have been significantly modified by human activity, preventing an accurate description of the vegetation community that may have been present prior to the disturbance. These areas are frequently unvegetated, but if vegetation is present, there is a predominance of non-native plants, such as bristly ox tongue (*Helminthotheca echioides*), cocklebur (*Xanthium strumarium*), giant reed (*Arundo donax*), salt cedar (*Tamarix* spp.), gum trees (*Eucalyptus* spp.), Pampas grasses (*Cortaderis* spp.), and Bermuda grass (*Cynodon dactylon*). Examples of disturbed wetlands include lined channels, Arizona crossings, detention basins, culverts, and ditches.

Within the CPU area, there are approximately 3.8 acres of disturbed wetland. Disturbed wetland occurs within the central portion of the CPU area, just west of the 3Roots San Diego Master Plan boundary (Figures 2-2 and 2-3).

Vernal Pool

The vernal pool classification includes all areas mapped as vernal pools (City of San Diego 2017). Vernal pools are a highly specialized community occurring on undeveloped mesa tops in association with other vegetation community types. These pools are seasonally flooded depressions that fill with rainwater that does not drain off or percolate because of the mesa top topography and underlying soil conditions (i.e., a claypan or hardpan layer that prevents or impedes subsurface drainage). Vernal pools support a unique ecosystem adapted to extreme variability in hydrologic conditions

that range from seasonally very dry to very wet conditions. Plant species that are commonly associated with vernal pools in San Diego include San Diego button-celery (*Eryngium aristulatum* var. *parishii*), little mousetail (*Myosurus minimus*), spreading navarretia (*Navarretia fossalis*), California adder's tongue (*Ophioglossum californicum*), and San Diego mesa mint (*Pogogyne abramsii*).

Within the CPU area, there are approximately 5.3 acres of vernal pools, of which approximately 1.6 acres occur in coastal sage scrub, approximately 1.9 acres occur in mixed chaparral, and approximately 1.8 acres occur in urban/developed. The vernal pools are located mainly from the central, northern portion of the CPU area to the central, southern portion of the CPU area with one additional complex located along the eastern boundary of the CPU area (Figures 2-2 and 2-3).

Wetland/Riparian Enhancement and Restoration

The wetland/riparian enhancement and restoration classification includes all areas mapped as wetland/riparian enhancement and wetland/riparian restoration (Helix 2019). These include wetland/riparian resource areas that were previously impacted and that were either enhanced and/or restored to mitigate for those impacts.

Within the CPU area, there are approximately 12.3 acres of wetland/riparian enhancement/restoration, including approximately 1.3 acres of wetland/riparian enhancement and approximately 10.9 acres of wetland/riparian restoration. Wetland/riparian enhancement and restoration occur in the southern portion of the CPU area, within the 3Roots Master Plan boundary (Figure 2-2 and 2-3).

Concrete Channel

The concrete channel classification includes all areas mapped as concrete channel (RECON 2015). Concrete channel refers to areas that were previously part of a natural wetland/riparian system, but that have been lined with concrete to stabilize the stream bank, allow for water conveyance, and/or prevent flooding into adjacent areas.

Within the CPU area, there is approximately 0.1 acres of concrete channel. Concrete channel occurs in the southeastern portion of the CPU area and in the eastern portion of the Stone Creek Master Plan area (Figures 2-2 and 2-3).

Upland Communities

Upland vegetation communities are found in dry landforms and do not occur in wetland situations (e.g., inundated or containing saturated soils). Initially, 22 upland vegetation communities and land cover were identified within the CPU area. These were categorized into 12 upland vegetation

communities and land covers, including native grassland, oak woodlands, coastal sage scrub, coastal sage scrub/chaparral, mixed chaparral, chamise chaparral, non-native grasslands, Disturbed Land, eucalyptus woodland, ornamental plantings, agriculture, and urban/developed (Figure 2-2). The individual upland vegetation types mapped within the CPU area are described below.

Native Grassland

The native grassland classification includes all areas mapped as valley and foothill grassland (SanGIS 2020). Native grassland is characterized by mid-height (up to 2 feet), relatively low (greater than 20%) to dense herbaceous cover of perennial, tussock-forming bunchgrasses, such as purple needle grass (*Nassella pulchra*). Native and non-native annual and perennial forbs—such as blue-eyed grass (*Sisyrinchium bellum*), California poppy (*Eschscholzia californica*), and goldfields (*Lasthenia californica*)—grow between the perennial grasses and often exceed the bunchgrass in cover. This vegetation community generally occurs on fine-textured, clay soils that are moist or wet in winter, but very dry in summer. Shrubs are infrequent, probably as a result of unstable soils. The degree of habitat quality in native grasslands varies greatly, depending on the history of grazing, cultivation, or other disturbance factors, and it has been replaced in many areas by non-native grassland, which is dominated by exotic annual grass species.

Within the CPU area, there are approximately 400.8 acres of native grassland. Native grassland occurs primarily along the northern and northwestern boundaries of the CPU area, primarily in Los Peñasquitos Canyon Preserve and Lopez Canyon but also within undeveloped land located just east of Vista Sorrento Parkway and south of Lusk Boulevard (Figures 2-2 and 2-3).

Oak Woodland

The oak woodland classification includes all areas mapped as coast live oak woodland and dense coast live oak woodland (SanGIS 2020; Helix 2019). Coast live oak woodland is dominated by coast live oak (*Quercus agrifolia*), an evergreen tree that can reach between 20 and 70 feet in height. A poorly developed shrub layer is often found beneath the oak canopy and typically includes plant species associated with native and non-native grasslands, coastal sage scrub, and mixed chaparral, such as poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), currant (*Ribes* spp.), and blue elderberry (*Sambucus nigra* ssp. *caerulea*). The herb component is continuous and dominated by ripgut grass (*Bromus diandrus*) and several other introduced taxa (e.g., Italian thistle [*Carduus pycnocephalus*]). Coast live oak woodland is typically found on north-facing slopes, as well as in shaded ravines and drainages in San Diego County where warm temperatures and hot summers persist.

Within the CPU area, there are approximately 59.7 acres of oak woodland. Oak woodland occurs within Los Peñasquitos Canyon Preserve along the central northern boundary of the CPU area, as

well as in Carroll Canyon and an unnamed adjacent canyon in the southwestern portion of the CPU area (Figures 2-2 and 2-3).

Coastal Sage Scrub

The coastal sage scrub classification includes all areas mapped as Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, baccharis scrub, disturbed baccharis scrub, and upland restoration (City Tier II Habitat) (SanGIS 2020; Helix 2019). These vegetation subcommunities have been presented together under this category based on the requirements for future impact analyses and associated avoidance, minimization, and/or mitigation measures. Each of these vegetation subcommunities is described below.

Diegan coastal sage scrub (including the disturbed phase) consists mainly of low, soft-woody sub-shrubs (approximately 3 feet high) that are most actively growing in winter and early spring. Many taxa are facultatively drought-deciduous. Stem- and leaf-succulents are also often present, but are usually not conspicuously dominant species. This association is typically found on dry sites, such as steep, south-facing slopes or clay-rich soils that are slow to release stored water. Dominant shrub species in this vegetation type may vary, depending on local site factors and levels of disturbance, but often include a variable mix of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), deerweed (*Acmispon glaber*), broom baccharis (*Baccharis sarothroides*), coyote brush (*Baccharis pilularis*), California sunflower (*Encelia californica*), and occasionally live-forevers (*Dudleya* spp.), coast barrel cactus (*Ferocactus viridescens*), and needlegrass (*Stipa* spp.).

Baccharis scrub (including the disturbed phase) is similar to Diegan coastal sage scrub, but it is classified as baccharis scrub because it is dominated by baccharis species, such as broom baccharis and/or coyote brush, and may also include California sagebrush, California buckwheat, black sage, sawtooth goldenbush (*Hazardia squarrosa*), and coastal goldenbush (*Isocoma menziesii*). It often occurs within disturbed Diegan coastal sage scrub and in other areas with nutrient-poor soils but can also be found on upper terraces of river valleys.

Upland restoration (City Tier II Habitat) was used to classify areas that have been reclaimed and restored to native uplands. While this vegetation community includes Diegan coastal sage scrub, southern mixed chaparral, and coastal sage-chaparral transition, it was included within the coastal sage scrub communities because of its classification as Tier II habitat.

Within the CPU area, there are approximately 987.6 acres of coastal sage scrub, including approximately 956.2 acres of Diegan coastal sage scrub, approximately 6.8 acres of disturbed Diegan coastal sage scrub, approximately 2.1 acres of baccharis scrub, approximately 1.8 acres of disturbed baccharis scrub, and approximately 20.7 acres of upland restoration (City Tier II Habitat).

Coastal sage scrub occurs primarily in the western portion of the CPU area with some scattered locations along the eastern and northeastern CPU area boundary (Figures 2-2 and 2-3).

Coastal Sage Scrub/Chaparral

The coastal sage scrub/chaparral classification includes all areas mapped as coastal sage-chaparral transition (Helix 2019). Coastal sage/chaparral is a mixed community including both drought-deciduous sage scrub species and woody chaparral species. This vegetation community includes vegetative cover with roughly equal amounts of both sage scrub and chaparral species. Characteristic dominant species often include chamise (*Adenostoma fasciculatum*), California sagebrush, lilacs (*Ceanothus* spp.), black sage, broom baccharis, laurel sumac, lemonadeberry (*Rhus integrifolia*), and poison oak.

Within the CPU area, there are approximately 7.2 acres of coastal sage scrub/chaparral. Coastal sage scrub/chaparral occurs in the central portion of the CPU area, along the northwestern portion of the 3Roots San Diego Master Plan area (Figure 2-2 and 2-3).

Mixed Chaparral

The mixed chaparral classification includes all areas mapped as chaparral and southern mixed chaparral (SanGIS 2020; Helix 2019). These vegetation subcommunities have been presented together under this category based on the requirements for future impact analyses and associated avoidance, minimization, and/or mitigation measures. Each of these vegetation subcommunities is described below.

Chaparral is a broad-scale vegetation community category and, in San Diego, typically refers to southern mixed chaparral. Southern mixed chaparral is composed of broad-leaved sclerophyll shrubs that grow between 5 and 10 feet in height. Chaparral occurs on dry, rocky, steep, north-facing slopes with little soil and moderate temperatures. This vegetation community type typically has high species diversity but is dominated by ceanothus species. In San Diego County, mixed chaparral is usually dominated by Ramona lilac (*Ceanothus tomentosus* var. *olivaceous*) but may also include other ceanothus species, such as chaparral whitethorn (*C. leucodermis*) and Orcutt ceanothus (*C. oliganthus*); however, the presence of other ceanothus species typically indicates other chaparral types. In addition to ceanothus, other species often associated with this vegetation community include chamise, Eastwood's manzanita (*Arctostaphylos glandulosa*), ceanothus species (*Ceanothus* spp.), toyon, Nuttall's scrub oak (*Quercus dumosa*), laurel sumac, lemonadeberry, spiny redberry (*Rhamnus crocea*), and yucca species (*Yucca* spp.).

Within the CPU area, there are approximately 875.9 acres of mixed chaparral, including approximately 838.9 acres of chaparral and approximately 38.9 acres of southern mixed chaparral.

Mixed chaparral primarily occurs within the undeveloped canyons located within the CPU area, including Los Peñasquitos Canyon Preserve, Lopez Canyon, Carroll Canyon, Flanders Canyon, and other small, unnamed canyons, but also occurs in several other scattered locations in the CPU area (Figures 2-2 and 2-3).

Chamise Chapparal

The chamise chaparral classification includes all areas mapped as chamise chaparral (Helix 2019). Chamise chaparral is a chaparral community ranging from about 3 to 9 feet in height and overwhelmingly dominated by chamise. Other shrub species, such as black sage, mission manzanita (*Xylococcus bicolor*), laurel sumac, and felt-leaved yerba santa (*Eriodictyon crassifolium*), may be present but typically contribute little to the overall cover. Mature stands of chamise chaparral have a dense overstory with very little herbaceous understory or leaf litter.

Within the CPU area, there are approximately 22.1 acres of chamise chaparral. Chamise chaparral occurs in the central portion of the CPU area, along the northern boundary of the 3Roots San Diego Master Plan (Figure 2-2 and 2-3).

Non-Native Grassland

The non-native grassland classification includes all areas mapped as non-native grassland (Helix 2019). Non-native grassland is characterized by a dense to sparse cover of annual grasses, often with showy-flowered native and non-native annual forbs. This vegetation community generally occurs on fine-textured loam or clay soils that are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. This habitat is a disturbance-related community most often found in old agricultural fields or openings in native scrub habitats; it has replaced native grassland and coastal sage scrub at many localities throughout southern California. Typical non-native grasses found within this vegetation community include red brome (*Bromus rubens*), ripgut grass, wild oat (*Avena barbata*), and soft chess (*Bromus hordeaceus*). Characteristic forbs include red-stem filaree (*Erodium cicutarium*), mustard (*Brassica* spp.), tar plant (*Deinandra* spp.), and goldfields (*Lasthenia* spp.).

Within the CPU area, there are approximately 1.5 acres of non-native grassland. Non-native grassland occurs in the central portion of the CPU area, along the northern boundary of the 3Roots San Diego Master Plan (Figure 2-2 and 2-3).

Disturbed Land

The disturbed land classification includes all areas mapped as disturbed and disturbed land (SanGIS 2020; Helix 2019; RECON 2015). Disturbed land refers to areas that retain a soil substrate but on

which the native vegetation has been significantly altered by previous human activity, such that the species composition and site conditions are no longer recognizable as a native or naturalized vegetation community. Vegetation, if present, is typically composed of predominantly non-native species—such as Russian-thistle (*Salsola tragus*), horseweed (*Conyza* spp.), mustard (*Hirschfeldia incana*), and non-native grasses—that have been introduced and established through human action. These areas are not typically artificially irrigated but receive water from precipitation and runoff. Examples of disturbed land include areas that have been graded, cleared for fuel management purposes, recently graded firebreaks, graded construction pads and staging areas, off-road vehicle trails, and old home sites.

Within the CPU area, there are approximately 657.1 acres of disturbed land. Disturbed land is scattered throughout the CPU area, both within the open space/canyons as well as within the more urbanized areas (Figure 2-2).

Eucalyptus Woodland

The eucalyptus woodland classification includes all areas mapped as eucalyptus woodland and sparse eucalyptus woodland (Helix 2019; RECON 2015). Eucalyptus woodland is typically characterized by dense stands of gum trees (*Eucalyptus* spp.), often monotypic and dominated by either blue gum (*Eucalyptus globulus*) or river red gum (*E. camaldulensis*); however, sparse eucalyptus woodland also occurs. In many areas with eucalyptus woodland, there is little understory, as very few plants are able to tolerate the chemical compounds in the bark and leaf litter. Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many regions of coastal California as a potential source of lumber and building materials, for their use as windbreaks, and for their horticultural novelty. They have increased their cover through natural regeneration, particularly in moist areas sheltered from strong coastal winds. Gum trees naturalize readily in the state and, where they form dense, monotypic stands, tend to completely supplant native vegetation, greatly altering community structure and dynamics.

Within the CPU area, there are approximately 23.8 acres of eucalyptus woodland, including approximately 23.4 acres of eucalyptus woodland and approximately 0.4 acres sparse eucalyptus woodland. Eucalyptus woodland occurs in the southeastern portion of the CPU area, within and immediately adjacent to the Stonecreek Master Plan (not yet adopted) and 3Roots Master Plan boundaries (Figure 2-2).

Ornamental Plantings

The ornamental plantings classification includes all areas mapped as non-native vegetation (Helix 2019). Ornamental plantings typically consist of non-native landscape and/or garden plantings that have been planted in association with buildings, roads, or other development. Within the CPU area, ornamental

plantings include species often used in landscaping and include stands of naturalized trees and shrubs, such as acacia (*Acacia* spp.), peppertree (*Schinus* spp.), and myoporum (*Myoporum* sp.).

Within the CPU area, there are approximately 1.1 acres of ornamental plantings. Ornamental plantings occur within the central portion of the CPU area, within and immediately adjacent to the northwestern portion of the 3Roots San Diego Master Plan (Figure 2-2).

Agriculture

The agriculture classification includes all areas mapped as intensive agriculture (SanGIS 2020). This land cover classification refers to open spaces used for livestock, such dairies, nurseries, and chicken ranches. In these areas, there is usually no vegetation present except between animal holdings.

Within the CPU area, there are approximately 3.6 acres of agriculture. Agriculture occurs in a small area in the northeastern portion of the CPU area, along the northern boundary (Figure 2-2).

Urban/Developed

The urban/developed classification includes all areas mapped as developed, development use, and urban/developed (SanGIS 2020; Helix 2019; RECON 2015). Developed lands have been constructed upon or physically altered such that they support no naturally occurring native vegetation and are characterized by the presence of permanent or semi-permanent human-made structures, such as buildings or roads. The level of soil disturbance is such that only the most ruderal plant species would be expected. In many areas, ornamental plantings are included in developed lands where they are immediately adjacent and part of the residential and/or commercial development. Developed land can also describe areas where no natural land is evident as a result of a large amount of debris or other human-made materials, such as a recycling plant or quarry.

Within the CPU area, there are approximately 7,350.3 acres of urban/developed. The majority of the CPU area is classified as urban/developed (Figure 2-2).

2.2.2.2 Jurisdictional Waters Resources

Jurisdictional waters resources are considered sensitive biological resources and are regulated by the U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and/or the City pursuant to federal, state, and local regulations.

USACE regulates the discharge of dredged and/or fill material, both temporary and permanent, into wetland and non-wetland waters of the United States, pursuant to Section 404 of the Clean Water Act. USACE non-wetland waters of the United States are delineated by the lateral and upstream/downstream extent of the ordinary high watermark. USACE wetland waters of the United

States are areas that contain wetland hydrology, hydric soils, and hydrophytic vegetation. Swales and erosional features (e.g., gullies, small washes characterized by low volume, infrequent, and short duration flow) are generally not considered waters of the United States because they are not tributaries or they do not have a significant nexus to downstream Traditional Navigable Waters.

RWQCB regulates wastewater discharge, dredged and/or fill material, or other alterations of wetland and non-wetland waters of the state, including isolated waters such as vernal pools and other waters showing lack of connectivity to a Traditional Navigable Waters, pursuant to Section 401 of the Clean Water Act and Section 13000 et. seq. of the California Water Code under the Porter-Cologne Water Quality Control Act.

CDFW regulates activities that would substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, pursuant to California Fish and Game Code Section 1600 et. seq. CDFW typically extends its jurisdictional limit to the top of a stream, the bank of a lake, or the outer edge of the riparian vegetation, whichever is wider. CDFW Streambeds include watercourses having a surface or subsurface flow that supports riparian vegetation. In addition, CDFW asserts jurisdiction over vernal pools when California state threatened and/or endangered species are present.

The City regulates Environmentally Sensitive Lands, including wetlands (and other sensitive vegetation communities), under the San Diego Municipal Code (SDMC), Chapter 14, Division 1, Section 143.0101et. seq. Naturally occurring wetland vegetation communities dominated by hydrophytic plant species are typically considered by the City to be characteristic of wetland areas. Areas lacking naturally occurring wetland vegetation communities are considered to be wetlands when (a) hydric soil or wetland hydrology are present and (b) either past human activities have occurred to remove the historical vegetation, or catastrophic or recurring natural events preclude the establishment of wetland vegetation. The City does not regulate areas that contain wetland vegetation, soils, or hydrology created by human activities in historically non-wetland areas unless they have been delineated as wetlands by USACE and/or CDFW.

Vegetation communities in the CPU area that may also be jurisdictional wetlands include disturbed wetland, southern riparian forest, riparian scrub, southern riparian woodland, southern sycamore-alder riparian woodland, southern willow scrub, and vernal pools.

2.2.2.3 Sensitive Plants

Based on the definitions provided in SDMC Chapter 11, Article 3, Division 1, sensitive plant species include those that fall under the following guidelines:

(1) Considered rare, endangered, or threatened by USFWS and/or CDFW

(2) Proposed for listing by USFWS and/or CDFW

(3) California Rare Plant Rank (CRPR) List 1A (plants presumed extirpated in California and either rare or extinct elsewhere), CRPR List 1B (plants rare, threatened, or endangered in California and elsewhere), CRPR List 2A (plants presumed extirpated in California but common elsewhere), or CRPR List 2B (plants rare, threatened, or endangered in California but more common elsewhere) species (California Native Plant Society [CNPS] 2022)

(4) MSCP-covered species and Narrow Endemic species

In addition, a plant species that is included on the CNPS Inventory of Rare and Endangered Plants (CNPS 2022) but with no other listing may also be considered sensitive based on its CRPR ranking; however, CRPR List 3 (plants about which more information is needed) and CRPR List 4 (plants of limited distribution) species are considered noteworthy species but are not considered sensitive. No focused sensitive plant species surveys were conducted for the current analysis, but the City assessed potential occurrence based upon known ranges, habitat preferences for the species, historical species occurrence records from the California Natural Diversity Database (CDFW 2022; Helix 2019; RECON 2015), and species occurrence records from the vicinity of the CPU area from other databases (SanGIS 2020; CNPS 2022; USFWS 2022).

Based on this data, a total of 34 sensitive plant species have been identified as being within or adjacent to the CPU area. Each of these species is listed below.

- **San Diego thorn-mint** (*Acanthomintha ilicifolia*; Federally Threatened, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **California adolphia** (*Adolphia californica*; CRPR 2B.1)
- **San Diego ambrosia** (*Ambrosia pumila*; Federally Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Del Mar manzanita** (*Arctostaphylos glandulosa* ssp. *crassifolia*; Federally Endangered, CRPR 1B.1, MSCP-covered)
- **Coastal dunes milk-vetch** (*Astragalus tener* var. *titi*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Encinitas baccharis** (*Baccharis vanessae*; Federally Threatened, State Endangered, CRPR 1B.1, MSCP-covered)
- **San Diego goldenstar** (*Bloomeria clevelandii*; CRPR 1B.1, MSCP-covered)
- **Orcutt's brodiaea** (*Brodiaea orcuttii*; CRPR 1B.1, MSCP-covered)

- **Lakeside ceanothus** (*Ceanothus cyaneus*; CRPR 1B.2, MSCP-covered)
- **Wart-stemmed ceanothus** (*Ceanothus verrucosus*; CRPR 2B.2, MSCP-covered, and VPHCP-covered)
- **Southern tarplant** (*Centromadia parryi* ssp. *australis*; CRPR 1B.1)
- **Long-spined spineflower** (*Chorizanthe polygonoides* var. *longispina*; CRPR 1B.2)
- **Summer holly** (*Comarostaphylis diversifolia* ssp. *diversifolia*; CRPR 1B.2)
- **San Diego sand aster** (*Corethrogyne filaginifolia* var. *incana*; CRPR 1B.1, MSCP-covered)
- **Snake cholla** (*Cylindropuntia californica* var. *californica*; CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Short-leaved dudleya** (*Dudleya brevifolia*; State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Variegated dudleya** (*Dudleya variegata*; CRPR 1B.2, MSCP-covered Narrow Endemic)
- **Sessile-leaved yerba santa** (*Eriodictyon sessilifolium*; CRPR 2B.1)
- **San Diego button-celery** (*Eryngium aristulatum* var. *parishii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- **San Diego barrel cactus** (*Ferocactus viridescens*; CRPR 2B.1, MSCP-covered)
- **Campbell's liverwort** (*Geothallus tuberosus*; CRPR 1B.1)
- **Beach goldenaster** (*Heterotheca sessiliflora* ssp. *sessiliflora*; CRPR 1B.1)
- **Decumbent goldenbush** (*Isocoma menziesii* var. *decumbens*; CRPR 1B.2)
- **San Diego marsh-elder** (*Iva hayesiana*; CRPR 2B.2)
- **Coulter's goldfields** (*Lasthenia glabrata* ssp. *coulteri*; CRPR 1B.1)
- **Willowy monardella** (*Monardella viminea*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- **Spreading navarretia** (*Navarretia fossalis*; Federally Threatened, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **California Orcutt grass** (*Orcuttia californica*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **San Diego mesa mint** (*Pogogyne abramsii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Nuttall's scrub oak** (*Quercus dumosa*; CRPR 1B.1)
- **Chaparral ragwort** (*Senecio aphanactis*; CRPR 2B.2)

- **Salt spring checkerbloom** (*Sidalcea neomexicana*; CRPR 2B.2)
- **Bottle liverwort** (*Sphaerocarpos drewei*; CRPR 1B.1)
- **Purple stemodia** (*Stemodia durantifolia*; CRPR 2B.1)

Of these 34 sensitive plant species, 14 are present within the CPU area, while 8 have a potential to occur and 12 are not expected to occur. The sensitivity status, species information, and potential for occurrence for each of these 34 plant species are summarized in Table 2-4, below.

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT SE CRPR 1B.1 MSCP Covered NE	Annual herb. Blooms April–June. Clay soils associated with vernal pools in chaparral, coastal sage scrub, grassland. Elevation 150–3,085 ft. (Calfora 2022)	**Potential**. May occur in suitable habitat within the CPU area. Two historical populations in the eastern CPU area, along Black Mountain Road, are thought to have been extirpated; however, populations occur within the 1-mile buffer, north and northeast of the CPU area in Los Peñasquitos Canyon. (CDFW 2022)
California adolphia (*Adolphia californica*)	CRPR2B.1	Deciduous shrub. Blooms Dec-May. Chaparral, coastal sage scrub, grassland. Elevation 15-1,115 feet. (Calfora 2022)	**Present**. Known from many populations in the northern portion of the CPU area and may occur in other suitable habitat within the CPU area. In addition, many populations occur within the 1-mile buffer, northwest, north, and northeast of the CPU area. (CDFW 2022)
San Diego ambrosia (*Ambrosia pumila*)	FE CRPR 1B.1 MSCP NE	Perennial rhizomatous herb. Blooms April–October. Often in disturbed areas with sandy loam or clay soils, normally vernal pools, in chaparral, coastal sage scrub, grassland.	**Low Potential.** May occur in suitable habitat in CPU area. No populations are known from the CPU area; however, three transplanted populations occur within

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
		Elevation 50–785 feet. (Calfora 2022)	the 1-mile buffer, just north of the CPU area, in Los Peñasquitos Canyon. (CDFW 2022)
Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*)	FE CRPR 1B.1 MSCP	Evergreen shrub. Blooms December–Jun. Sandy soils in maritime chaparral. Elevation 115–820 feet. (Calfora 2022)	**Potential.** May occur in suitable habitat. One known population occurs in the northern CPU area in Los Peñasquitos Canyon. In addition, several other populations occur within the 1-mile buffer, just north of the CPU area, also in Los Peñasquitos Canyon. (CDFW 2022)
coastal dunes milk-vetch (*Astragalus tener* var. *titi*)	FE SE CRPR 1B.1 MSCP NE	Annual herb. Blooms March–May. Vernally mesic areas in coastal dunes, coastal bluff scrub, coastal prairie. Elevation 15–195 feet. (Calfora 2022)	**Not Expected.** No historical records occur within the CPU area. One historical species record occurs within the 1-mile buffer, northwest of the CPU area; however, the species restricted to the immediate coast, and no suitable habitat occurs within the CPU area. (CDFW 2022)
Encinitas baccharis (*Baccharis vanessae*)	FT SE CRPR 1B.1 MSCP NE	Deciduous shrub. Blooms August–November. Maritime chaparral. Elevation 245–2,460 feet. (Calfora 2022)	**Not Expected.** Limited suitable habitat is present in the CPU area. This species is extremely rare, and its distribution is well documented. The single reported historical occurrence along Black Mountain Road is reported to have been extirpated. (CDFW 2022)

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
San Diego goldenstar (*Bloomeria clevelandii*)	CRPR 1B.1 MSCP	Perennial, bulbiferous herb. Blooms April–May. Typically clay soils in vernal pools in chaparral, coastal sage scrub, grassland. Elevation 260–1,050 feet. (Calfora 2022)	**Present.** Known from several populations in the central portion of the CPU area and may occur in other suitable habitat within the CPU area. In addition, several populations occur within the 1-mile buffer, both north and south of the CPU area. (CDFW 2022)
Orcutt's brodiaea (*Brodiaea orcuttii*)	CRPR 1B.1 MSCP	Perennial, bulbiferous herb. Blooms May–July. Typically mesic, clay soils (sometimes serpentine) in vernal pools associated with chaparral, cismontane woodland, closed-cone coniferous forest, meadows and seeps, grassland. Elevation 330–5,610 feet. (Calfora 2022)	**Present.** Known from several populations in the central portion of the CPU area and may occur in other suitable habitat within the CPU area. In addition, several populations occur within the 1-mile buffer, both north and south of the CPU area.(CDFW 2022)
Lakeside ceanothus (*Ceanothus cyaneus*)	CRPR 1B.2 MSCP	Shrub. Blooms April –July. Typically well-drained, granitic soil in chaparral, closed-cone pine forest. Elevation 490–2,725 feet. (Calfora 2022)	**Not Expected.** One historical species record occurs northwest of the CPU area outside of the 1-mile buffer at the Torrey Pines Preserve; however, the CPU area is outside the known range for this species, which typically occurs much farther east. (CDFW 2022)
wart-stemmed ceanothus (*Ceanothus verrucosus*)	CRPR 2B.2 MSCP	Evergreen shrub. Blooms January–April. Chaparral. Elevation 15–1,115 feet. (Calfora 2022)	**Present.** Known from one, historical population within the CPU area and may occur in other suitable habitat within the CPU area. In addition, several populations occur within the 1-mile buffer, northwest and southwest of the CPU

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
			area. (CDFW 2022)
southern tarplant (*Centromadia parryi* ssp. *australis*)	CRPR 1B.1	Annual herb. Blooms May–November. Vernal pools, along the margins of marshes, in vernally mesic areas within grassland. Elevation 0–1,410 feet. (Calfora 2020)	**Low Potential.** No historical records occur within the CPU area (CDFW 2022); however, one historical record occurs within the 1-mile buffer, to the north of the CPU area (Calfora 2022).
long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	CRPR 1B.2	Annual herb. Blooms April–July. Clay soils, vernal pools in chaparral, coastal sage scrub, grassland. Elevation 330–5,315 feet. (Calfora 2020)	**Present.** Known from three locations within the CPU area and may occur in other suitable habitat within the CPU area. In addition, several populations occur within the 1-mile buffer, north of the CPU area. (CDFW 2022)
summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	CRPR 1B.2	Evergreen shrub. Blooms April-June. Chaparral. Elevation 130–1,835 feet. (Calfora 2020)	**Present.** Known from many locations mainly along the north-central boundary of the CPU area but with two additional locations in the southern portion of the CPU area and may occur in other suitable habitat within the CPU area. In addition, many populations occur within the 1-mile buffer to the north of the CPU area and two populations occur within the 1-mile buffer to the south of the CPU area. (CDFW 2022)
San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*)	CRPR 1B.1 MSCP	Perennial herb. Blooms June–September. Coastal sage scrub. Elev 15–2,360 feet. (Calfora 2022)	**Potential.** May occur in suitable habitat within CPU area. Known from several populations within the 1-mile buffer, northwest of the CPU area in Los

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
			Peñasquitos Canyon. (CDFW 2022)
snake cholla (*Cylindropuntia californica* var. *californica*)	CRPR 1B.1 MSCP NE	Stem succulent. Blooms April–July. Sandy soils or sandy loam soils in chaparral and coastal sage scrub. Elevation 65–885 feet. (Calfora 2022; NatureServe 2022)	**Not expected.** No historical records exist within the CPU area. Only one historical population has been reported within the 1-mile buffer, west of the CPU area. (CDFW 2022)
short-leaved dudleya (*Dudleya brevifolia)*	SE CRPR 1B.1 MSCP NE	Perennial herb. Blooms April–May. Sandstone, openings in chaparral, coastal sage scrub. Elevation 330–460 feet. (Calfora 2020)	**Not expected.** This species is very rare and well documented with no historical records within the CPU area. Only two historical populations have been reported within the 1-mile buffer, west of the CPU area, and both are reported to have been extirpated. (CDFW 2022)
variegated dudleya (*Dudleya variegata*)	CRPR 1B.2 MSCP NE	Perennial herb. Blooms April–June. Clay soils associated with vernal pools in chaparral, foothill woodland, coastal sage scrub, grassland. Elevation 115–1,015 feet. (Calfora 2020)	**Low Potential.** Species is very rare but may occur in suitable habitat in CPU area. No populations are known from the CPU area; however, populations occur within the 1-mile buffer, several just outside of the northern CPU area boundary in Los Peñasquitos Canyon and one to the southwest of the CPU area. (CDFW 2022)
sessile-leaved yerba santa (*Eriodictyon sessilifolium*)	CRPR 2B.1	Shrub. Blooms April–June. Slopes and ridges in grassland, chaparral. Elevation 82–262 feet. (Jepson 2022)	**Present.** Known from one location near the eastern CPU boundary and may occur in other suitable habitat within the CPU area. (CDFW 2022)
San Diego	FE	Annual/perennial herb.	**Present.** Known from many

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
button-celery (*Eryngium aristulatum* var. *parishii*)	SE CRPR 1B.1 MSCP NE VPHCP	Blooms April–June. Vernal pools in coastal sage scrub, grassland. Elevation 115–2,495 feet. (Calfora 2020)	locations mainly within the central portion of the CPU area and may occur in other suitable habitat within the CPU area (CDFW 2022). In addition, many populations occur within the 1-mile buffer, north and south of the CPU area (USFWS 2022; CDFW 2022).
San Diego barrel cactus (*Ferocactus viridescens*)	CRPR 2B.1 MSCP	Stem succulent. Blooms May–June. Found in sandy or gravelly soils in chaparral, coastal sage scrub, grassland. Elevation 15–885 feet. (Calfora 2022)	**Present.** Known from many locations scattered across the CPU area and may occur in other suitable habitat within the CPU area. In addition, many populations occur within the 1-mile buffer, west, north, and east of the CPU area. (CDFW 2022)
Campbell's liverwort (*Geothallus tuberosus*)	CRPR 1B.1	Bryophyte/liverwort. Wet soil in coastal sage scrub. (NatureServe 2022)	**Present.** Known from three locations in the CPU area, one in the northeast and two in the north, and may occur in other suitable habitat within the CPU area. In addition, known from two populations within the 1-mile buffer, west of the CPU area. (CDFW 2022)
beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*)	CRPR 1B.1	Perennial herb. Blooms March–December. Coastal dunes, beaches. Elevation 35–295 feet. (Calfora 2020; Jepson 2022)	**Not Expected.** One historical species record occurs northwest of the CPU area, outside of the 1-mile buffer at the Torrey Pines Preserve; however, no suitable habitat is present in the CPU area (CDFW 2022)
decumbent goldenbush	CRPR 1B.2	Shrub. Blooms April–November. Sandy, often	**Low Potential.** No historical species records

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
(*Isocoma menziesii* var. *decumbens*)		disturbed, areas in coastal sage scrub. Elevation 65–1,640 feet. (Calfora 2022)	occur within the CPU area; however, several populations occur, scattered outside of the CPU area but within the 1-mile buffer. (CDFW 2022)
San Diego marsh-elder (*Iva hayesiana*)	CRPR 2B.2	Perennial herb. Blooms April–October. Marshes, playas. Elevation 15–855 feet. (Calfora 2022)	**Present.** Known from several locations in the center of the CPU area and may occur in other suitable habitat within the CPU area. In addition, known from many populations within the 1-mile buffer, north and east of the CPU area. (CDFW 2022)
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CRPR 1B.1	Annual herb. Blooms February–June. Coastal salt marsh, playas, vernal pools. Elevation 0–1,905 feet. (Calfora 2020)	**Not Expected.** No historical records occur within the CPU area. Only one historical species record occurs within the 1-mile buffer, southwest of the CPU area. (CDFW 2022)
willowy monardella (*Monardella viminea*)	FE SE CRPR 1B.1 MSCP	Perennial herb. Blooms June–August. Sandy soils along alluvial, ephemeral washes in chaparral, coastal sage scrub, riparian habitats. Elevation 150–885 feet. (Calfora 2020; NatureServe 2022)	**Present.** Known from several locations in the center of the CPU area, most of which occur in Lopez Canyon, and may occur in other suitable habitat within the CPU area. In addition, known from several populations within the 1-mile buffer, southeast of the CPU area mainly along Pomerado Road; however, these populations may have been extirpated. (CDFW 2022)
spreading navarretia	FT CRPR 1B.1	Annual herb. Blooms April–June. Clay soils associated with	**Low Potential.** The single historical population within

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
(*Navarretia fossalis*)	MSCP NE VPHCP	marshes, playas, vernal pools. Elevation 295–3,510 feet. (Calfora 2022)	the CPU area is thought to have been extirpated; however, several extant populations are known from within the 1-mile buffer, to the southwest of the CPU area. (CDFW 2022)
California Orcutt grass (*Orcuttia californica*)	FE SE CRPR 1B.1 MSCP NE VPHCP	Annual grass. Blooms April–August. Vernal pools. Elevation 460–2,200 feet. (Calfora 2022)	**Not Expected.** No historical records occur within the CPU area. Only a few populations occur within the 1-mile buffer, two to the northwest/north and one south of the CPU area. (USFWS 2022; CDFW 2022)
San Diego mesa mint (*Pogogyne abramsii*)	FE SE CRPR 1B.1 MSCP NE VPHCP	Annual herb. Blooms March–July. Vernal pools in chaparral and coastal sage scrub. Elevation 360–590 feet. (Calfora 2020)	**Present.** Known from many locations in the center of the CPU area and may occur in other suitable habitat within the CPU area. In addition, known from many locations within the 1-mile buffer, both north and south of the CPU area. (CDFW 2022)
Nuttall's scrub oak (*Quercus dumosa*)	CRPR 1B.1	Evergreen shrub. Blooms February–March. Sandy or clay loam soils associated with chaparral and coastal sage scrub. Elevation 50–4,035 feet. (Calfora 2022)	**Present.** Known from many locations, mainly in north central portion of the CPU area and may occur in other suitable habitat within the CPU area. In addition, known from many locations within the 1-mile buffer, northeast, north, northwest, and southwest of the CPU area. (CDFW 2022)
chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Blooms January–April. Alkaline flats, dry open rocky areas in coastal sage scrub and foothill woodlands.	**Not Expected.** No historical populations known from the CPU area. Two historical locations known from the 1-

Table 2-4
Sensitive Plant Species and Potential to Occur in the CPU Area

Species	Sensitivity	Description	Potential For Occurrence
		Elevation 425–2,165 feet. (Calfora 2022)	mile buffer, one extant population in Del Mar Mesa to the north and one to the south on MCAS Miramar likely extirpated. (CDFW 2022)
salt spring checkerbloom (*Sidalcea neomexicana*)	CRPR 2B.2	Perennial herb. Blooms March–July. Wetlands in chaparral, coastal sage scrub, and other scrub communities. Elevation below 1,500 feet. (Calfora 2022)	**Not Expected.** No historical populations known from the CPU area. One historical population known from the 1-mile buffer, southwest of the CPU area along Miramar Road. (CDFW 2022)
bottle liverwort (*Sphaerocarpos drewei*)	CRPR 1B.1	Bryophyte/liverwort. Shady spots in coastal sage scrub. Elevation 295–1,970 feet. (Calfora 2022; CNPS 2022)	**Not Expected.** No historical populations known from the CPU area. One historical population known from the 1-mile buffer, southwest of the CPU area, north of Miramar Road. (CDFW 2022)
purple stemodia (*Stemodia durantifolia*)	CRPR 2B.1	Perennial herb. Blooms year-round. Wetland, riparian. Elevation 50–560 feet. (Calfora 2022)	**Not Expected.** No historical populations known from the CPU area. One historical location known from the 1-mile buffer, south of the CPU area on MCAS Miramar. (CDFW 2022)

Source: Calfora 2022; CNPS 2022; Jepson 2022; NatureServe 2022; CDFW 2022; USFWS 2022
Notes:
CPU = Community Plan Update ; MCAS = Marine Corps Air Station
FT = Federally listed threatened species
CNPS CRPR = California Native Plant Society Rare Plant Ranking
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known
City of San Diego
MSCP = City of San Diego Multiple Species Conservation Program covered species
NE = Narrow Endemic
VPHCP = Vernal Pool Habitat Conservation Plan covered species

2.2.2.4 Sensitive Wildlife

Sensitive wildlife species include those that are listed as threatened or endangered or proposed for listing by USFWS or CDFW, designated as "fully protected" by CDFW, considered a Species of Special Concern by CDFW, and/or considered and City MSCP-covered species. In addition, species included on the MSCP-covered species list are also included as sensitive species. Species that are covered by the federal Migratory Bird Treaty Act were also considered. As the list of species covered under the Migratory Bird Treaty Act is extensive, these species are not included in the sensitive wildlife species table below (Table 2-5). No focused sensitive wildlife surveys were conducted for the purposes of this analysis.

A total of 37 sensitive wildlife species have been recorded within or adjacent to the CPU area. Each of these species is listed below.

- **San Diego fairy shrimp** (*Branchinecta sandiegonensis*; Federally Endangered, MSCP-covered, and VPHCP-covered)
- **Riverside fairy shrimp** (*Streptocephalus woottoni*; Federally Endangered, MSCP-covered, and VPHCP-covered)
- **Quino checkerspot butterfly** (*Euphydryas editha quino*; Federally Endangered)
- **Western spadefoot** (*Spea hammondii*; California Species of Special Concern)
- **Southwestern pond turtle** (*Emys marmorata*; California Species of Special Concern, MSCP-covered)
- **Southern California legless lizard** (*Anniella stebbinsi*; California Species of Special Concern)
- **Coast horned lizard** (*Phrynosoma blainvillii*; California Species of Special Concern, MSCP-covered)
- **Belding's orange-throated whiptail** (*Aspidoscelis hyperythra beldingi*; CDFW Watch List Species, MSCP-covered)
- **Coastal whiptail** (*Aspidoscelis tigris stejnegeri*; California Species of Special Concern)
- **Two-striped garter snake** (*Thamnophis hammondii*; California Species of Special Concern)
- **Coast patch-nosed snake** (*Salvadora hexalepis virgultea*; California Species of Special Concern)
- **Red diamond rattlesnake** (*Crotalus ruber*; California Species of Special Concern)

- **White-tailed kite** (*Elanus leucurus*; State Fully Protected [nesting])
- **Northern harrier** (*Circus cyaneus*; California Species of Special Concern [nesting], MSCP-covered)
- **Cooper's hawk** (*Accipiter cooperii*; CDFW Watch List Species [nesting], MSCP-covered)
- **American peregrine falcon** (*Falco peregrinus anatum*; State Fully Protected [nesting], MSCP-covered)
- **Light-footed Ridgway's rail** (*Rallus obsoletus levipes*; Federally Endangered, State Endangered, State Fully Protected, MSCP-covered)
- **Burrowing owl** (*Athene cunicularia*; California Species of Special Concern [burrow sites and some winter sites], MSCP-covered)
- **Southwestern willow flycatcher** (*Empidonax traillii extimus*; Federally Endangered [nesting], State Endangered [nesting], MSCP-covered)
- **Loggerhead shrike** (*Lanius ludovicianus*; California Species of Special Concern [nesting])
- **Least Bell's vireo** (*Vireo bellii pusillus*; Federally Endangered [nesting], State Endangered [nesting], MSCP-covered)
- **Coastal California gnatcatcher** (*Polioptila californica*; Federally Threatened, California Species of Special Concern, MSCP-covered)
- **Yellow warbler** (*Dendroica petechia brewsteri*; California Species of Special Concern [nesting])
- **Southern California rufous-crowned sparrow** (*Aimophila ruficeps canescens*; CDFW Watch List Species, MSCP-covered)
- **Tricolored blackbird** (*Agelaius tricolor*; California Species of Special Concern [nesting colony])
- **Northwestern San Diego pocket mouse** (*Chaetodipus fallax*; California Species of Special Concern)
- **San Diego desert woodrat** (*Neotoma lepida intermedia*; California Species of Special Concern)
- **San Diego black-tailed jackrabbit** (*Lepus californicus bennettii*; California Species of Special Concern)
- **Mexican long-tongued bat** (*Choeronycteris mexicana*; California Species of Special Concern)
- **Western mastiff bat** (*Eumops perotis californicus*; California Species of Special Concern)
- **Big free-tailed bat** (*Nyctinomops macrotis*); California Species of Special Concern)
- **Western red bat** (*Lasiurus blossevillii*; California Species of Special Concern)
- **Townsend's big-eared bat** (*Corynorhinus townsendii*; California Species of Special Concern)

- **Spotted bat** (*Euderma maculatum*; California Species of Special Concern)
- **Pallid bat** (*Antrozous pallidus*; California Species of Special Concern)
- **Southern mule deer** (*Odocoileus hemionus*; MSCP-covered)
- **Mountain lion** (*Felis concolor*; MSCP-covered)

Of these 37 sensitive wildlife species, 20 are present within the CPU area, while 10 have a potential to occur, and 7 are not expected to occur. The sensitivity status, species information, and potential for occurrence for each of these 37 wildlife species are summarized in Table 2-5.

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
Invertebrates			
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	FE MSCP VPHCP	Vernal pools, swales, ditches, road ruts. Adults emerge typically mid-December to early May.	**Present.** Known from multiple historical locations throughout the CPU area and may occur in other suitable habitat within the CPU area. Also known from many historical locations within the 1-mile buffer, both north and south of the CPU area. (USFWS 2022; SanGIS 2020)
Riverside fairy shrimp (*Streptocephalus woottoni*)	FE MSCP VPHCP	Vernal pools, swales, ditches, road ruts that are long-lasting (i.e., several months).	**Low Potential.** No historical locations are known from the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020). Two historical locations occur within the 1-mile buffer to the southeast of the CPU area (CDFW 2022); however, only limited suitable habitat is present within the CPU area.
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE	Open, dry areas in foothills, mesas, lake margins where principal larval host plants dot-seed plantain, and secondary host plants woolly plantain, white snapdragon, thread-leaved bird's beak, and purple owl's clover occurs. Adult emergence mid-January	**Low Potential.** Several historical locations within the CPU area have been extirpated. Only a few potential extant historical locations are known within the 1-mile buffer, to the south and southeast of the CPU area (USFWS 2022; SanGIS 2020). However, the CPU area

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
		to April.	occurs within the USFWS Recommended Quino Survey Area, and the species may occur in suitable habitat within the CPU area.
Amphibians			
western spadefoot (*Spea hammondii*)	SSC	Washes, river floodplains, alluvial fans, playas, alkali flats, temporary ponds, vernal pools in mixed woodlands, grasslands, coastal sage scrub, and chaparral. Surface activity October to April. Oviposition late February to May in temporal pools and slow-moving sections of streams.	**Present.** One historical location in CPU area has been extirpated (SanGIS 2020); however, two extant historical locations within the CPU area remain (CDFW 2022), and this species may occur in other suitable habitat within the CPU area. Also known from multiple historical locations in the 1-mile buffer to the north, south, and southeast of the CPU area. (CDFW 2022; SanGIS 2020)
Reptiles			
southwestern pond turtle (*Emys marmorata*)	SSC MSCP	Valley-foothill hardwood and hardwood-conifer forests, coastal scrub, mixed chaparral, non-native grassland, and mixed conifer habitat at elevations from sea level to 5,900 feet above mean sea level. Breeding occurs from December to May in ponds and streams.	**Present.** Known from two historical locations along northern boundary of the CPU area, one in the west and one in the east, and may occur in other suitable habitat within the CPU area. Also known from two historical locations within the 1-mile buffer, to the northeast of the CPU area. (SanGIS 2020)
southern California legless lizard (*Anniella stebbinsi*)	SSC	Found in leaf litter and loose soil on beaches and in coastal scrub, chaparral, and open riparian habitats. Sandy washes and beach dunes are used for burrowing, while logs and leaf litter are used for cover and feeding.	**Present.** Known from one historical location on the southern boundary of the CPU area (CDFW 2022) and may occur in other suitable habitat within the CPU area. Also known from one historical location within the 1-mile buffer, to the south of the CPU area. (SanGIS 2020; CDFW 2022)

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
coast horned lizard (*Phrynosoma blainvillii*)	SSC MSCP	Open chaparral, coastal sage scrub with sandy, loose soil. Partially dependent on harvester ants for forage.	**Present.** Known from one historical location in the southwest portion of the CPU (CDFW 2022) and may occur in other suitable habitat within the CPU area. Also known from several historical locations in the 1-mile buffer, to the north and southeast of the CPU area. (SanGIS 2020; CDFW 2022)
Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)	WL MSCP	Pristine open coastal sage scrub, chaparral, and streamside growth with loose sandy soils, revegetation sites.	**Present.** Known from one historical location in the CPU area that has been extirpated (SanGIS 2020); however, also known from one extant historical location within the CPU area (CDFW 2022), and this species may occur in other suitable habitat within the CPU area. Many historical locations occur in the 1-mile buffer to the north, northeast, southeast, south, and southwest of the CPU area. (SanGIS 2020, CDFW 2022)
coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	Arid areas with sparse, open foliage in forests, woodland, chaparral, riparian areas.	**Potential.** No historical locations have been reported within the CPU area (USFWS 2022; CDFW 2022: SanGIS 2020), and only two historical locations have been reported within the 1-mile buffer, one to west and one to southwest of the CPU area (CDFW 2022). However, suitable habitat for this species occurs in multiple, natural locations within the CPU area.
two-striped garter snake	SSC	Permanent fresh water, inhabiting streams, ponds,	**Potential.** While the single historical location reported

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
(*Thamnophis hammondii*)		vernal pools. Occupies adjacent coastal sage scrub and grasslands during the winter.	within the CPU area has been extirpated (SanGIS 2020), there is one extant location known from just inside the 1-mile buffer, to the southeast of the CPU area (CDFW 2022), and suitable habitat for this species occurs in multiple, natural locations within the CPU area.
coast patch-nosed snake (*Salvadora hexalepis virgultea*)	SSC	Chaparral and semi-arid areas with brushy or shrubby vegetation in canyons, plains and rocky hillsides.	**Potential.** While there are no historical records for this species (USFWS 2022; CDFW 2022; SanGIS 2020), suitable habitat for this species occurs in multiple, natural locations within the CPU area.
red diamond rattlesnake (*Crotalus ruber*)	SSC	Coastal sage scrub, open chaparral, woodland, grassland, and cultivated areas.	**Present.** The single historical location within the CPU area has been extirpated; however, this species has been observed frequently in Los Peñasquitos Canyon, and it may occur in suitable habitat within the CPU area. Several historical locations occur in the 1-mile buffer to the south of the CPU area. (SanGIS 2020)
Birds			
white-tailed kite (*Elanus leucurus*)	SFP (nesting)	Resident. Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas.	**Present.** Multiple historical locations occur within the northwestern portion of the CPU area (SanGIS 2020), and this species may occur in other suitable habitat within the CPU area. Several historical locations are scattered in the 1-mile buffer to the north (SanGIS 2020; CDFW 2022). In addition, this species occurs in San Diego County year-round and is

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
			widespread over the coastal slope of San Diego County, and breeding has been confirmed within the CPU area (Unitt 2004).
northern harrier (*Circus cyaneus*)	SSC MSCP (nesting)	Uncommon resident with additional winter visitors. Coastal lowland, marshes, grassland, agricultural fields.	**Present.** Only a single historical location is known along the northwestern boundary of the CPU area and several historical locations are known in the 1-mile buffer to the northwest and southwest of the CPU area (SanGIS 2020); however, this species is found year-round in grassland and marsh habitats in San Diego County and nesting possible within the CPU area in suitable habitat (Unitt 2004).
Cooper's hawk (*Accipiter cooperii*)	WL MSCP (nesting)	Resident with additional winter visitors. Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	**Present.** Only a single historical location is known within the western portion of the CPU area and a couple historical locations in the 1-mile buffer to the northeast of the CPU area (SanGIS 2020); however, this species is widespread in mature forests along San Diego County's coastal slopes and is well adapted to city landscapes (Unitt 2004), and it is known to occur in both urban and natural habitats spread across the CPU area.
American peregrine falcon (*Falco peregrinus anatum*)	SFP MSCP (nesting)	Rare resident with additional winter visitors. Nests on cliff ledges, old raptor or raven nests, and human-made structures. Forages in open coastal areas, mud flats. Rare inland. Rare fall and winter	**Low Potential.** No historical locations are known within the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020; Unitt 2004), and only one historical location occurs in the 1-mile buffer to the west of the CPU area

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
		resident, casual in late spring and early summer.	(SanGIS 2020). Nesting is not expected within the CPU area (Unitt 2004); however, the species may occur in suitable habitat within the CPU area.
light-footed Ridgway's rail (*Rallus obsoletus levipes*)	FE SE SFP MSCP	Salt marshes primarily dominated marshes by cordgrass. Localized resident.	**Not Expected.** Several historical locations are known from just northwest of the CPU area (USFWS 2022); however, no historical locations are known within the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020; Unitt 2004), and no suitable habitat is present within the CPU area.
burrowing owl (*Athene cunicularia*)	SSC MSCP (burrow sites and some winter sites)	Rare, localized resident, with additional winter visitors. Grassland, agricultural land, coastal dunes. Declining resident.	**Not Expected.** No historical records for this species occur within the CPU area or within the 1-mile buffer (USFWS 2022, CDFW 2022, SanGIS 2020, Unitt 2004). This species is currently known from only five locations in San Diego County and has not been seen in the vicinity of the CPU area since before 1997 (Unitt 2004).
southwestern willow flycatcher (*Empidonax traillii extimus*)	FE SE MSCP (nesting)	Rare spring and fall migrant, rare summer resident. Nests in extensive willow-dominated riparian forests and woodlands, occasionally oak woodlands.	**Not Expected.** No historical records for this species occur within the CPU area or within the 1-mile buffer (USFWS 2022; CDFW 2022; SanGIS 2020; Unitt 2004). This species is currently known from only two colonies and a few additional scattered pairs in San Diego County and has not been recorded as a breeding species from the vicinity of the CPU area since before 1997 (Unitt 2004).
loggerhead shrike	SSC	Uncommon resident. Open	**Potential.** No historical records

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
(*Lanius ludovicianus*)	(nesting)	country with short vegetation such as pastures with fence rows, agricultural fields and open woodlands.	for this species occur within the CPU area or within the 1-mile buffer (USFWS 2022; CDFW 2022; SanGIS 2020). However, it has fragmented distribution along the coastal slope of San Diego County and has been recorded as a possible breeder in and adjacent to the CPU area (Unitt 2004).
least Bell's vireo (*Vireo bellii pusillus*)	FE SE MSCP (nesting)	Migrant. Willow-dominated successional woodland or scrub, Baccharis scrub, mixed oak/willow woodland, and elderberry scrub in riparian habitat. Nests and forages in vegetation along streams and rivers that measures approximately 3 to 6 feet in height and has a dense, stratified canopy.	**Potential.** Multiple historical locations occur along the northwest border of the CPU area, and one historical location occurs just north of the eastern boundary of the CPU area (USFWS 2022; CDFW 2022). This species may occur in suitable habitat within the CPU area. Also two additional historical locations occur immediately to the northwest of the CPU boundary (CDFW 2022).
coastal California gnatcatcher (*Polioptila californica californica*)	FT SSC MSCP	Resident. Coastal sage scrub, maritime succulent scrub.	**Present.** Many historical locations occur within the CPU area, mainly in the central, western, and northeastern portions, and this species likely occurs in other suitable habitat in the CPU area. Multiple historical locations occur in the 1-mile buffer, scattered in all directions (USFWS 2022; CDFW 2022; SanGIS 2020; Unitt 2004)
yellow warbler (*Dendroica petechia brewsteri*)	SSC (nesting)	Common resident, with additional migrants. Well-developed riparian habitats, often with mature willows	**Potential.** No historical records for this species occur within the CPU area or within the 1-mile buffer (USFWS 2022; CDFW 2022; SanGIS 2020). However, it breeds in riparian corridors

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
			along the coastal slope of San Diego County and has been recorded as a probable breeder in and adjacent to the CPU area (Unitt 2004). May occur in suitable habitat within the CPU area.
southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	WL MSCP	Common resident. Coastal sage scrub, chaparral, grassland. Resident.	**Present.** Known from multiple historical locations inside the CPU area, mainly in in the western portion (SanGIS 2020) with one location in northeastern corner of the CPU area (CDFW 2022), and it may occur in other suitable habitat within the CPU area. Also known from many locations in the 1-mile buffer, to north, northeast, and east of the CPU area (SanGIS 2020; CDFW 2022) and is known to breed within and adjacent to the CPU area (Unitt 2004).
tricolored blackbird (*Agelaius tricolor*)	SSC (nesting colony)	Localized resident. Freshwater marshes agricultural areas, lakeshores, parks. Localized resident. Breeding colonies well documented, inland San Diego County	**Not Expected.** Known from two historical locations within the CPU that have both been extirpated (SanGIS 2020). No other historical locations are known from within the CPU area (CDFW 2022; Unitt 2004). Known from 20 to 30 breeding colonies in San Diego, with one possible breeding location at Lake Miramar. However, breeding colonies are well documented and not historically present in the CPU area.
Mammals			
northwestern San	SSC	San Diego County west of	**Present.** Known from multiple

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
Diego pocket mouse (*Chaetodipus fallax fallax*)		mountains in sparse, disturbed coastal sage scrub or grasslands with sandy soils.	historical locations along the northern boundary of the CPU area (Tremor et al. 2017) as well as from multiple historical locations in the 1-mile buffer to north and northeast of the CPU area (SanGIS 2020; Tremor et al. 2017). In addition, known from multiple other historical locations in the vicinity of the CPU area (Tremor et al. 2017). May occur in other suitable habitat within the CPU area.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Coastal sage scrub and chaparral	**Present.** Known from one historical location in far western portion of CPU area as well as from one historical location in the 1-mile buffer to the southwest and several historical locations in the 1-mile buffer to the north of the eastern portion of CPU area (SanGIS 2020; CDFW 2022). May occur in other suitable habitat within the CPU area.
San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)	SSC	Open areas of scrub, grasslands, agricultural fields.	**Present.** Known from one location within the far northeastern corner of the CPU area (SanGIS 2020; CDFW 202;, Tremor et al. 2017) as well as another location northwest and adjacent to the CPU area (Tremor et al. 2017). This species is now rare in coastal San Diego County but is more common in the desert region; however, it may be found in suitable habitat in the CPU area.
Mexican long-	SSC	Desert and montane riparian	**Not Expected.** No historical

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
tongued bat (*Choeronycteris mexicana*)		and woodlands, desert succulent scrub, desert scrub, and pinyon-juniper habitats. Roosts in caves, buildings, bridges, etc. Sightings in San Diego County very rare. Migratory.	locations occur within or adjacent to the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020). In addition, the majority of the historical locations are located south of the CPU area (Tremor et al. 2017).
western mastiff bat (*Eumops perotis californicus*)	SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels, and travels widely when foraging.	**Present.** Known from one location on central northern border of CPU area (SanGIS 2020; CDFW 2022; Tremor et al. 2017). May also occur in other areas within the CPU area with suitable habitat, as multiple historical locations occur in the vicinity of the CPU area (Tremor et al. 2017).
big free-tailed bat (*Nyctinomops macrotis*)	SSC	Rugged, rocky terrain. Roost in crevices, buildings, caves, tree holes. Very rare in San Diego County. Colonial, Migratory.	**Low Potential.** Known from one location in 1-mile buffer north of the eastern portion of the CPU area (SanGIS 2020; CDFW 2022) and one location west of the CPU area (Tremor et al. 2017). May occur in other suitable habitat within the CPU area.
western red bat (*Lasiurus blossevillii*)	SSC	Roosts in small colonies in the foliage of trees and shrubs in edge areas adjacent to streams and open fields, preferring foraging areas that are distant from human habitation	**Present.** Known from multiple locations along the northern boundary of the CPU area (SanGIS 2020; CDFW 2022; Tremor et al. 2017) and from one location within the CPU area (Tremor et al. 2017). May occur in other suitable habitat within the CPU area.

Table 2-5
Sensitive Wildlife Species and Potential to Occur in the CPU Area

Common Name	Status	Habitat	Potential for Occurrence
Townsend's big-eared bat (*Corynorhinus townsendii*)	SSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic. Individual or colonial. Extremely sensitive to disturbance.	**Present.** Known from one location in the eastern portion of the CPU area (Tremor et al. 2017). May occur in other suitable habitat within the CPU area.
spotted bat (*Euderma maculatum*)	SSC	Wide variety of habitats. Caves, crevices, trees. Audible echolocation signal.	**Not Expected.** No historical locations within or adjacent to the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020; Tremor et al. 2017). Known from only four historical locations in San Diego County, only two of which are certain (Tremor et al. 2017).
pallid bat (*Antrozous pallidus*)	SSC	Open scrub, grasslands, shrub lands, woodlands, and forests. Roosts in rock crevices, caves, mines, tree hollows, and buildings. Occurs near water, colonial. Audible echolocation signal.	**Not Expected.** No historical locations within or adjacent to the CPU area (USFWS 2022; CDFW 2022; SanGIS 2020; Tremor et al. 2017). Known from many locations around San Diego County; however, none are in the vicinity of the CPU area (Tremor et al. 2017).
southern mule deer (*Odocoileus hemionus*)	MSCP	Requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats.	**Present.** Known from many historical locations within the western portion of CPU as well as from many locations scattered in the 1-mile buffer in all directions except east (SanGIS 2020; Tremor et al. 2017).
mountain lion (*Felis concolor*)	MSCP	Typically in remote, hilly or mountainous areas but can occasionally be found in the urban/wild land interface	**Present.** Known from one historical location in the CPU area in Lopez Canyon. Also known from multiple historical locations within the 1-mile buffer, primarily in Los Peñasquitos and Rose. (SanGIS 2020; Tremor et al. 2017)

Source: SanGIS 2020; Tremor et al. 2017; Unitt 2004; USFWS 2022, CDFW 2022
Notes:
Status Codes
Federal
FE = Federal-listed endangered species
FT = Federal-listed threatened species
State
SE = State-listed endangered species
ST = State-listed threatened species
SSC = Species of special concern
SFP = Fully protected species
WL = CDFW watch list species
Other
MSCP = City of San Diego Multiple Species Conservation Program covered species
VPHCP = Vernal Pool Habitat Conservation Plan covered species

2.2.2.5 Wildlife Movement Corridors

Wildlife corridors are essential to maintain populations of healthy and genetically diverse plant and wildlife species. Wildlife corridors are considered sensitive by municipal, state, and federal resource conservation agencies. These corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated due to habitat fragmentation urbanization, rugged terrain, and/or changes in vegetation (Beier and Loe 1992).

Wildlife corridors can be classified as either regional corridors or local corridors. Regional corridors are defined as those linking two or more large areas of natural open space, and local corridors are defined as those allowing resident animals to access critical resources (e.g., food, cover, water) in a smaller area that might otherwise be isolated by some form of urban development (e.g., roads, housing tracts).

Within these wildlife corridors, wildlife movement activities typically fall into one of the following three movement categories:

(1) Dispersal (i.e., juvenile animals from natal areas or individuals extending range distributions)

(2) Seasonal migration

(3) Movement related to home range activities (e.g., foraging for food or water, defending territories, searching for mates)

Both regional and local wildlife corridors exist within the CPU area and are important to maintain healthy plant and wildlife populations in the highly urbanized CPU area (Figure 2-4). Los Peñasquitos Canyon serves as both a regional and local wildlife movement corridor, allowing movement not only

within Los Peñasquitos Canyon itself, but also into the Del Mar Mesa Preserve to the north of the CPU area, Lopez Canyon (a local wildlife corridor) within the northwestern portion of the CPU area, and additional open space areas to the east of the CPU area. In addition, Carroll Canyon and Flanders Canyon, both located in the southwest portion of the CPU area, serve as additional local wildlife corridors allowing movement within the CPU area. All of these canyons provide critical resources to wildlife species and are important both locally and regionally, especially as urbanization within the CPU area and vicinity continues.

2.2.2.6 Critical Habitat

Under the federal ESA, USFWS designates certain areas as "critical habitat" if they determine that these geographic areas are essential for the conservation and/or recovery of a federally listed threatened or endangered species, whether or not the species currently occupies the area. Critical habitat areas often require special management and protection to assure they will remain suitable for the federally listed species for which they have been designated. While federally listed species are protected by the ESA whether or not they are in an area that is designated as critical habitat, projects proposed within or adjacent to critical habitat must demonstrate that implementation of the project would not destroy or significantly impact the functions and values of the critical habitat.

Within the CPU area, USFWS has designated critical habitat for the following species: Cushenberry oxytheca, San Diego thorn-mint, spreading navarretia, and San Diego fairy shrimp (Figure 2-5).

2.2.3 GEOLOGY AND SOILS

Potential impacts to geology and soils associated with implementation of the proposed CPU are discussed in Section 5.3, Geology and Soils, of this PEIR.

2.2.3.1 Geologic Setting

San Diego is located within the western (coastal) portion of the Peninsular Ranges Geomorphic Province of California. The Peninsular Ranges encompass an area that roughly extends from the Transverse Ranges and the Los Angeles Basin, south to the Mexican border, and beyond another approximately 800 miles to the tip of Baja California. The geomorphic province varies in width from approximately 30 to 100 miles, most of which is characterized by northwest-trending mountain ranges separated by subparallel fault zones. In general, the Peninsular Ranges are underlain by Jurassic-age metavolcanic and metasedimentary rocks and by Cretaceous-age igneous rocks of the southern California batholith. Geologic cover over the basement rocks in the westernmost portion of the province in San Diego County generally consists of Upper Cretaceous-, Tertiary-, and Quaternary-age sedimentary rocks. See additional information in Appendix D, Desktop Geotechnical and Geological Hazard Evaluation.

2.2.3.2 Local Geology

Soils within the CPU area include artificial fill materials (both documented and undocumented), young alluvium, landslide deposits, young canyon and estuarine terraces, Very old paralic deposits (Units 5, 6, 7, 8, and 9), and the Stadium Conglomerate and Scripps Foundation (Upper and Lower members). These units are described below and their locations within the CPU area are depicted on Figure 2-6.

a. Af—Artificial fill (late Holocene)

Although there are no mapped limits of artificial fill on Figure 2-6, human-made fill underlies large portions of the CPU area. Most areas underlain by fill are associated with construction of buildings or infrastructure. These fills are likely compacted. Uncompacted fills associated with quarry operations are likely present in Carroll Canyon. The uncompacted fills are subject to settlement under building or additional fill loads.

b. Qya—Young alluvial deposits (Holocene and Late Pleistocene)

Young alluvial deposits are characterized as poorly consolidated, poorly sorted, permeable canyon deposits of sandy, silty, or clay-bearing alluvium. These deposits occur in the bottoms of the major canyons (Carroll Canyon, Sorrento Canyon and Peñasquitos Canyon and their larger tributaries. Young alluvial deposits may settle under structural or additional fill loads. Compacted fill overlying settlement prone young alluvial flood plain deposits may settle under new building or additional fill loads.

c. Qpe—Paralic estuarine deposits

Early Holocene estuarine deposits are found as subtle terraces along the base of Peñasquitos Canyon and consist of poorly consolidated sand and clay. These deposits may settle under new building or additional fill loads.

d. Qls—Landslide deposits (late Pleistocene to Holocene)

Landslide deposits are mapped in the slopes of Peñasquitos and Sorrento Canyons. They appear related to weak, slide-prone formations (Scripps Formation Del Mar and Friars Formations undifferentiated, and Ardath Shale) in combination with steep natural slopes.

e. Qvop9—Very old paralic deposits, Unit 9 (middle to early Pleistocene)

All of the very old paralic deposits (Units 9 to 7) are exposed on the top of the mesa in the CPU area (Figure 2-6). They are differentiated by subtle changes in elevation and topography. The units become older as they occur at higher elevations and are exposed further to the east.

The Unit 9 deposits are located in the western portion of the CPU area and consist of poorly sorted, moderately permeable, well-consolidated, reddish-brown, interfingered strandline,

beach, estuarine, and colluvial deposits composed of siltstone, sandstone, and conglomerate. These paralic deposits are well consolidated and are usually suitable for light structural or thin fill loads. They are locally cemented and may create difficult excavation conditions for utility trenches or basements. An expansive, highly plastic clay residual soil has formed on these deposits on the mesa tops.

f. Qvop8—Very old paralic deposits, Unit 8 (middle to early Pleistocene)

The Unit 8 deposits are located in the central portion of the CPU area and consist of poorly sorted, moderately permeable, well-consolidated, poorly to moderately cemented, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone, and conglomerate. These paralic deposits are well consolidated and are typically suitable for light structural or thin fill loads. They are locally cemented and may create difficult excavation conditions for utility trenches or basements. An expansive, highly plastic clay residual soil has formed on these deposits on the mesa tops.

g. Qvop7—Very old paralic deposits, Unit 7 (middle to early Pleistocene)

Unit 7 of the very old paralic deposits are located in the eastern portion of the CPU area and are characterized as poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone and conglomerate. The Unit 7 deposits are frequently moderately to very well-cemented and can be very difficult to excavate. An expansive, highly plastic clay residual soil has formed on these deposits on the mesa tops.

h. Qvop6—Very old paralic deposits, Unit 6 (middle to early Pleistocene)

The Unit 6 deposits are located in the eastern portion of the CPU area and are poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone and conglomerate. The Unit 6 deposits are frequently moderately to very well-cemented and can be very difficult to excavate. An expansive, highly plastic clay residual soil has formed on these deposits on the mesa tops.

i. Qvop5 – Very old paralic deposits, Unit 5 (middle to early Pleistocene)

The Unit 5 deposits are located in the eastern portion of the CPU area and are poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of siltstone, sandstone and conglomerate. The Unit 5 deposits are frequently moderately to very well-cemented and can be very difficult to excavate. An expansive, highly plastic clay residual soil has formed on these deposits on the mesa tops.

j. Tst – Stadium Conglomerate (middle Eocene)

The Stadium Conglomerate underlies almost the entire CPU area, underlying the very old paralic deposits. It is most exposed in the slopes in the major canyons and their tributaries. It consists of massive cobble conglomerate with a dark-yellowish brown, coarse-grained sandstone matrix. The conglomerate contains slightly metamorphosed volcanic and volcaniclastic rocks and quartzite. The conglomerate is very well consolidated and locally very well-cemented. The conglomerate can typically support very heavy structural and fill loads. The Stadium Conglomerate is difficult to excavate and is at least 200 feet thick in the central portion of the CPU area but pinches out to the west. (Kennedy and Tan 2008).

k. Tsc upper and Tsc—Scripps Formation, upper member and undifferentiated (middle Eocene)

This formation consists of yellowish-gray, medium-grained, sandstone with lenses of cobble conglomerate and claystone. Within the CPU area, it is exposed in the lower portions of the major canyons and tributaries. A tongue of the Scripps formation overlies a portion of the Stadium Conglomerate in the upper Carroll Canyon. This "upper" member is difficult to differentiate from the rest of the Scripps Formation without the presence of the Stadium Conglomerate. The Scripps Formation is well-consolidated and locally very well-cemented (concretion beds) and can typically support high structural and fill loads. Bedding is highly variable and can create potential slope instability where adverse structure and local claystone beds combine as evidenced by landslides in Peñasquitos Canyon in areas underlain by this formation.

l. Td + Tf—Del Mar/Friars Formations Undifferentiated (middle Eocene)

The Del Mar/Friars Formations undifferentiated is exposed in the eastern portion of Peñasquitos Canyon at the base of the north facing slopes. The formation is composed of claystone and some lensoidal bodies of sandstone. The claystone is fractured and locally sheared. The weak claystone can create unstable conditions in slopes.

m. Ta— Ardath Shale (middle Eocene)

The Ardath shale is exposed in the lower elevations in the western portion of the CPU area, primarily at the base of slopes along the main canyons. The formation is composed of highly fractured silty claystone and intercalated fine sandstone. Where fresh, the formation is well-consolidated and locally strongly cemented. Where weathered, the formation desiccates into weak, sheared and remolded clay that is expansive and is unstable in slopes. Clay seams and shears in the unweathered formation can create unstable conditions in slopes where the local structure is adverse.

n. Ju—Undifferentiated Volcanic Rocks (Mesozoic Undifferentiated)

The volcanic rocks exposed in the northeast corner of the CPU area consists of locally metamorphosed and unmetamorphosed volcanic rock ranging from dacite to andesite. The rock is very hard but locally fractured. Excavation characteristics will be dependent upon fracture spacing.

2.2.3.3 Geologic Hazards

a. Geologic Hazard Categories

The City of San Diego Seismic Safety Study (City of San Diego 2008) Geologic Hazards and Faults maps document the known and suspected geologic hazards and faults in the region. The maps show potential hazards and rates them by relative risk, on a scale from nominal to high. Figure 2-7 shows the location of hazards within the CPU area as defined by the City maps.

The mesa that covers most of the CPU area is designated as Geologic Hazard Category 51, which includes other terrain characterized by "level mesas - underlain by terrace deposits or bedrock" with nominal risk and Geologic Hazard Category 52, "other level areas or gently sloping to steep terrain" with favorable geologic structure and low risk. Slope areas are underlain by "Friars Formation with neutral or favorable geologic structure" that are designated Geologic Hazard Category 23, "Friars Formation with unfavorable geologic structure (24), "Ardath Shale with neutral or favorable geologic structure"(25). The areas at the top of slopes have been designated 53 "level or sloping terrain with unfavorable structure and "low to moderate risk".

The bottoms of drainages are designated as Category 31 or 32 which exhibit a "high potential for liquefaction due to high groundwater" or "low potential for liquefaction due to fluctuating groundwater levels". Landslide deposits are "Confirmed, known, or highly suspected" (21), "Possible or conjectured" (22).

b. Faulting and Seismicity

The San Diego region sits along the boundary between the North American and Pacific tectonic plates and experiences the effects of seismic activity occurring where the plates interact. The boundary is characterized by a wide zone of predominantly northwest-striking, right-slip faults that span the Imperial Valley and Peninsular Range to the offshore California Continental Borderland Province (from the California continental slope to the coast). Within the San Diego region, this zone extends from the San Clemente fault zone located approximately 60 miles west of San Diego to the San Andreas fault zone approximately 70 miles east of San Diego. The most active faults based on geodetic and seismic data are the San Andreas, San Jacinto, and Imperial faults. These faults take up most of the plate motion. Smaller faults, however, are active enough to create damaging earthquakes and these

include the Elsinore, Newport- Inglewood-Rose Canyon, and the offshore Coronado Banks, San Diego Trough, and San Clemente fault zones. The CPU area is subject to potential ground shaking caused by activity along faults located near the CPU area.

Table 2-6, Fault Characteristics for Active Faults in the Region, summarizes the local and regional fault characteristics for the active faults that could affect the CPU area. Active faults are those faults which have ruptured the ground surface in the last 11,700 years. Potentially active faults are those that have ruptured the ground surface during Quaternary time, but Holocene activity is indeterminate. Potentially active faults may have a lower probability for future activity than active faults. The nearest potentially active faults in the CPU area are located in the southwest corner of the CPU area. However, due to their limited lengths and discontinuous nature, they are not likely sources of future earthquakes or ground rupture.

Table 2-6
Fault Characteristics for Active Faults in the Region

Fault Name	Approximate distance to the CPU Area (miles)	Slip Rate (mm/yr)	Fault Length (miles)	Estimated Magnitude (Maximum Moment Magnitude [Mw])
Newport-Inglewood-Rose Canyon Fault Zone	10	1.5	130	7.2
Coronado Bank Fault Zone (offshore)	22	3.0	115	7.6
San Diego Trough Fault Zone (offshore)	43	1.5	106	7.5
San Miguel-Vallecitos Fault Zone (Northern Baja California)	43	0.2	100	6.9
Elsinore Fault Zone	43	5.0	190	7.0
San Clemente Fault Zone (offshore)	70		129	7.7
San Jacinto Fault Zone	73	4.0	152	6.8
Southern San Andreas Fault Zone	109	25	140	7.2

Source: CDMG 2002; CGS 2010; Hirabayashi et. al. 1996; Kahle et. al. 1984; Ryan et. al. 2012.

The nearest active fault capable of causing ground rupture and strong earthquake shaking is the Rose Canyon fault zone located approximately 10 miles southwest of the CPU area. The Rose Canyon fault zone is the southernmost portion of the Newport-Inglewood fault zone that extends from Long Beach to the north to the Descanso fault, offshore of Baja California. A magnitude 6.3

earthquake occurred on the Newport-Inglewood fault in 1933 and caused serious damage in the Los Angeles area. Fault trenching on the Rose Canyon fault has shown that the fault has ruptured the ground surface several times in the last 10,000 years (Appendix D).

2.2.3.4 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 significant 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. Groundwater levels vary across the CPU area and occur at depths as shallow as 3 feet below ground surface and deeper than 100 feet below ground surface. Groundwater flow directions also vary within the CPU area.

2.2.3.5 Dam Inundation

In the event of a breach of Miramar Reservoir's dam, portions of the CPU area could be inundated by dam flows. Figure 2-8 shows the extent of modelled flooding in case of dam failure at the Miramar Reservoir, in the areas immediately west of Miramar Reservoir, Carroll Canyon, and Los Peñasquitos Canyon (though most of this inundation zone is just north of the CPU area boundary).

2.2.4 GREENHOUSE GAS EMISSIONS

Potential greenhouse gas (GHG) emissions impacts associated with implementation of the proposed CPU are discussed in Section 5.4, Greenhouse Gas Emissions, of this PEIR.

The CPU area is currently a source of anthropogenic GHG emissions, with emissions generated by vehicular traffic and by the energy use, water use, and solid waste management practices of existing development. A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, water vapor, hydrofluorocarbons, hydrochlorofluorocarbons, perfluorocarbons (PFCs), and sulfur hexafluoride.[1] Some GHGs—such as CO_2, CH_4, and N_2O—occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Fluorinated gases (e.g., hydrofluorocarbons, hydrochlorofluorocarbons, perfluorocarbons, and sulfur hexafluoride), another type of GHG, are typically associated with certain industrial products and processes and have a much greater heat-absorption potential than CO_2.

[1] California Health and Safety Code 38505 identifies seven GHGs that CARB is responsible for monitoring and regulating to reduce emissions: CO_2, CH_4, N_2O, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons, and nitrogen trifluoride.

2.2.4.1 Statewide and Regional Greenhouse Gas Emissions

According to California's 2000 through 2017 GHG emissions inventory (2019 edition), California emitted 424 MMT CO_2e in 2017, including emissions resulting from out-of-state electrical generation (CARB 2019). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high global warming potential substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2017 are presented in Table 2-7, GHG Emissions Sources in California.

Table 2-7
GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO2e)	Percent of Total[a]
Transportation	169.9	40%
Industrial	89.4	21%
Electricity (in state)	38.5	9%
Electricity (imports)	23.9	6%
Agriculture	32.4	8%
Residential	26.0	6%
Commercial	15.1	4%
High global-warming potential substances	20.0	5%
Recycling and waste	8.9	2%
Total	**424.2**	**100%**

Source: CARB 2019.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.

Between 2000 and 2017, per-capita GHG emissions in California dropped from a peak of 14.1 metric tons per person in 2001 to 10.7 metric tons per person in 2017, representing a 24% decrease. In addition, total GHG emissions in 2017 were approximately 5 MMT CO_2e less than 2016 emissions (CARB 2019).

2.2.4.2 City of San Diego Climate Action Plan Inventory

The City provided an update to their GHG emission inventory in their 2020 Climate Action Plan (CAP) Annual Report Appendix (City of San Diego 2020a). The City's GHG emissions for 2019 are presented in Table 2-8, GHG Emissions Sources in the City of San Diego.

Table 2-8
GHG Emissions Sources in the City of San Diego

Source Category	Annual GHG Emissions (MT CO2e)	Percent of Totala
Transportation	5,296,000	54.90%
Electricity	2,069,000	21.45%
Natural Gas	1,911,000	19.81%
Wastewater and Solid Waste	303,000	3.14%
Water	67,000	0.69%
Totals	**9,646,000**	**100%**

Source: City of San Diego 2020a.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent per year. Emissions reflect the 2018 City of San Diego GHG inventory.
[a] Percentage of total has been rounded, and total may not sum due to rounding.

2.2.5 HISTORICAL, ARCHAEOLOGICAL, AND TRIBAL CULTURAL RESOURCES

Potential impacts to historical, archaeological, and tribal cultural resources associated with implementation of the proposed CPU are discussed in Section 5.5, Historical, Archaeological, and Tribal Cultural Resources, of this PEIR.

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. For purposes of the PEIR, historical resources consist of historic buildings, structures, objects, or sites, prehistoric and archaeological resources, sacred sites and human remains, and tribal cultural resources determined to be significant or potentially significant under CEQA.

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.

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).

A brief summary of prehistoric, ethno historic, and historical development periods is provided below with full details provided in Appendix E, Mira Mesa Community Planning Area Cultural Resources Constraints and Sensitivity Analyses, and in Appendix F, Mira Mesa Community Planning Area Historic Context Statement and Mira Mesa Community Plan Area Focused Reconnaissance Survey.

2.2.5.1 Ethnohistoric Period

The Ethnohistoric Period, sometimes referred to as the ethnographic present, commenced with the earliest European arrival in what is now San Diego and continued through the Spanish and Mexican periods, and into the American period. The CPU area is located within the traditional territory of the Kumeyaay, also known as Ipai, Tipai, or Diegueño (named for Mission San Diego de Alcalá). According to documentation in the ethnographic record, the Kumeyaay territory ranged from between Agua Hedionda Lagoon and Batiquitos Lagoon in the northwest, east through present day Escondido to the southern end of the Salton Sea, and then southeast through the Sonoran Desert into Mexico, with the southwestern boundary near Todos Santos Bay in Baja California, Mexico, south of Ensenada. Four to six dialects were present within the Kumeyaay territory, and northernmost groups referred to themselves as Ipai, while those in the southern portions of the Kumeyaay territory refer to themselves as the Kamiai, Kamiyahi, or Tipai. Ipai and Tipai were thought to be two distinct dialects of Kumeyaay, which was part of the Yuman Family of the Hokan Stock. The Ipai were present immediately south of the Luiseño, with the southern boundary near the San Diego Bay and generally following the San Diego River Valley eastward. The Tipai were present south of the San Diego River Valley into Mexico. At the time of Spanish contact, Yuman-speaking Kumeyaay bands occupied southern San Diego and southwestern Imperial counties and northern Baja California. (Appendix E).

At the time of Spanish colonization in the late 1700s, several major Kumeyaay villages or rancherias were located in proximity to the community planning area boundaries we know today. The closest villages were *Ystagua* to the west in present-day Sorrento Valley, *Peñasquitos* to the northeast in the canyon along Los Peñasquitos Creek, *Onap* to the south within present-day Rose Canyon, and *Pawai/Pawaii/Paguay* located further east near present-day Poway. The coastal villages of *Ystagua*, *Onap, Jamo* (Rinconada) which was located along the west side of Rose Canyon, where the Rose Canyon drainage enters into Mission Bay*,* and *Sallagua,* which was located further north near the San Dieguito River Valley, were noted in early diaries because of their proximity to the El Camino Real, the north/south route between the San Diego Presidio, the San Diego Mission de Alcalá, and

other missions and Spanish ranchos to the north. It is also likely that the east/west canyons and tributaries were also often used by the Kumeyaay as travel corridors from interior coastal plain areas, to and from villages located along, and at the mouth of the rivers (Appendix E). These river valleys were often referred to by native speakers as *oon-ya*, meaning trail or road, describing one of the main routes linking the interior of San Diego with the coast. For example, the floodplain from the San Diego Mission de Alcalá to the ocean was *hajir* or *qajir*. (Appendix E).

The village of *Ystagua* is significant to the CPU area as it represents the closest of the documented Ipai villages during the ethnohistoric period, and is located adjacent to the western boundary of the planning area. (Appendix E).

2.2.5.2 Pre-Contact/Prehistoric Period

Generally, archaeologists believe that human occupation within San Diego County began sometime after 20,000 years Before Present, and likely prior to 11,200 B.C. However, Kumeyaay creation stories state that the Kumeyaay people have always resided in San Diego County and were created in the sea at the same time as the earth was created. Archaeologists have developed numerous chronologies and nomenclature for the archaeological record many of which conflict with each other. Most archaeologists divide the human occupation of San Diego County during the prehistoric period into three main occupation eras: the Terminal Pleistocene/Early Holocene Period, the Middle Holocene Period, and the Late Holocene Period. While archaeological studies have taken place in San Diego County for over 100 years, portions of San Diego County, especially the coastal region within the limits of the City of San Diego, have few well-dated deposits as a result of development and the destruction of sites prior to the implementation of environmental laws and systematic archaeological studies. (Appendix E).

2.2.5.3 Historic Period

San Diego history can be divided into three periods: the Spanish, Mexican and American periods. Additionally, the Historic Context Statement (Appendix F) categorizes the history of Mira Mesa into chronologically ordered periods of development, which are further categorized into overarching themes:

- Early Development Period (1823–1968)
    - Theme: Early Agriculture and Ranching (1823–1968)
- Development Boom Period (1958–1979)
    - Theme: Residential Development (1969–1979)
    - Theme: Civic and Institutional Development (1969–1979)
    - Theme: Recreational and Commercial Development (1970–1979)

- Community Expansion and Continued Development (1980–1990)
    - Theme: Residential Development (1980–1990)
    - Theme: Institutional and Recreational Development (1980–1990)
    - Theme: Expansion of Commercial Facilities and Industrial (1981–1990)
- Shifting Demographics (2000-2016)

National Register Bulletin 15 defines a theme as a "means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments of an area during one or more periods of prehistory or history. A theme is considered to be significant if it can be demonstrated through scholarly research, to be important to American history." Important themes have been distilled into residential development, commercial development, civic and institutional development, recreational development, military development, and agricultural development.

These development periods are discussed in the context of the three historic periods.

Spanish Period (1769–1822)

In spite of Juan Cabrillo's earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769. In 1769, a land expedition led by Gaspar de Portola reached San Diego Bay, where they met those who had survived the trip by sea on the San Antonio and the San Carlos. Initially, camp was made on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to moving the camp on May 14, 1769, to a small hill closer to the San Diego River near the Kumeyaay village of Kosti/Cosoy/Kosaii/Kosa'aay near present day Old Town.

In August 1774, the Spanish missionaries moved the Mission San Diego de Alcalá to its present location 6 miles up the San Diego River valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. In 1798, the Spanish constructed the Mission San Luis Rey de Francia in northern San Diego County. They also established three smaller mission outposts (asistencias) at Santa Ysabel, Pala, and Las Flores. The mission system had a great effect on all Native American groups from the coast to the inland areas and was a dominant force in San Diego County. Early Spanish colonial use of the CPU area was focused on the western boundary of the planning area, along the coastal canyons. (Appendix E).

Mexican Period (1822–1846)

In 1822, the political situation changed as Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates. Much of the land came from the Spanish missions that the Mexican government secularized in 1833. Another change in Mexican San Diego was the decline of the presidio and the rise of the civilian pueblo. The establishment of pueblos in California under the Spanish government met with only moderate success and none of the missions obtained their ultimate goal, which was to convert to a pueblo. The new pueblo of San Diego did not prosper as did some other California towns during the Mexican Period. In 1834, the Mexican government secularized the San Diego and San Luis Rey missions. The secularization in San Diego County had the adverse effect of triggering increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors, led to San Diego's population decline to around 150 permanent residents by 1840. San Diego's official Pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles Pueblo.

Early Development Period

Rancho Santa Maria de Los Peñasquitos was San Diego's first rancho awarded to Captain Francisco María Ruiz, Commandant of the Presidio of San Diego as a Mexican land grant in 1823.[2] The grant comprised of one league, 4,243-acres, at the eastern part of the Los Peñasquitos Canyon and extended into Sabre Spring and up to Rancho Bernardo. The name Santa Maria de Los Peñasquitos meant "Saint Mary of the Little Cliffs," and contained present day Mira Mesa, Carmel Valley, and Rancho Peñasquitos in southwestern San Diego County. In 1824, Ruiz constructed a one-room adobe casa for himself to use while ranching. In 1834, the Mexican government gave Ruiz an additional league of land after he expressed his dissatisfaction with the original grant's inability to be cultivated. (Appendix F).

American Period (1846–Present)

The Americans raised the United States flag in the square in Old Town San Diego in 1846 and assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848. In the quarter of a century following 1848, they transformed the Hispanic community into a thoroughly Anglo-American one. In 1850, the Americanization of San Diego began to develop rapidly. On February 18, 1850, the California State Legislature formally organized San Diego County. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town

[2] Pam Stevens, *Images of America: Mira Mesa* (Charleston: Arcadia Publishing, 2011), 9.

closer to the bay. The failure of these plans, a severe drought that crippled ranching, and the onset of the Civil War left San Diego as a remote frontier town. (Appendix E).

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town. After the county seat was moved in 1871 and a fire destroyed a major portion of the business block in April 1872, Old Town rapidly declined in importance. By 1872, San Diegans relocated the center of the city and community to a new location that was more accessible to the bay and to commerce. (Appendix E).

Throughout the Mexican and early American periods, much of the CPU area remained largely undeveloped. Mira Mesa earned its current name from one if its first American settlers, E.W. Scripps, a newspaper publisher who purchased 400 acres in the area to construct Miramar Ranch. It was not until the end of the Korean War that the CPU area began to take on portions of its current form due to the influx of American military personnel. In 1958, the CPU area was annexed to the City of San Diego, along with Del Mar Heights and a portion of MCAS Miramar (previously the Naval Air Station Miramar). Through 1969, the population of Mira Mesa remained small, and little residential and community growth occurred. San Diego neighborhoods, including Mira Mesa, experienced a severe population boom starting in 1969 (Appendix E).

Development Boom Period (1958 – 1979)

Mira Mesa did not exist in its current state until 1969. Prior to that, the land was primarily rocky, brush-covered mesa with finger canyons leading to Lopez and Peñasquitos Canyons to the north, Rattlesnake and Carroll Canyons to the south and Sorrento Valley to the west. Prior to this period of development, the area was largely rural with areas focused on military development. On November 7, 1958, as part of a large annexation, Mira Mesa along with Del Mar Heights and Miramar Naval Air Station became an official part of the City of San Diego. (Appendix F).

Interested parties disclosed preliminary plans for a new residential community on 800-acres north of Miramar in 1958. The tentative map of the proposed subdivision named Mira Mesa showed approximately 2,800 sites for single-family homes, a 40-acre site for multiple-family housing, a 40-acre shopping center, a high school site of 50-acres, 3 elementary schools, a 13-acre park, and multiple other locations for professional buildings, churches, and a small neighborhood shopping center or strip mall. (Appendix F).

At the start of 1969, Mira Mesa had all the necessary elements for development including water availability, flat land, no unmanageable zoning restrictions, roadway access, and most importantly a high demand for housing in the area. Mira Mesa's population began to rise as more tracts opened increasing from 1,180 in 1970 to 3,200 in 1971, 10,800 in 1972, and 16,900 by 1973. In response to the demand for housing, multiple developers emerged in Mira Mesa and began to acquire large

tracts of land. The work of companies like Pardee Construction Company (Pardee) and the Larwin Company along with multiple other developers created a sense of competition in the area. Mira Mesa's competitive and accelerated building program resulted in a large residential boom during this period of development. Between October 1969 and October 1976, approximately 8,685 dwelling units were constructed, and the area had attained a population of approximately 28,800. From early 1971 until mid-1972, Mira Mesa led the City of San Diego's construction activity and remained tied for growth with the Tierrasanta community (located southeast of Mira Mesa) between 1973 and 1974. By January 1978, Mira Mesa consisted of approximately 10,457 dwelling units with a population of approximately 34,600 people. (Appendix F).

Community Expansion and Continued Development (1980-1990)

Mira Mesa's expansion displayed little evidence of slowing down after a development boom between 1969 and 1979. The community continued to be one of the most rapidly growing areas in San Diego, starting as a few scattered farms in 1969 and developing into a community with 11,500 dwelling units and a population of 37,600 by 1980. By the time the community had enough schools, parks, and other facilities to service the 1980 population, additional growth between the late 1970s into 1980 caused the community to fall behind population-based park standards of the City's General Plan. Mira Mesa by this time had become less isolated, and citizens no longer had to travel outside of Mira Mesa to do everyday tasks such as grocery shopping and purchasing gas, but the rate of development proved to be too rapid for many residents. Development between 1980 and 1990 was more diversified, higher in density, and more conscious of its impact to sensitive areas such as Los Peñasquitos Canyon. The City Council in 1986 adopted the first Public Facilities Financing Plan and Facilities Benefit Assessment for Mira Mesa. The Facilities Benefit Assessment contained a provision that whenever a developer filed a building permit they would pay into a fund that financed parks, roads, fire stations and libraries. This was intended to ensure that the community's public amenities and infrastructure would not fall behind future population demands. (Appendix F).

Traffic into and out of Mira Mesa had long been a complaint of its citizens, having only one connecting street (Miramar Road) to the I-5 and I-805 freeways at La Jolla Village Drive. After an 11-year planning effort to provide an east-west route for the growing northern section of the City, a four-lane 2.3-mile extension of Mira Mesa Boulevard connected Mira Mesa to the two heavily trafficked freeways, I-5 and I-805. A key benefit of the road's extension relieved congestion on Miramar Road, which in the early 1980s exceeded its capacity by an estimated 50,000 cars a day. The Mira Mesa Boulevard expansion accommodated up to 25,000 cars daily. The road's financing came from an assessment district made up of the property owners along the route. Despite being a welcome addition to residents in the area, more east-west routes would be required in the future to link the inland freeways to the coast. Since its opening in 1983, the Mira Mesa Boulevard extension underwent two widening projects into six lanes and eventually became eight lanes. (Appendix F).

Mira Mesa's population increased 66 percent between 1980 and 1990. The CPU area was one of the major employment centers of the region with approximately 28,000 people employed in Mira Mesa in 1986. The major employment types included manufacturing, retail trade, and business services. Additionally, MCAS Miramar remained one of the region's major employers with 11,000 military and 2,500 civilian employees. The total on-base residential population in 1990 was 2,873, of this population 2,210 lived in group quarters, 111 in single-family units, and 78 in mobile homes. In 1990, Miramar College expanded with an instructional center with computer and business courses and a new library. More than 6,000 students were registered for the fall 1990 semester, which could contribute to the population growth in the CPU area. (Appendix F).

Shifting Demographics (2000-2016)

In 2000, the CPU area remained relatively similar to its 1975 demographic of young, white, and middle-class families. The total population of the CPU area in 2000 was 72,005, 45 percent being non-Hispanic white. The second largest group were Asians with 40 percent. Compared to the citywide average of 9 percent, the CPU area displayed a higher than average Asian population. The largest population group by age were those under 18 with 17,228 people. This can be attributed to Miramar College located within the CPU area and MCAS Miramar located directly south of the CPU area. In 2000, 10 percent of Mira Mesa's population was enrolled in undergraduate school and 2 percent were enrolled in graduate school. The CPU area's median household income was $62,804 compared to the citywide household income of $47,268. (Appendix F).

In 2012, the largest employment industries in the CPU area included professional and business services with 27,287 people and manufacturing with 9,603 people out of the 75,275 total people employed in the CPU area. The majority of these employment centers were located in the Sorrento Valley area of the CPU area. Industries in this area included the communications, computer and electronic, software, biopharmaceutical manufacturing, medical devices and diagnostic equipment, defense, clean energy, and aerospace industries. Jobs in these industries typically required a higher education level and result in higher salaries for skilled labor. The CPU area's median household income in 2016 was $94,215, compared to the median household income in the United States of $60,309. As a result of the high median income, the CPU area was an upper-income community. The largest income group in the CPU area was comprised of households earning $75,000 to $99,000. Comparing the annual income in the CPU area to the citywide annual income, there was a smaller percentage of households with an annual income less than $44,999 and a smaller percentage of annual incomes that were more than $200,000. (Appendix F).

In 2016, the total population of the CPU area was 76,434. Over 74 percent of households were "family households," which were defined as a household maintained by a householder who is in a family and includes any unrelated people who may be residing with them. The number of family

households in an area is equal to the number of families. In the CPU area, families with children under the age of 18 made up 33 percent of households compared to 30 percent of households citywide. There was a smaller percent of people living alone in the CPU area (16.8 percent) compared to 28.1 percent citywide. Additionally, the CPU area had a higher percentage of households with four or more persons with 32 percent compared to 23 percent citywide. Mira Mesa as a result generally has more families living in it with small children when compared to citywide averages. (Appendix F).

Mira Mesa is an ethnically diverse community. In 2016, Asians constituted 39 percent of the population, while non-Hispanic whites made up 33 percent. Hispanics represented 20 percent, residents with two or more races made up four percent, and Blacks constituted three percent of the CPU area's population. In comparison, citywide in 2017, Asians made up 17.3 percent of the total population, Hispanics 30.3 percent, and non-Hispanic white 56.7 percent. The CPU area had a lower percentage of non-Hispanic whites and Hispanics and a larger population of Asians when compared citywide. The community's Asian population, specifically Filipino, is reflected in the area's commercial properties including the grocery store Seafood City, 8955 Mira Mesa Boulevard, and the Vinh-Hung Supermarket, 10550 Camino Ruiz. The CPU area's restaurants also reflect the high number of Filipinos in the community including R and B Filipino Cuisine (11257 Camino Ruiz), Jollibee (8436 Mira Mesa Boulevard), Valerio's City Bakery (9396 Mira Mesa Boulevard), Café 89 (8945 Mira Mesa Boulevard), Manila Fast Food and Desserts (8979 Mira Mesa Boulevard), Nanay's Best BBQ (6755 Mira Mesa Boulevard), Trining's Bakery & Cafe (10606 Camino Ruiz), and Max's Restaurant (8285 Mira Mesa Boulevard). (Appendix F).

2.2.6 HAZARDS AND HAZARDOUS MATERIALS

Potential impacts to hazards and hazardous materials associated with implementation of the proposed CPU are discussed in Section 5.6, Hazards and Hazardous Materials, of this PEIR.

2.2.6.1 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. Businesses that handle/generate hazardous materials within the City are monitored by the U.S. Environmental Protection Agency. 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 in order to identify sites within the CPU area that may have been impacted by hazardous materials or wastes. The search identified five sites with a ranking of 4 (high). These properties are undergoing active remediation with regulatory oversight. The facilities and the extent of known impacts within the CPU area are described below. Additional details are provided in Section 5.6, Hazards and Hazardous Materials, of this PEIR and in Appendix G, Hazardous Materials Technical Study.

EMD Chemicals (10394 Pacific Center Court)

The facility is associated with two closed cases. According to the closure reports, chlorinated solvents remain at the property in soil, soil gas, and indoor air, and heavy metals remain in soil. A ventilation system was implemented above a chloroform plume and, as of 2009, the system was active with a minimum requirement of 1.97 air exchanges per hour. Land use controls are in place (no schools hospitals, churches, water supply wells within 0.5 miles).

Frame Marital Trust (8655 Commerce Avenue)

The property is a 4,800 square-foot commercial building that was formerly operated as a dry cleaning facility and is associated with one open Voluntary Assistance Program case. Perchloroethylene (PCE) concentrations remain in soil and soil vapor from former dry cleaning operations. PCE concentrations were measured at a maximum of 91,000 micrograms per liter in soil gas beneath the property. A human health risk assessment performed in 2016 indicated levels of PCE and trichloroethylene in soil gas exceeding the acceptable risk factor for site occupants from exposure to these contaminants migrating into indoor air (SCS Engineers 2016). According to correspondence on Geotracker, an active soil vapor extraction system has been in place since 2016.

Plaza Sorrento (6755 Mira Mesa Boulevard, Suite 133–135)

A Voluntary Assistance Program case was opened on September 27, 2019, for historical use as a dry cleaner. According to the Voluntary Assistance Program application, PCE soil gas concentrations remain 10 to 15 feet east of the former dry cleaner property, beneath a retail grocery store, at levels above the current residential and commercial screening levels. According to documents on Geotracker, vapor mitigation operations and maintenance system is being operated due to elevated PCE concentrations detected at a maximum of 4,700,000 micrograms per cubic meter (Terracon 2019).

Linda Vista Landing Field (San Diego)

The Linda Vista Valley Auxiliary Field is a former auxiliary airfield and landing strip and was reportedly used as a practice field for bombing. Visual site inspections conducted by USACE in 1997 found no evidence of munitions and explosives or concern for munitions debris; however, a Site

Inspection Report by Parsons recommends further evaluation in the form of a Remedial Investigation and Feasibility Study for the property (Parsons 2009). The property has been redeveloped and is currently occupied by residences, commercial structures and, portions of Miramar College and Wangenheim Middle School campuses. According to the Formerly Used Defense Sites database, the property is known or suspected to contain military munition and explosives of concern.

Sunflower Property (9755 Distribution Avenue)

The property was formerly a dry cleaning supply storage facility and is associated with an open remediation case. Multiple accidental releases of PCE into soil, soil gas, and groundwater have occurred. According to the Request for Closure, a soil vapor extraction system has been operating at the property since 1999 and a sub-slab depressurization system has been operating since 2011 (Risk Assessment & Management Group 2019). A request for closure was submitted to the Department of Toxic Substances Control in March 2019 and was denied based on required additional soil and groundwater investigation to fully delineate the vertical contamination.

2.2.6.2 Wildfire Hazards

Most of the CPU area is located within a Very High Fire Hazard Severity Zone within a Local Responsibility Area (CAL FIRE 2022), particularly along the northern boundary of the CPU area and the eastern portion of the CPU area, as shown on Figure 2-9.

2.2.6.3 Emergency Preparedness

The City is a participating jurisdiction in the San Diego County Multi-Jurisdictional Hazard Mitigation Plan, a countywide plan to identify risks and minimize damage from natural and human-made disasters (County of San Diego 2018). The primary goals of the Multi-Jurisdictional Hazard Mitigation Plan include efforts to promote and provide compliance with applicable regulatory requirements (including through the promulgation/enhancement of local requirements), increase public awareness and understanding of hazard-related issues, and foster inter-jurisdictional coordination.

The San Diego Office of Homeland Security oversees the City's Homeland Security, Disaster Preparedness, Emergency Management, and Recovery/Mitigation Programs. The primary focus of this effort is to ensure comprehensive emergency preparedness, training, response, recovery, and mitigation services for disaster-related effects. The San Diego Office of Homeland Security also maintains the City's Emergency Operations Center and an alternate Emergency Operations Center in a ready-to-activate status, ensures that assigned staff are fully trained and capable of carrying out their responsibilities during activations, and manages the Emergency Operations Center during

responses to multidepartment and citywide emergencies to support incident response activities and maintain citywide response capabilities (County of San Diego 2018).

Additionally, the City is a participating agency in the County's Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan (County of San Diego 2018), which addresses emergency issues including evacuation. Annex Q (Evacuation) of the Emergency Operations Plan notes that: "Primary evacuation routes consist of major interstates, highways and prime arterials within San Diego County…," with I-15 and I-805 identified as evacuation routes in the CPU area.

2.2.6.4 Aircraft Hazards

The State of California requires that the San Diego County Regional Airport Authority, as the Airport Land Use Commission (ALUC), prepares 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 City of San Diego implements the adopted ALUCPs with the Airport Land Use Compatibility Overlay Zone.

The MCAS Miramar ALUCP was adopted in 2008 and amended in 2011. MCAS Miramar is located directly to south of the CPU area, and the entirety of the CPU area is located either in MCAS Miramar's AIA Review Area 1 or 2, as shown on Figure 2-10, with additional zones shown on Figure 2-11. The composition of each area is determined as follows:

- 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 Community Noise Equivalent Level (CNEL) or greater together with all of the safety zones. Within Review Area 1, all types of land use actions are to be submitted to the ALUC for review to the extent review is required by law.

- Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or 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. Within Review Area 2, only land use actions for which the height of objects is an issue are subject to ALUC review.

The ALUCP for MCAS Miramar contains policies related to noise, safety compatibility, airspace protection, and overflight factors for areas within each AIA. The purpose of noise compatibility policies is to avoid the establishment of new incompatible land uses and exposure of the users to levels of aircraft noise that can disrupt the activities involved. Safety compatibility policies are intended to minimize the risks of an off-airport accident or emergency landing. Airspace protection surfaces are established to evaluate the airspace compatibility of land use actions in the AIA. Airspace protection compatibility policies ensure that structures and other uses of the land do not cause hazards to aircraft in flight within the airport vicinity. Hazards to flight may include but are not limited to physical obstruction of navigable airspace, wildlife hazards (such as bird strikes), and land use characteristics that create visual or electronic interference with aircraft navigation or communication. The airspace protection surfaces establish the maximum height that objects on the ground can reach without potentially creating constraints or hazards to the use of the airspace by aircraft approaching, departing, or maneuvering in the vicinity of the airport. Overflight compatibility policies are intended to help notify people about the presence of overflights near airports so they can make informed decisions regarding acquisition or leasing of property in the area.

The majority of the western half and southern portion of the CPU area falls within the 60 CNEL contour or higher; a smaller southern portion falls within the 65 CNEL noise contour or higher. The entirety of the CPU area is within the airspace protection boundary for MCAS Miramar. Portions of the CPU area are within the overflight notification area and FAA Height Notification Area. The entirety of the CPU area is within the FAR Part 77 Outer Boundary. Portions of the eastern/southeastern CPU area are located within the Accident Potential Zone 2 and Transition Zone for MCAS Miramar Safety Compatibility. These safety zones are established for the purpose of evaluating safety compatibility of land use development in the AIA and the ALUCP contains specific criteria for development review in each zone. Projects located within the AIAs are reviewed for consistency with the ALUCP.

2.2.7 HYDROLOGY AND WATER QUALITY

Potential hydrology and water quality impacts associated with implementation of the proposed CPU are discussed in Section 5.7, Hydrology and Water Quality, of this PEIR.

2.2.7.1 Drainage

The two major drainage channels draining through (or directly adjacent to) the CPU area are Carroll Canyon Creek and Los Peñasquitos Creek. The CPU area is mostly 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 consists of high peak flow rates for short durations. Stormwater runoff originating in Mira Mesa is conveyed to the

receiving waters via streets, gutters, cross gutters, open channels, creeks, and other storm drain systems. More information can be found in Appendix H, Hydrology and Water Quality Report.

Major drainage inputs into the CPU area include the upper tributaries of Carroll Canyon Creek, and the Lopez and Flanders canyons. The Carroll Canyon Creek drainage area upstream of the CPU area boundary includes the small area draining into Miramar Reservoir, and the residential areas surrounding Miramar Reservoir. The Carroll Canyon watershed is approximately 17.4 square miles in size, and the portion upstream of the CPU area is approximately 2.1 square miles. Refer to Figure 2-12 showing rivers, creek, and storm drainage within the CPU area and immediate surroundings.

2.2.7.2 Floodplains

Each water body studied by the Federal Emergency Management Agency (FEMA) is mapped on one or more Flood Insurance Rate Maps. FEMA Flood Hazard Zones within the CPU area include Zone AE, Zone A, and Zone X. The term "floodplain" refers to the area that experiences flooding during a high flow event. The floodplain includes both actively flowing areas as well as areas that are more ponded and not actively flowing. The "floodway" is the portion of the floodplain reserved to let the stronger-flowing floodwaters pass and not cause an unacceptable increase in flood elevations. Carroll Canyon Creek and Los Peñasquitos Creek have been studied and documented in the FEMA Flood Insurance Study for San Diego County, California, and Unincorporated Areas, most recently revised in December 2019 (FEMA 2019).

Based on mapping from FEMA, almost all of the developed CPU area lies outside of mapped floodplains (FEMA 2019). Portions of the Los Peñasquitos Canyon Creek corridor, Lopez Canyon, and Carroll Canyon Creek are within the mapped 100-year floodplain with some areas designated as a regulatory floodway. As shown in Figure 2-13, Flood Zones, the 100-year and 500-year floodways are primarily limited to the canyon areas. Portions of the mapped 100-year floodplain are also designated Special Flood Hazard Area, which are high-risk areas defined as any land that would be inundated by the 100-year flood (the flood having a 1% chance of occurring in any given year).

2.2.7.3 Water Quality

Stormwater runoff originating in the CPU area is conveyed via streets, gutters, cross gutters, creeks, and storm drain systems resulting in limited opportunities for infiltration for much of the area. Thus, pollutants in runoff may reach receiving waters. Areas with additional pollutant protection for stormwater runoff include industrial sites that have implemented best management practices required by the Industrial Stormwater General Permit or individual waste discharge requirements issued by the San Diego RWQCB, and development projects classified as "Priority Development Projects" that have been constructed since the City adopted the Stormwater Standards Manual.

Receiving waters from runoff within the CPU area include the Los Peñasquitos Lagoon, Los Peñasquitos Creek, and Carroll Canyon Creek and Tributaries. Typical pollutants from existing land uses within the CPU area include sediment, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

Beneficial Uses

Beneficial uses are the uses of water necessary for the survival or wellbeing of humans, plants, and wildlife. These water uses serve to promote the tangible and intangible economic, social, and environmental goals of humankind. The Water Quality Control Plan for the San Diego Basin (RWQCB 2021) prepared by the RWQCB identifies beneficial uses for inland surface waters, coastal waters, reservoirs and lakes, and ground waters.

Los Peñasquitos Lagoon. Existing beneficial uses identified for the Los Peñasquitos Lagoon include Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Biological Habitats of Special Significance (BIOL), Estuarine Habitat (EST), Wildlife Habitat (WILD), Rare, Threatened, and Endangered Species (RARE), Marine Habitat (MAR), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction, and/or Early Development (SPWN).

Los Peñasquitos Creek. Existing beneficial uses identified for the Los Peñasquitos Creek include Agricultural Supply (AGR), Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), and Wildlife Habitat (WILD). Industrial Service Supply (IND) is a potential beneficial use.

Carroll Canyon Creek and Tributaries. Existing beneficial uses identified for the Carroll Canyon Creek and Tributaries included Agricultural Supply (AGR), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), and Rare, Threatened, and Endangered Species (RARE). Industrial Service Supply (IND) and Contact Water Recreation (REC-1) are potential beneficial uses.

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 waters on the list and development of action plans, called Total Maximum Daily Loads, to improve water quality. The San Diego RWQCB is responsible for developing the Section 303(d) list in the San Diego region.

The receiving waters for the CPU area that are currently listed as impaired (based on the current 2016 303[d] list) are Los Peñasquitos Lagoon, Los Peñasquitos Creek, and the Carroll Canyon Creek and Tributaries as described below.

Los Peñasquitos Lagoon. The main pollutant/stressor to the natural function of the lagoon is caused by sedimentation/siltation, with the majority of sediment coming from the Carroll Canyon Creek watershed.

Los Peñasquitos Creek. The main pollutants/stressors in the creek are benthic community effects, phosphates, total dissolved solids, and toxicity.

Carroll Canyon Creek and Tributaries. The main pollutants/stressors in the creek are benthic community effects and toxicity.

2.2.7.4 Groundwater

The principal groundwater basins in the San Diego region are small and shallow. Only a small portion of the region is underlain by permeable geologic formations that can accept, transmit, and yield appreciable quantities of groundwater. In many parts of the region, usable groundwater occurs outside of the principal groundwater basins. There are groundwater-bearing geologic formations in the region that do not meet the definition of an aquifer. Accordingly, the term "groundwater" for basin planning and regulatory purposes, includes all subsurface waters that occur in fully saturated zones within soils, and other geologic formations. Subsurface waters are considered groundwater even if the waters do not occur in an aquifer or an identified groundwater basin.

Most of the groundwater in the region has been extensively developed; the availability of potential future uses of groundwater resources is limited (SDRWQCB 2013). Further development of groundwater resources would probably necessitate groundwater recharge programs to maintain adequate groundwater table elevations.

The CPU area does not lie within an area of appreciable permeable geologic formations, nor does it significantly contribute recharge to any major groundwater basin in San Diego County.

2.2.8 LAND USE

Potential land use impacts associated with implementation of the proposed CPU are discussed in Section 5.8, Land Use, of this PEIR.

2.2.8.1 Existing Land Uses

Existing land uses within the CPU area, as of 2018, are summarized in Table 2-9. Residential use is the most predominant existing land use in the CPU area, occupying approximately 2,736 acres (29%)

of the CPU area, closely followed by Open Space with approximately 2,414 acres (26%). The Industrial land use is the third largest land use occupying approximately 2,006 acres (22%) while Office land uses account for approximately 654 acres (7%) of the CPU. There are approximately 49 acres of Vacant/Undeveloped land in the CPU area.

Table 2-9
Existing Land Use Distribution Summary

Land Use	Land Area (acres[1])	Land Area Percentage of Total CPU Area
Residential	2,736	29.3
Commercial	434	4.6
Office	654	7
Industrial	2,006	21.5
Public and Community Facilities	644	6.9
Open Space	2,414	25.8
Cemetery	213	2.3
Parking Lot	86	0.9
Vacant/Undeveloped	49	0.5
Transportation/Community/Utilities	108	1.2
TOTAL	**9,344[2]**	**100**

Source: City of San Diego 2018.

1 All acres are rounded to the nearest acre.

2 Right-of-way and utilities are excluded from the total.

Average residential density in the CPU area is approximately eight dwelling units per acre, demonstrating the relatively compact suburban form that predominates in the community and includes single-family homes, townhomes, multiplex apartment and condominium complexes. Existing residential uses are generally geographically located east of Camino Santa Fe and north of Carroll Canyon, as well as along Sorrento Valley Boulevard and a small pocket south of Lusk Boulevard and north of Mira Sorrento Place.

Existing non-residential development is generally concentrated in the Sorrento area (east of Camino Santa Fe) and south of Carroll Canyon along Miramar Road. Commercial centers are also located at the intersections of Mira Mesa Boulevard and Camino Ruiz and Black Mountain Road. Miramar College is located east of Black Mountain Road and west of I-15. Other non-residential uses, including schools and public facilities, are scattered throughout the CPU area.

2.2.8.2 General Plan

The City of San Diego General Plan, adopted in 2008, is a comprehensive "blueprint" for San Diego's growth over the next 20 to 30 years. The General Plan provides the broad citywide vision and development framework. Central to the plan is the "City of Villages" strategy, which focuses growth in pedestrian-friendly, mixed-use activity centers linked to an improved regional transit system. As a part of this strategy, the General Plan identifies over 50 community planning areas in the City, including Mira Mesa, for which community plans are to be developed or updated to provide more localized policies. The Mira Mesa Community Plan is intended to provide a vision for and guide future growth and development within Mira Mesa, in concert with the framework of the General Plan. The proposed CPU further expresses the General Plan policies in the context of the Mira Mesa Community with policies that complement the General Plan goals and policies, while also addressing specific community needs. The General Plan provides the citywide planning framework, while the detailed policies and recommendations of the Mira Mesa Community Plan are used during the review and assessment of public and private development projects proposed in Mira Mesa.

2.2.8.3 Adopted Mira Mesa Community Plan

The Mira Mesa Community Plan was adopted in 1992, and last amended in 2020. The adopted Mira Mesa Community Plan covers the same geographic area as the CPU area and identifies key issues, goals, and implementation actions for the community. Specific policies to implement the adopted Mira Mesa Community Plan's vision are contained in its individual plan elements, which include Sensitive Resources and Open Space System, Transportation System, Park and Recreation Facilities, Community Facilities, Residential Land Use, Industrial Land Use, Commercial Land Use, Carroll Canyon Master Plan Area, and Development Criteria. The adopted Mira Mesa Community Plan would be replaced by the proposed CPU. Existing community plan land use is shown on Figure 2-14.

2.2.8.4 Existing Zoning

Zoning implements the land use designations and policies set forth in the General Plan and the community plan through development regulations addressing form and design, density and intensity, and permitted uses. Figure 2-15, Existing Zoning, illustrates the existing underlying zone classifications within the CPU area.

2.2.9 NOISE

Potential noise impacts associated with implementation of the proposed CPU are discussed in Section 5.9, Noise, of this PEIR.

2.2.9.1 Fundamentals of Noise

Noise is defined as unwanted or annoying sound that interferes with or disrupts normal human activities. Although continuous and extended exposure to high noise levels (e.g., through occupational exposure) can cause hearing loss, the principal human response to noise is annoyance. The response of different individuals to similar noise events is diverse and is influenced by the type of noise, perceived importance of the noise, its appropriateness in the setting, time of day, type of activity during which the noise occurs, and sensitivity of the individual.

Sound characteristics include the sound power, which relates to the source of the sound, and sound pressure, which is the sound received at a receptor. Sound power is the amount of energy of sound at the source. Sound pressure is the pressure vibrations caused by the source but perceived at the ear.

Levels of noise are measured in units of decibels (dB). However, several factors affect how the human ear perceives sound: the actual level of noise, frequency, period of exposure, and fluctuations in noise levels during exposure. The human ear cannot equally perceive all pitches or frequencies and noise measurements metrics are therefore adjusted or weighted to compensate for the human lack of sensitivity to low- and high-pitched sounds. This commonly used adjusted unit is known as the A-weighted decibel, or dBA. The A-weighted metric, de-emphasizes very low and very high-pitched sound and is most often applied to noise generated by motor vehicle traffic and construction equipment. Time-averaged noise levels are expressed by the symbol L_{eq}, with a specified duration.

The Community Noise Equivalent Level (CNEL) represents the 24-hour average equivalent noise level at a location, where 5 dBA is added during the evening hours (7 p.m. through 10 p.m.) and 10 dBA is added during the night hours (10 p.m. through 7 a.m.). These adjustments account for increased noise sensitivity in the evening and night periods in order to account for the lower tolerance of individuals to noise during those periods.

2.2.9.2 Fundamentals of Vibration

Vibrations are movement of the ground or air caused by explosions, construction works, railway and road transport, or other forces causing the earth to move. These vibrational motions are measured in terms of peak particle velocity. Construction activities such as pile driving, demolition activity, blasting, and other earth-moving operations have the potential to cause ground vibrations that may cause structural damage to adjacent buildings. Unless there are extreme flaws in pavement surfaces, heavy truck traffic on busy highways rarely cause vibrations strong enough to cause damage though occasionally can generate human annoyance.

2.2.9.3 Existing Noise Environment

Noise Sensitive Land Uses

Noise sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise. Existing NSLUs in the CPU area include medical centers; the Mira Mesa – Branch Library; various hotels, private and public schools, and daycares; as well as residences located in the northeastern, central, and southeastern portions of the CPU area. Industrial and commercial land uses are generally not considered to be sensitive to noise.

Noise Measurements

In the CPU area, the primary noise generator is traffic from two nearby freeways (I-805 and I-15) and major roadways. Mira Mesa's commercial and industrial areas also generate noise during operations. In addition, MCAS Miramar lies immediately to the south of the CPU area and contributes military aircraft noise to the CPU area. Ambient noise levels were measured in the following focus areas for the CPU: Mira Mesa Gateway, Mira Mesa Town Center, and Sorrento Mesa. These measurements help characterize the existing noise environment and assist in determining constraints and opportunities for future development. Twelve 15-minute daytime noise level measurements and three long-term (up to 24 hours) noise measurements were conducted throughout the focus areas. Figure 2-16 shows the noise measurement locations, which are summarized in Table 2-10.

Table 2-10
Mira Mesa Noise Measurements

Focus Area	ID	Location (Street – Nearest landmark)	Date	Time	L_{eq} (1 hour)
Mira Mesa Gateway	ST-1	Hillery Drive – The Home Depot	05/18/2021	9:36am PST	68
	ST-2	Mira Mesa Blvd - Mira Mesa Market/Bucca di Beppo Parking Lot	05/18/2021	12:31pm PST	70
	LT-1	Mira Mesa Blvd - Mira Mesa Market/Bucca di Beppo Parking Lot	05/18–19/2021	12:31pm PST	70
	ST-3	Mira Mesa Blvd – United States Postal Service	05/18/2021	9:10am PST	74
Mira Mesa Town Center	ST-1	Mira Mesa Blvd – Mira Mesa Mall/ Panda Express Parking Lot	05/18/2021	8:44am PST	73
	ST-2	Camino Ruiz – El Pollo Loco Parking Lot	05/19/2021	1:45pm PST	65
	LT-1	Camino Ruiz – El Pollo Loco Parking Lot	05/19–20/2021	1:45pm PST	63

Table 2-10
Mira Mesa Noise Measurements

Focus Area	ID	Location (Street – Nearest landmark)	Date	Time	L_{eq} (1 hour)
Sorrento Mesa	ST-1	Lusk Blvd – West of Pacific Center Blvd/ Qualcomm Building Q	05/20/2021	9:00am PST	69
	LT-1	Lusk Blvd – West of Pacific Center Blvd/ Qualcomm Building Q	05/20–21/2021	2:32pm PST	65
	ST-2	Mira Mesa Blvd – Fountain Plaza Parking Lot	05/18/2021	10:58am PST	68
	ST-3	Mira Mesa Blvd – Sorrento Commerce Park	05/18/2021	11:19am PST	59
	ST-4	Mira Mesa Blvd – Plaza Sorrento Shopping Center	05/19/2021	1:14pm PST	72
Miramar Road	ST-1	Miramar Road – Shell Gas Station	05/21/2021	3:43pm PST	73
Black Mountain Road	ST-1	Black Mountain Road – Intersection of Black Mountain Road and Maya Linda Road	05/21/2021	3:05pm PST	65
	ST-2	Black Mountain Road – Little India Shopping Center	05/21/2021	3:25pm PST	59

Notes:
PST = Pacific Standard Time; ST – Short-term; LT – Long-term.
L_{eq} = 1-hour equivalent noise level

Table 2-11 shows measured noise levels at the actual distance of the meter, and at modeled levels at 50, 100, and 150 feet from the roadway.

Table 2-11
Noise Levels at 50, 100, and 150 feet

ID[1]	Location (Street – Nearest landmark)	Measurement Distance (ft)	L_{eq} (1 hour) at Measure Point dBA	L_{eq} (1 hour) at 50 feet (dBA)	L_{eq} (1 hour) at 100 feet (dBA)	L_{eq} (1 hour) at 150 feet (dBA)
Mira Mesa Gateway						
ST-1	Hillery Drive – The Home Depot	10	68	54	48	45
ST-2	Mira Mesa Blvd - Mira Mesa Market/Bucca di Beppo Parking Lot	60	71	73	67	63

Table 2-11
Noise Levels at 50, 100, and 150 feet

ID[1]	Location (Street – Nearest landmark)	Measurement Distance (ft)	L_{eq} (1 hour) at Measure Point dBA	L_{eq} (1 hour) at 50 feet (dBA)	L_{eq} (1 hour) at 100 feet (dBA)	L_{eq} (1 hour) at 150 feet (dBA)
ST-3	Mira Mesa Blvd – United States Postal Service	15	74	64	58	54
LT-1	Mira Mesa Blvd - Mira Mesa Market/Bucca di Beppo Parking Lot	60	70	71	65	62
Mira Mesa Town Center						
ST-1	Mira Mesa Blvd – Mira Mesa Mall/ Panda Express Parking Lot	20	73	65	59	55
ST-2	Camino Ruiz – El Pollo Loco Parking Lot	70	65	68	62	58
LT-1	Camino Ruiz – El Pollo Loco Parking Lot	70	63	66	60	56
Sorrento Mesa						
ST-1	Lusk Blvd – West of Pacific Center Blvd/ Qualcomm Building Q	10	69	61	55	51
ST-2	Mira Mesa Blvd – Fountain Plaza Parking Lot	70	68	60	54	50
ST-3	Mira Mesa Blvd – Sorrento Commerce Park	70	59	62	56	53
ST-4	Mira Mesa Blvd – Plaza Sorrento Shopping Center	30	72	64	58	55
LT-1	Lusk Blvd – West of Pacific Center Blvd/ Qualcomm Building Q	60	65	57	51	48
Miramar Road						
ST-1	Miramar Road – Shell Gas Station	20	73	69	63	59
Black Mountain Road						
ST-1	Black Mountain Road – Intersection of Black Mountain Road and Maya Linda Road	70	65	68	62	58
ST-2	Black Mountain Road – Little India Shopping Center	20	59	62	56	53

Notes: ft = feet; dBA = A-weighted decibel; L_{eq} = 1-hour equivalent noise level

Existing Airport Noise Contours

The CPU area is affected by military aircraft noise generated from operations at MCAS Miramar. Fighter jets, including F-18E/F and F-35 aircraft, flying on the Julian and Seawolf departure routes dominate the noise contours emanating from MCAS Miramar. Aircraft generally depart MCAS Miramar to the west on one of these two routes. The Julian departure route takes off the runway and turns north over Mira Mesa. The Seawolf departure route takes aircraft west over the ocean.

Figure 2-17 shows the CPU area and the MCAS Miramar noise contours. Noise contours 65 dBA CNEL or greater extend from MCAS Miramar to as far as Mira Mesa Boulevard in the CPU area. Most of the land in the CPU area north of MCAS Miramar is used for industrial or commercial purposes, which lack noise-sensitive receptors. There are no residential areas within the 65 dBA CNEL noise contours.

2.2.10 PUBLIC SERVICES AND FACILITIES

Potential impacts to public services and facilities associated with implementation of the proposed CPU are discussed in Section 5.10, Public Services and Facilities, of this PEIR. Existing public facilities that serve the CPU area are described below and their locations are shown on Figure 2-18, Existing Public Facilities.

2.2.10.1 Police Protection

The San Diego Police Department (SDPD) provides police services including patrol, traffic, investigative, records, laboratory, and support services to the City (City of San Diego 2021). The CPU area is currently patrolled by Beats 242, 243, and 931 in the Northeastern Division and Northwestern Division of the San Diego Police Department. Beat 242 covers the CPU area north of Miramar Road from I-15 to Camino Santa Fe. Beat 243 covers the CPU area from Camino Santa Fe to I-805. Beat 931 covers the southern boundary of the CPU area, north of Miramar Road.

The San Diego Police Department has personnel on duty and available to respond to calls for service 7 days a week, 24 hours a day. The San Diego Police Department currently uses a multilevel priority dispatch system, with different response-time guidelines for different call types. Calls for service range from level “1 priority,” meaning life-threatening/suspicious activity, to level “4 priority” related to non-life-threatening/suspicious activity. Priority E calls, meaning imminent threat to life, receive the highest priority.

2.2.10.2 Fire Protection

Fire protection services to the CPU area are provided by the San Diego Fire-Rescue Department. In addition to fire protection services, the San Diego Fire-Rescue Department also provides emergency medical services.

Fire protection services in Mira Mesa are provided by three San Diego Fire-Rescue Department stations: Fire Stations 38, 41, and 44. San Diego Fire Station 38 provides fire protection and advanced life support services to a majority of the CPU area and is located at 8441 New Salem Street in the central portion of the CPU area. Fire Station 38 was originally built in 1930 and serves Mira Mesa and surrounding areas, totaling 7.55 square miles (City of San Diego 2022). This station includes a fire engine, a brush engine, and a paramedic unit/medic rescue rig (City of San Diego 2022).

Fire Station 41 is located at 4914 Carroll Canyon Road, at the western boundary of the CPU area. Fire Station 42 was originally built in 1990 and serves Sorrento Valley and surrounding areas, totaling 10.2 square miles. This station is equipped with one fire engine, one paramedic unit/medic rescue rig, and one urban search and rescue rig (City of San Diego 2022)

Fire Station 44 is located at 10011 Black Mountain Road, in the eastern portion of the CPU area. This station serves the eastern portion of the CPU area, totaling 6.58 square miles. This station is equipped with one fire engine, one aerial truck, and one battalion chief's vehicle (City of San Diego 2022).

Table 2-12, Incident Runs for Fire Stations Serving the CPU Area for Calendar Year 2020, shows the number of incident runs for Fire Stations 38, 41, and 44 for Calendar Year 2020.

Table 2-12
Incident Runs For Fire Stations Serving The CPU Area For Calendar Year 2020

	Fire Station 38			Fire Station 41			Fire Station 44		
Call Category	*Engine 38*	*Medic 38*	*Brush 38*	*Engine 41*	*USAR 41*	*Medic 41*	*Engine 44*	*Truck 44*	*Battalion 7*
Fire	126	—	—	139	196	—	135	79	160
Rescue	23	—	—	28	275	—	36	31	109
Emergency Medical Response	1597	—	—	710	191	—	1,361	385	8
Urgent Medical Response	76	—	—	18	3	—	48	15	2
Non-emergency Medical Response	13	—	—	5	—	—	4	1	—
Hazard	164	—	—	359	7	—	204	37	32
Service	2	—	—	6	1	—	5	5	—

Source: City of San Diego 2020b

Adopted Fire Station Location Measures

To direct fire station location timing and crew size planning as the community grows, the adopted fire unit deployment performance measures based on population density zones are listed in Table 2-13, Deployment Measures for San Diego City Growth by Population Density per Square Mile.

Table 2-13
Deployment Measures for San Diego City Growth By Population Density Per Square Mile

	Structure Fire Urban Area >1,000 people/ sq. mi.	Structure Fire Rural Area 1,000 to 500 people/sq. mi.	Structure Fire Remote Area 500 to 50 people/sq. mi.	Wildfires Populated Area Permanent Open Space Areas
1st Due Travel Time	5	12	20	10
Total Reflex Time	7.5	14.5	22.5	12.5
1st Alarm Travel Time	8	16	24	15
1st Alarm Total Reflex	10.5	18.5	26.5	17.5

Source: City of San Diego 2021.

Aggregate Population Definitions

Where more than 1 square mile is not populated at similar densities, and/or a contiguous area with different zoning types aggregate into a population "cluster," the standards (as shown in Table 2-14, Aggregate Population Standards) guide the determination of response time measures and the need for fire stations.

Table 2-14
Aggregate Population Standards

Area	Aggregate Population	First-Due Unit Travel Time Goal
Metropolitan	>200,000 people	4 minutes
Urban-Suburban	<200,000 people	5 minutes
Rural	500-1,000 people	12 minutes
Remote	< 500 people	>15 minutes

Source: City of San Diego 2021.

The City's emergency medical services also has ambulances, paramedics, and emergency medical technicians who respond to emergency calls. There are four levels of calls. Level 1 is the most

serious (e.g., heart attack, shortness of breath), and the closest fire engine and an advance life support ambulance respond to this type of call. The fire crew must respond within 8 minutes of being dispatched pursuant to City requirements, and the ambulance must respond within 12 minutes for Level 1 (the most serious) calls. A Level 2 call is the next most serious; however, these calls are either reprioritized up to a Level 1 call or down to a Level 3 call. Only the advance life support ambulance responds to Level 2 calls; no fire station staff or equipment are deployed. The response time for a Level 2 call is 12 minutes, the same as for a Level 1 call. For a Level 3 call (e.g., someone having extended flu-like symptoms), either a basic or advance life support ambulance would respond. A basic ambulance is staffed with two emergency medical technicians, whereas an advance life support ambulance is staffed with one paramedic and one emergency medical technician. The response time for a Level 3 call is 18 minutes. For a Level 4 call, which is not an emergency (e.g., the patient could have driven themselves to a hospital), a basic ambulance would respond within 18 minutes of being dispatched.

2.2.10.3 Parks and Recreation

The CPU area is served by a community park, athletic field house, an aquatics facility, and a number of recreation centers, neighborhood parks, joint-use parks, trails, and open space areas. Existing parks and recreation facilities are shown on Figure 2-19. The performance standards for park space in the City are outlined in the City's Parks Master Plan (City of San Diego 2021). The Parks Master Plan establishes a Recreational Value-Based Park Standard (Value Standard) as the guideline for providing adequate park space. The Value Standard requires 100 Recreation Value-Based points per 1,000 residents. For the proposed CPU area buildout population estimate of 143,000 residents in 2050, approximately 14,300 Recreational Value Points would be required to meet this standard.

2.2.10.4 Schools

Public education in the CPU area is provided by the San Diego Unified School District (SDUSD), which serves students from kindergarten through 12th grade. Table 2-15, School Enrollment, shows the most recent enrollment numbers available for the public schools (including San Diego Miramar College) that serve student-aged populations within the CPU area.

Table 2-15
School Enrollment

School	Address	Enrollment (2018–2019)
Sandburg Elementary	11230 Avenida Del Gato	571
Erickson Elementary	11174 Westonhill Drive	692
Hage Elementary	9750 Galvin Avenue	696
Hickman Elementary	10850 Montongo Street	424
Jonas Salk Elementary	7825 Flanders Drive	702
Mason Elementary	10340 San Ramon Drive	552
Walker Elementary	9225 Hillery Drive	389
Challenger Middle	10810 Parkdale Avenue	976
Wangenheim Middle	9230 Gold Coast Drive	941
Mira Mesa High	10510 Marauder Way	2,338
San Diego Miramar College	8290-B Mira Mesa Boulevard	10,108 (projected)
Audeo Charter (Independent Study)	7250 Mesa College Drive	416
TRACE Alternative School	8290-B Mira Mesa Boulevard	471
Twain Mesa Senior High (Alternative)	10444 Reagan Road	234

Source: SDUSD 2022

2.2.10.5 Libraries

The CPU area is within the service area of the City's Library System. Each service area for a library is two miles, although the area served depends on the proximity and access to residential, commercial, and civic uses, as well as roadways and transit. The City's General Plan establishes a minimum of 15,000 square feet of dedicated library space for branch libraries. In addition, branch libraries should ideally serve a resident population of 30,000.

The Mira Mesa Library, located at 8405 New Salem Street, serves the CPU area. The library was constructed in 1994 and includes community rooms and play areas. Other nearby libraries include the Scripps Miramar Ranch Library to the east of the CPU area.

2.2.11 PUBLIC UTILITIES

Potential impacts to public utilities associated with implementation of the proposed CPU are discussed in Section 5.11, Public Utilities, of this PEIR.

The Mira Mesa community is served by a variety of public facilities and services, including utilities such as water and sewer, and solid waste services. Many of the infrastructure needs for these services are managed through the City's Capital Improvements Program. The City conducts a biannual review of public services, facilities, and utilities implementation in conjunction with the

budget/Capital Improvements Program review cycle. As part of this review process, the City assesses the need for new or expanded services and public facilities to provide appropriate services and infrastructure commensurate with population increase.

Public utilities include public water, energy, sewer, stormwater, and solid waste collection and recycling that are available to serve the CPU area. A description of the existing conditions of each of these public utilities is provided below.

2.2.11.1 Water Supply

City of San Diego

The City's Public Utilities Department (PUD) provides water services to 1.3 million customers through a water system that serves over 200 square miles of developed land including the CPU area. The City's PUD purchases approximately 85%–90% of its water from the San Diego County Water Authority (Water Authority), the region's water wholesaler, which is imported from other areas such as northern California and the Colorado River.

The City's water system consists of a large network of infrastructure connecting residents and businesses to the water supply. The City's water system includes 9 surface raw water storage reservoirs, 3 water treatment plants, 32 potable water storage facilities, approximately 3,300 miles of water transmission and distribution pipelines, and 49 water pump stations. The City runs three water treatment operations—Otay Water Treatment Plant, Alvarado Water Treatment Plant, and Miramar Water Treatment Plant—with a total of approximately 450 million gallons per day capacity.

The City also runs two recycled water facilities. The North City and South Bay Water Reclamation Plants were built to treat wastewater to a level that would be approved for non-potable uses such as landscape irrigation and manufacturing. These facilities provide water to City residents and businesses, as well as other jurisdictions and water districts.

Established in 1985, the PUD's Water Conservation Program was established to reduce San Diego's dependence on imported water. Savings are achieved through the implementation of programs, policies, and ordinances promoting water conservation practices. All residential, commercial, and industrial buildings are required to be certified as having water-conserving plumbing fixtures in accordance with SDMC Chapter 14, Article 7, Division 4. The PUD works in collaboration with the MWD and the Water Authority to formulate new conservation initiatives, and annually checks progress toward conservation goals.

The City's 2020 Urban Water Management Plan (UWMP) was developed to serve as the City's overarching water resources planning document to address the City's water system, water demand,

water supply resources, conservation efforts, and historic and projected water use. This UWMP was prepared in accordance with the Urban Water Management Act, requiring urban water suppliers to adopt and submit a plan every 5 years to the California Department of Water Resources. Every urban water supplier providing water for municipal purposes to more than 3,000 connections or supplying more than 3,000 acre-feet of water annually must comply.

The PUD also adopted the Long-Range Water Resources Plan in 2013. This plan provides guidance and input on alternative strategies for meeting San Diego's water needs through 2035 by addressing concerns such as population growth and water resource diversification. The plan details existing water supplies, new water supply opportunities, objectives, performance measures, and conclusions and recommendations.

In accordance with the Conservation Element of the City's General Plan (policy CE-A.11), development projects are encouraged to implement sustainable landscape design and to use recycled water to the maximum extent feasible in development projects to aid in water conservation (City of San Diego 2021).

The Metropolitan Water District of Southern California

The Metropolitan Water District (MWD) was formed in 1928 to develop, store, and distribute supplemental water in Southern California for domestic and municipal purposes. MWD is a wholesale supplier of water to its member agencies, which include 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 UWMP 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 most recently updated in 2015 to accommodate recent changes in retail demands, water use efficiency, local and imported supplies, and to update resource targets. The IWRP sets reliability targets to identify developments in imported and local water supply and 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 Regional UWMP, 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 San Diego County Water Authority (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, the PUD purchases water from the Water Authority for retail distribution within its service area.

The Water Authority's 2020 UWMP was adopted by the Water Authority Board in June 2021 in accordance with state law and the Regional UWMP. The 2020 UWMP 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 Water Authority also prepares an annual water supply report providing updated documentation on existing and projected water supplies.

2.2.11.2 Water, Sewer, and Stormwater Infrastructure

Water Distribution System

The City's PUD provides water service to the CPU area via the City's Miramar Water Treatment Plant and/or the Water Authority's Second Aqueduct Pipeline. Water is distributed from these facilities to the CPU area in a system of large water pipelines that connect to numerous distribution main lines within the community.

The water distribution system in the CPU area includes seven pressure zones, including Mercy High (750 pounds per square inch [psi]), Miramar (712 psi), Mira Mesa (625 psi), North City (610 psi), Carroll Ridge (610 psi), El Camino (470 psi), and Lusk Park (470 psi). The main pressure zone in the north and central portions of the community is the Mira Mesa zone. The pressure zone to the east and south is the Miramar zone and to the west is the North City zone.

Wastewater Collection System

The City's PUD provides wastewater collection, treatment, reclamation, and disposal services to the San Diego region, including the CPU area, through its Metropolitan Sewerage System. The Metropolitan Sewerage Sub-System treats the wastewater from the City of San Diego and 15 other cities and districts from a 450 square-mile area with a population of over 2.2 million. The system treats an average of 180 million gallons of wastewater each day. Sewage collected is conveyed and processed through a sewer infrastructure system and ultimately discharges at the Point Loma Wastewater Treatment Plant.

A programmatic analysis of the existing wastewater collection system (sewer) was performed to support this PEIR (Appendix J). Based on the information in Appendix J, the majority of wastewater

flows generated within the CPU area are conveyed outside of the CPU area boundary via the Miramar Trunk sewer. Outside the CPU area boundary, the sewer flows continue to the Rose Canyon Trunk Sewer and the North Metro Interceptor, ultimately to the Point Loma Wastewater Treatment Plant. A portion of the sewer flows within the CPU area are also conveyed to the North City Water Reclamation Plant.

Stormwater Conveyance

The CPU area is mostly developed and has extensive impervious surfaces. Stormwater runoff originating in the CPU area is conveyed to receiving waters via streets, gutters, drain pipes, cross gutters, open channels, and other storm drain systems. The majority of the storm drain network consists of residential and commercial drainage structures that are conveyed to larger storm mains that contribute stormwater to the Carroll, Lopez, Flanders, and Los Peñasquitos Canyons. The City maintains this infrastructure through capital improvement investments, operations, and maintenance.

2.2.11.3 Solid Waste Management

The City provides refuse, recycling, and yard waste collection services to some residents per the People's Ordinance (SDMC Section 66.0127). These services are provided without a fee primarily to single-family homes, and also some multifamily facilities, using General Fund monies. Residences on private streets, commercial land uses, and certain multifamily residences are not served by the City and must obtain the services of one of the City's franchised haulers.

Solid waste generated in the CPU area is collected by City forces or franchised haulers and taken to an active landfill permitted to accept solid waste: West Miramar Sanitary Landfill (Miramar Landfill), Otay Landfill, and Sycamore Sanitary Landfill (Sycamore Landfill). Miramar Landfill and Sycamore Landfill are located within the City. Otay Landfill is located within an unincorporated area within the City of Chula Vista. The Greenery at the Miramar Landfill provides the majority of organic waste processing capacity.

Per Assembly Bill 341, 75% of waste must be diverted from disposal in landfills. Of the remaining 25% of residuals requiring disposal, 15 years of landfill disposal capacity is the target. Miramar Landfill is permitted to receive 8,000 tons per day, and, on average, it receives less than 1,000,000 tons per year. The anticipated closure date for Miramar Landfill is 2031. Sycamore Landfill is permitted to receive a maximum of 5,000 tons per day and is expected to operate until 2042. Otay Landfill is permitted to receive 6,700 tons per day and is expected to serve the region through 2030 (CalRecycle 2022).

2.2.11.4 Energy

Electricity

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 gas and electric services to the CPU area. SDG&E is regulated by the California Public Utilities Commission. The California Public Utilities Commission sets the gas and electricity rates for SDG&E and is responsible for making sure that California utilities customers have safe and reliable utility service at reasonable rates, protecting utilities customers from fraud, and promoting the health of California's economy.

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 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.

Table 2-16, SDG&E 2020 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 31% of its energy from renewable resources in 2020 (SDG&E 2020). As directed by the California Renewables Portfolio Standard in Senate Bill 1078, SDG&E and other statewide energy utility providers are targeted to achieve a 33% renewable energy mix by 2020 and 50% by 2030. Note that the renewable percentage shown in Table 2-16 does not reflect Renewables Portfolio Standard compliance, which is determined using a different methodology.

Table 2-16
SDG&E 2020 Power Mix

Energy Source	Power Mix (%)
Renewables	31
Biomass	2.1
Solar	17.9
Wind	11
Large Hydroelectic	1.7
Natural Gas	26.2
Nuclear	0.2
Unspecified Power	40.9

Source: SDG&E 2020

However, the City's CAP establishes a goal to achieve 100% renewable energy on the citywide electrical grid by 2035. Additionally, Title 24 of the California Public Resources Code contains mandated energy efficiency requirements for all new developments.

In September 2019, the cities of San Diego, Chula Vista, Encinitas, La Mesa, and Imperial Beach adopted an ordinance and resolution to form San Diego Community Power (SDCP), a California joint powers agency. In 2021, the County of San Diego and National City voted to join SDCP. SDCP is a community-owned organization that provides affordable clean energy for the San Diego region. SDCP is a Community Choice Aggregation (CCA) program, which partners with SDG&E. SDCP pools the electricity needs of its customers and purchase power on their behalf. SDG&E continues to deliver the electricity through its existing power lines, and will continue to provide meter reading, billing, and line maintenance services to customers.

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 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.

2.2.11.5 Communications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Spectrum, and other private, 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. Individual projects consisting of more than four lots are subject to SDMC Section 144.0240, which requires most privately owned utility systems and service facilities to be placed underground.

2.2.12 TRANSPORTATION

Potential transportation impacts associated with implementation of the proposed CPU are discussed in Section 5.12, Transportation, of this PEIR.

2.2.12.1 Roadways and Access

Mira Mesa is located in the north-central portion of the City of San Diego with two freeways within or adjacent to the CPU area, I-805 on the west and I-15 on the east. These freeways provide regional access to the CPU area. Key roadways within the CPU area that are maintained by the City of San Diego include Mira Mesa Boulevard, Miramar Road, Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Camino Santa Fe. The freeways and roadways contribute to the community's automobile-oriented transportation network. Although the CPU area is readily accessible by freeway, travel to specific points within the community by means of the surface street system can be difficult during the peak hours. In the morning and evening peak hours, congestion occurs on the freeways as workers living in other communities travel to and from jobs in the CPU area. In the evening, the surface street system backs up due to commuters accessing the freeways, plus motorists coming into the CPU area. Figure 2-20 shows the existing roadway network in the CPU area.

2.2.12.2 Bicycle Facilities

Existing bicycle facilities within the CPU area include bicycle lanes (Class II) and bicycle routes (Class III). Class II bike lanes are located in the CPU area along Mira Mesa Boulevard, Sorrento Valley Boulevard, Calle Cristobal, Miramar Road, Black Mountain Road, Mercy Road, Camino Santa Fe, and Camino Ruiz. Class III bike routes are located along Gold Coast Drive. Existing bicycle facilities are shown on Figure 2-21.

2.2.12.3 Public Transportation

Mira Mesa is relatively well-served by transit, with most of the community within 0.5 miles of a transit stop, except for residences along Sorrento Boulevard and Calle Cristobal. Ten bus lines connect Mira Mesa to the surrounding communities, including two Rapid Routes that connect to job centers in Downtown and University Town Center, and two limited-service shuttles that connect Sorrento Mesa and Carroll Canyon to the Sorrento Valley Coaster Station and future San Diego Association of Governments Mobility Hub, respectively. Except for the two shuttle routes to and from the Sorrento Valley Coaster Station, all of the routes running through Mira Mesa connect, at some point, to the Miramar College Transit Station. Existing transit options include MTS routes 20, 21, 110, 235, 237, 921, 921a, 964, 972, and 973. Existing transit is shown on Figure 2-22.

2.2.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

Potential visual effects and neighborhood character impacts associated with implementation of the proposed CPU are discussed in Section 5.13, Visual Effects and Neighborhood Character, of this PEIR.

2.2.13.1 Visual Setting

Topographically, Mira Mesa lies on a relatively flat mesa top with steep slopes on the western boundary of the CPU area. Mira Mesa is characterized by steep slopes on the west overlooking Sorrento Valley, trending eastward to a series of flat mesas with steep-sided canyons. Elevations on the mesa portion of the CPU area range from approximately 50 feet above mean sea level near the westerly portion of Los Peñasquitos Canyon to 850 feet above mean sea level at Canyon Hills Park in the northeast portion of the CPU area. Elevations of the mesas range from 350 feet to 500 feet from west to east. Most development has occurred on relatively flat topography atop the mesa areas.

Three major canyons traverse the CPU area, including Carroll Canyon in the central portion of the CPU area, and Lopez Canyon and Los Peñasquitos Canyon located near the northern boundary of the CPU area. These areas are characterized by sloping terrain and riparian drainages vegetated with various species of plants and trees along the canyon floors. In addition to the major canyons, many tributary drainages extend in a general north-south direction creating small, separate mesas with very limited access. The Los Peñasquitos Canyon features a perennial stream, while several canyons have intermittent streams, such as Carroll Creek in Carroll Canyon. The canyons are part of the community's open space areas and MHPA and provide public scenic views via public trails and pocket parks.

Mira Mesa is a developed, urbanized community, and the CPU area is predominantly developed with residential, mixed-use, office/research and development, light industrial uses and, to a lesser extent, with other types of land uses such as retail commercial and educational. In general, Mira Mesa's street blocks are large, termed "superblocks", and intended to be traversed by automobile, with pedestrian-oriented development limited to commercial and mixed-use residential areas. Residential development is the largest area occupying approximate 2,736 acres and is primarily featured in the central eastern portion of the CPU area, including east of Camino Santa Fe and north of Carroll Canyon, as well as along Sorrento Valley Boulevard and a small pocket south of Lusk Boulevard and north of Mira Sorrento Place. Residences in the CPU area reflect a relatively compact suburban form that includes single-family homes (the largest portion of housing), townhomes, multiplex apartment and condominium complexes.

Natural scenic resources can be found primarily in the CPU area's open space areas and canyons within the MHPA. Open Space land use is the second largest area occupying 2,414 acres (Table 2-9) primarily located along the northern boundary of the CPU area and in canyons located in the central and southern portions of the CPU area.

Existing non-residential development is generally located east of Camino Santa Fe and south of Carroll Canyon. Industrial development, which occupies the third largest area of approximately

2,006 acres, is primarily concentrated along the southern boundary and within the western central portion of the CPU area. Commercial centers are also located in the central eastern portion of the CPU area along Black Mountain Road and in the southern portion north of Miramar Road. Other non-residential uses, including schools and public facilities, are scattered throughout the CPU area.

Additionally, major transportation facilities characterize the CPU area given the I-805 and I-15 freeways that frame the community on the western and eastern borders, respectively. The freeways provide expansive, hardscaped linear elements that provide regional access to the CPU area and further contribute to its developed nature. Four primary streets cross the CPU area in the north-south direction: Vista Sorrento Parkway, Camino Santa Fe, Camino Ruiz, and Black Mountain Road. Three primary roads cross the CPU area in the west-east direction: Sorrento Valley Boulevard/Calle Cristobal, Mira Mesa Boulevard, and Miramar Road. The secondary and local street networks include many cul-de-sacs and loops, which somewhat restrict fluidity of movement across Mira Mesa's neighborhoods.

2.2.13.2 Urban Form

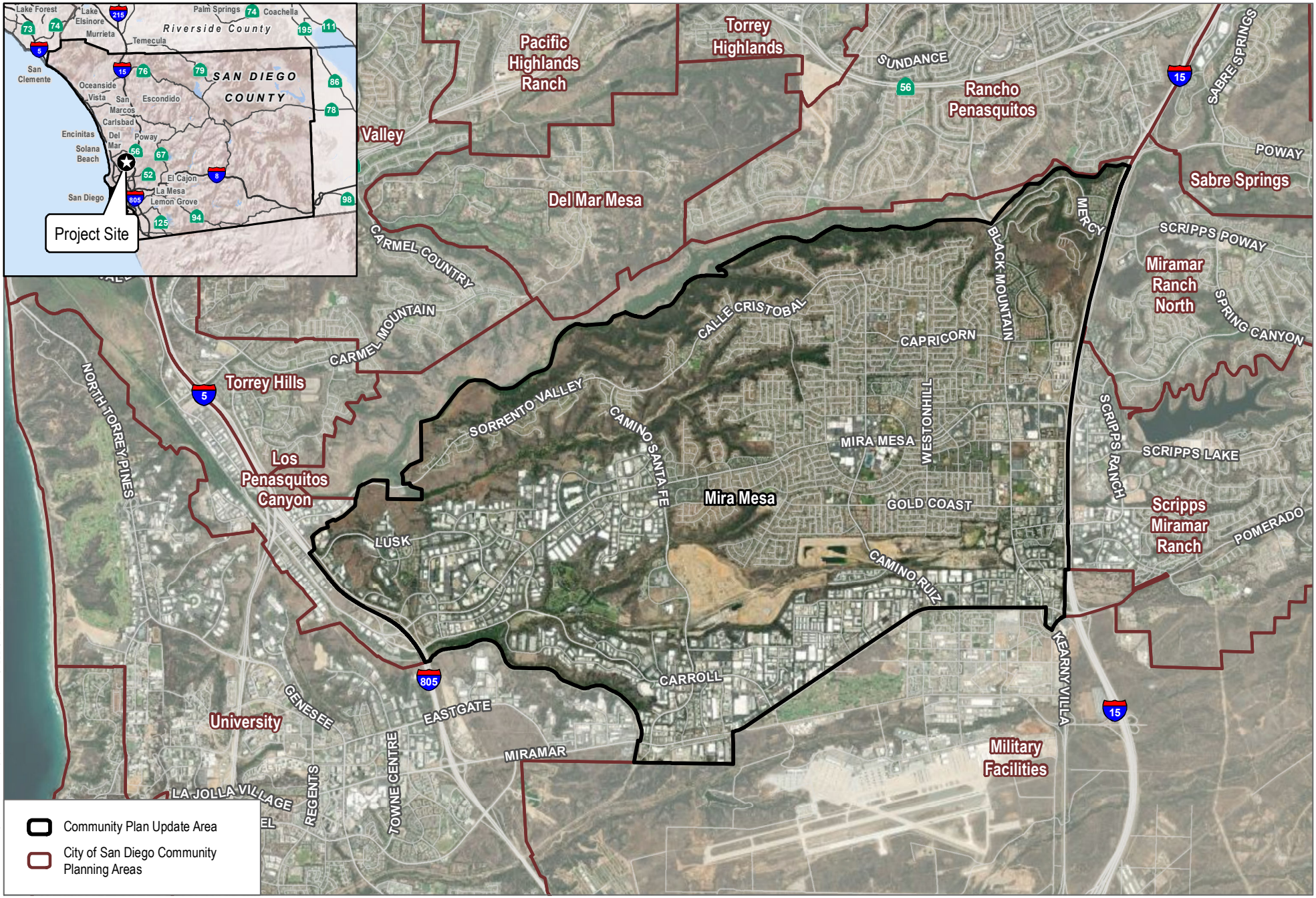
The presence of freeways and major arterial corridors contributes to the urban form of the community as they create an emphasis on automobile use. Visual elements are positioned based on this linear configuration. Signage, landscaping, and surface parking lots line the roadways and buildings are set back from the roadways but are generally arranged parallel to the roadway alignments. Sources of light currently include those typical of an urban community, such as building lighting for residential and non-residential land uses, parking lot lighting, roadway infrastructure lighting, and signage.

There are distinct districts with varied building forms within Mira Mesa. These are defined by their use characteristics, including single-family residential, multifamily residential, retail/commercial, office, light industrial, and community college areas, as well as by their location in Mira Mesa. In general, residential areas are located on flat mesa tops in the central and northern portions of the CPU area, with one- to two-story single-family homes as the dominant type of housing. Multifamily residential areas feature multistory clusters of buildings that are generally concentrated closer to commercial and service centers.

Office areas include taller buildings with varied architecture and are generally situated in portions of the CPU area with steeper slopes, such as Sorrento Mesa. Retail and commercial areas are generally automobile-oriented, with large parking areas between the stores and the streets. Newer developments have incorporated trees within the parking lots and were planned with cohesive architecture, building materials, signs, and landscaping.

2.2.13.3 Scenic Views and Resources

Scenic natural views are provided by canyons and open space in the CPU area, which provide visual relief from the built environment. As described above, various canyons, such as the Los Peñasquitos and Lopez Canyons, are part of the community's open space areas and Multi-Habitat Planning Area and provide scenic views via public trails and pocket parks. However, the existing Mira Mesa Community Plan does not identify prominent view corridors and the CPU area does not contain any designated scenic vistas or notable visual landmarks. No designated scenic highways occur within or adjacent to the CPU area. Although the CPU area sits atop a mesa, it does not contain any designated scenic vistas. The possibilities for vistas and scenic views within some areas of the CPU area are largely constrained by the location and the topography of the CPU area and the physical and visual barriers formed by existing development.



SOURCE: DigitalGlobe 2017; SANGIS

SD Planning

0 2,750 5,500 Feet

FIGURE 2-1

Regional and Vicinity Map

Mira Mesa Community Plan Update PEIR

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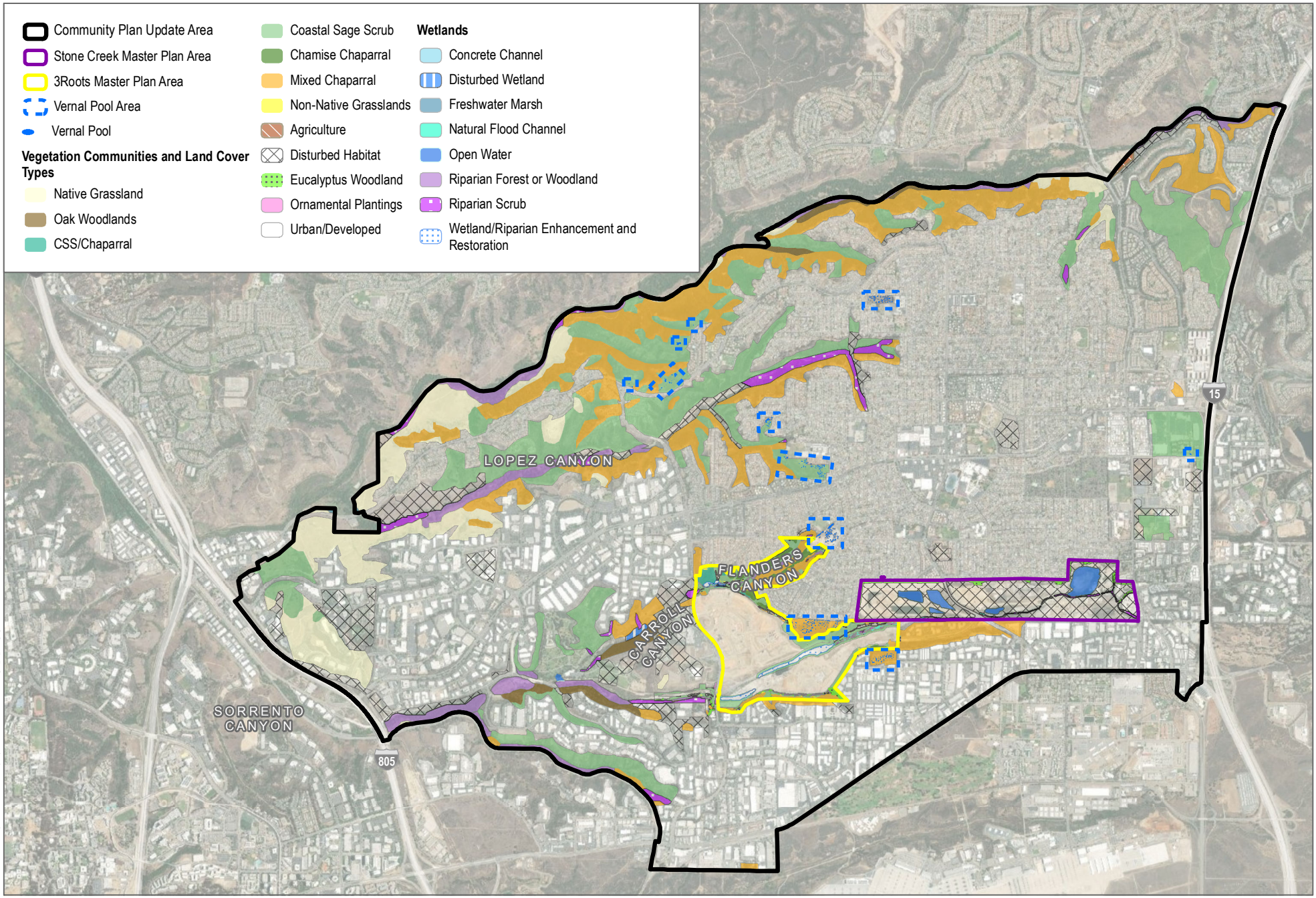

SOURCE: DigitalGlobe 2017; SANGIS

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FIGURE 2-2

Existing Vegetation Communities and Land Cover Types

Mira Mesa Community Plan Update PEIR

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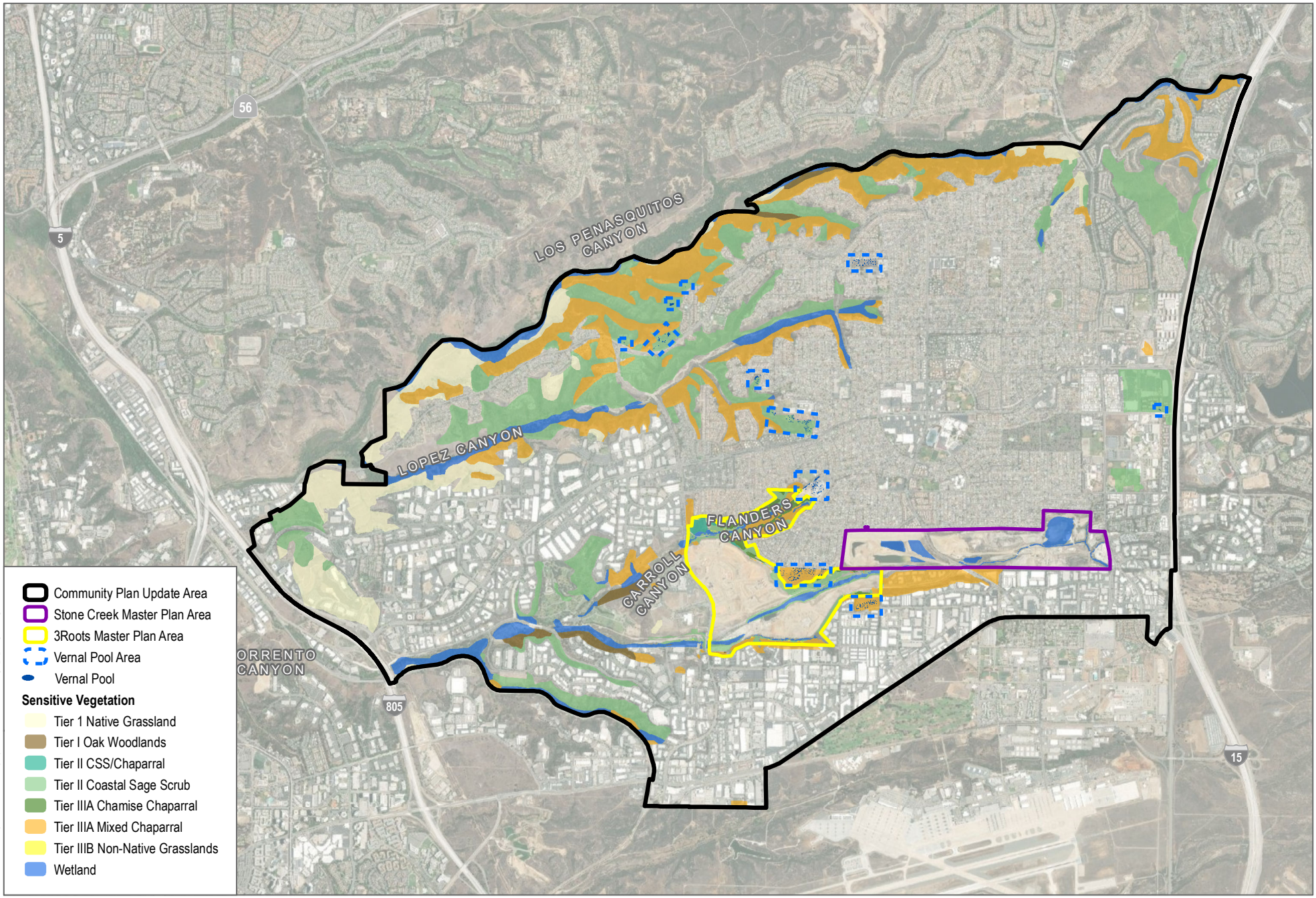

SOURCE: DigitalGlobe 2017; SANGIS

SD Planning

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FIGURE 2-3

Existing Sensitive Vegetation Communities

Mira Mesa Community Plan Update PEIR

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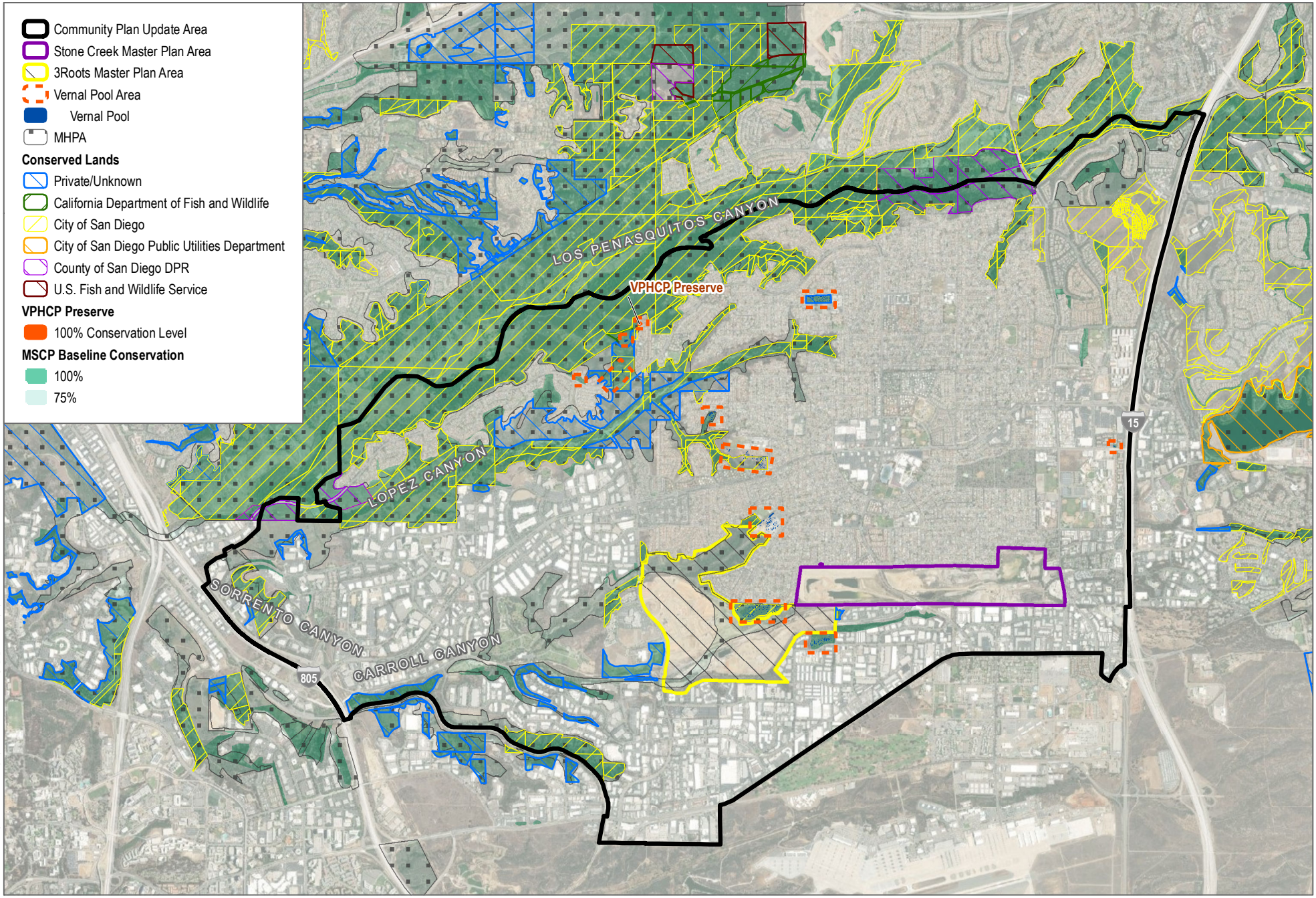

SOURCE: DigitalGlobe 2017; SANGIS

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FIGURE 2-4

Conserved Lands and Open Space

Mira Mesa Community Plan Update PEIR

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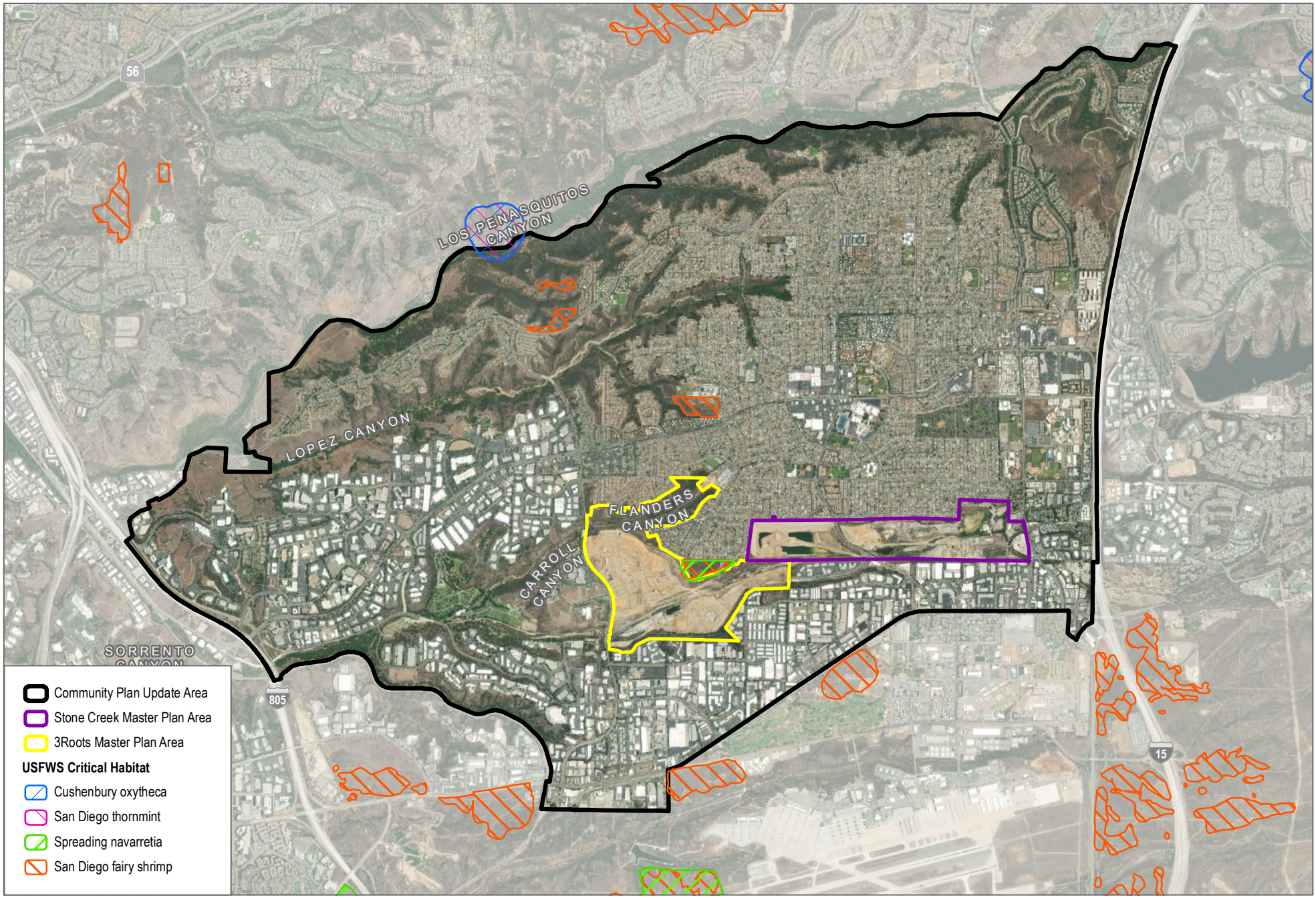

SOURCE: DigitalGlobe 2017; SANGIS; USFWS 2019

SD Planning

0 2,150 4,300 Feet

FIGURE 2-5

USFWS Critical Habitat

Mira Mesa Community Plan Update PEIR

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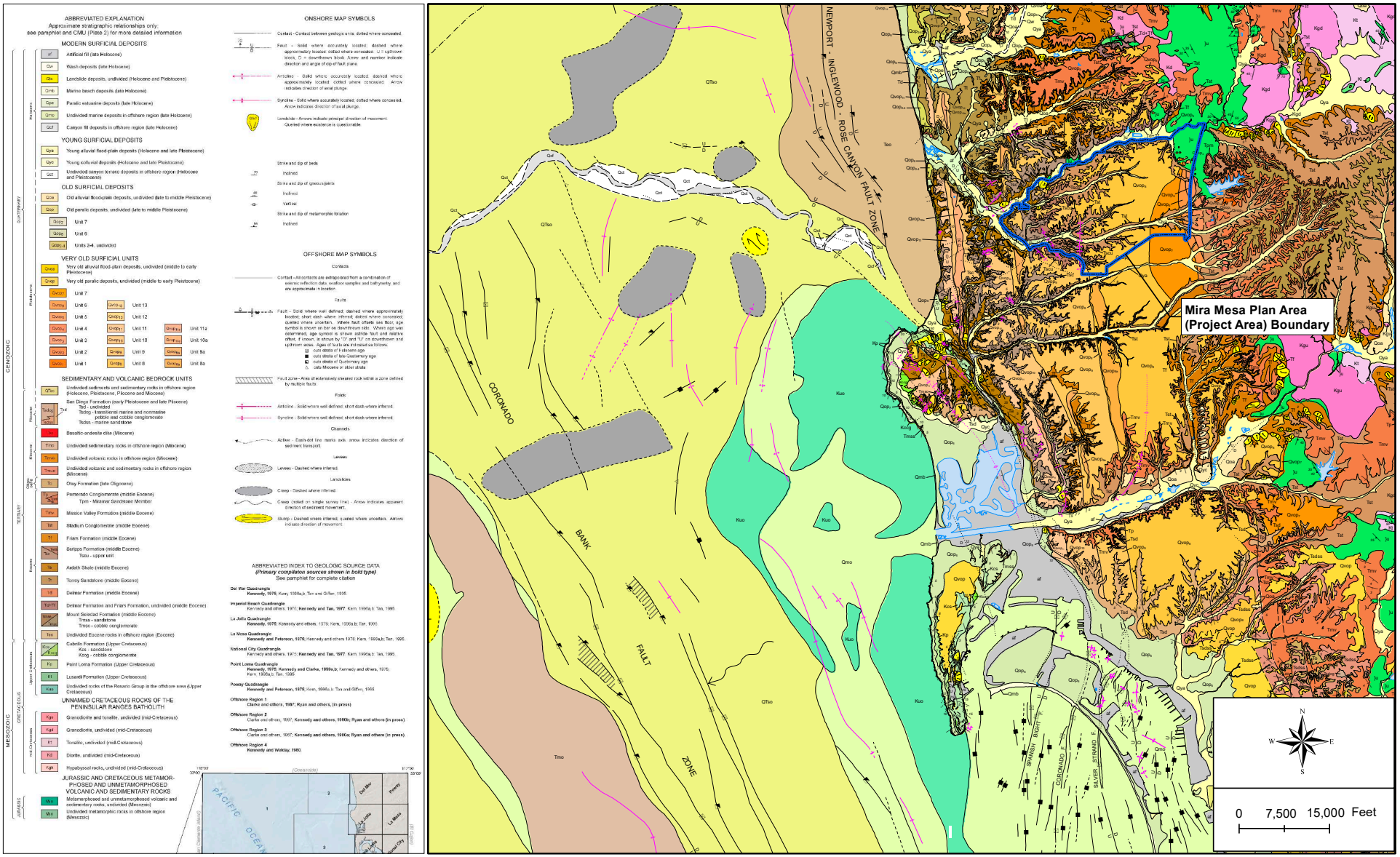

SOURCE: The Bodhi Group

SD Planning

FIGURE 2-6

Regional Geology

Mira Mesa Community Plan Update PEIR

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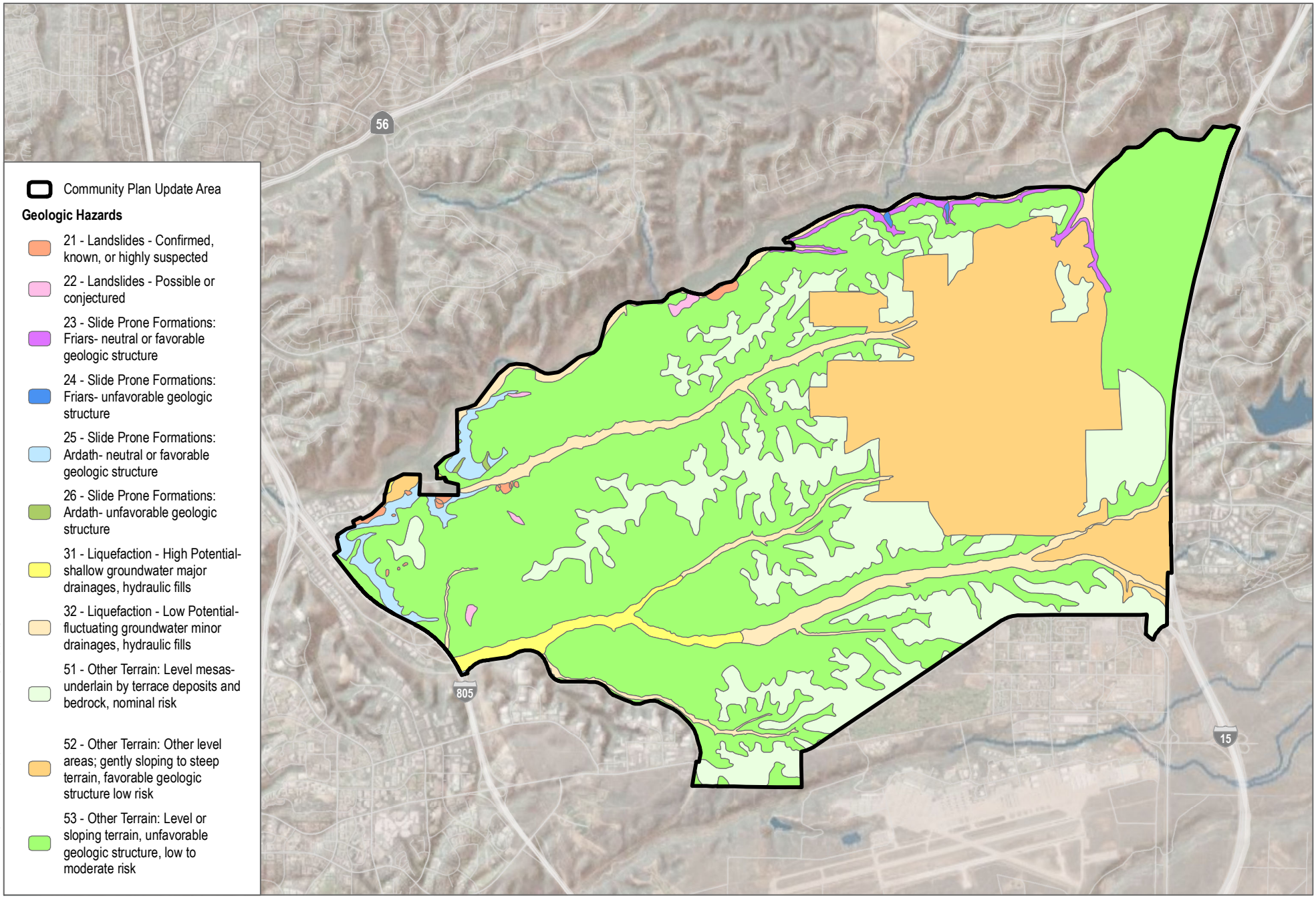

SOURCE: DigitalGlobe 2017; SanGIS

SD Planning

0 2,500 5,000 Feet

FIGURE 2-7

Mapped Geologic Hazards

Mira Mesa Community Plan Update PEIR

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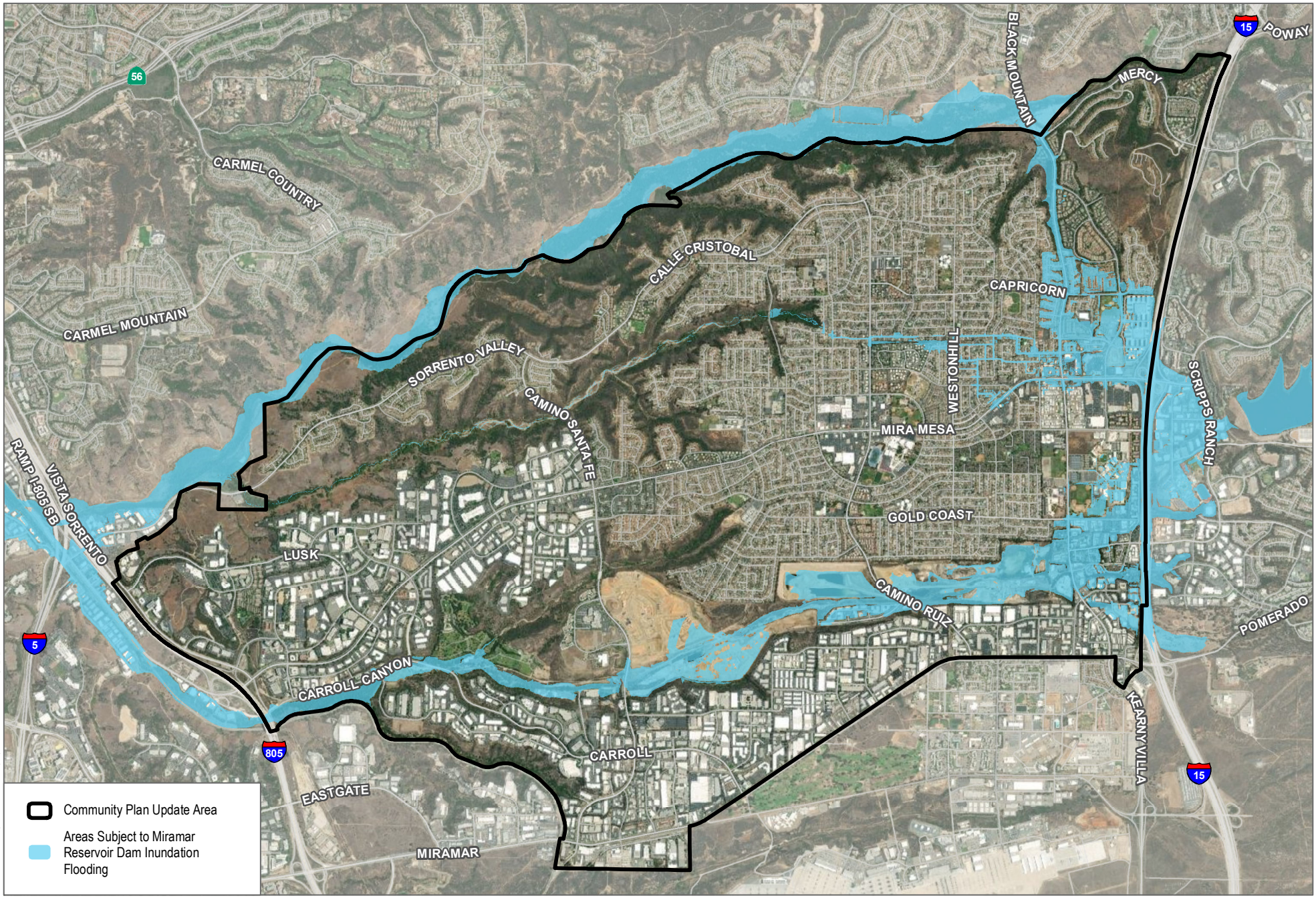

SOURCE: DigitalGlobe 2017; SanGIS

SD Planning

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FIGURE 2-8

Miramar Reservoir Dam Inundation

Mira Mesa Community Plan Update PEIR

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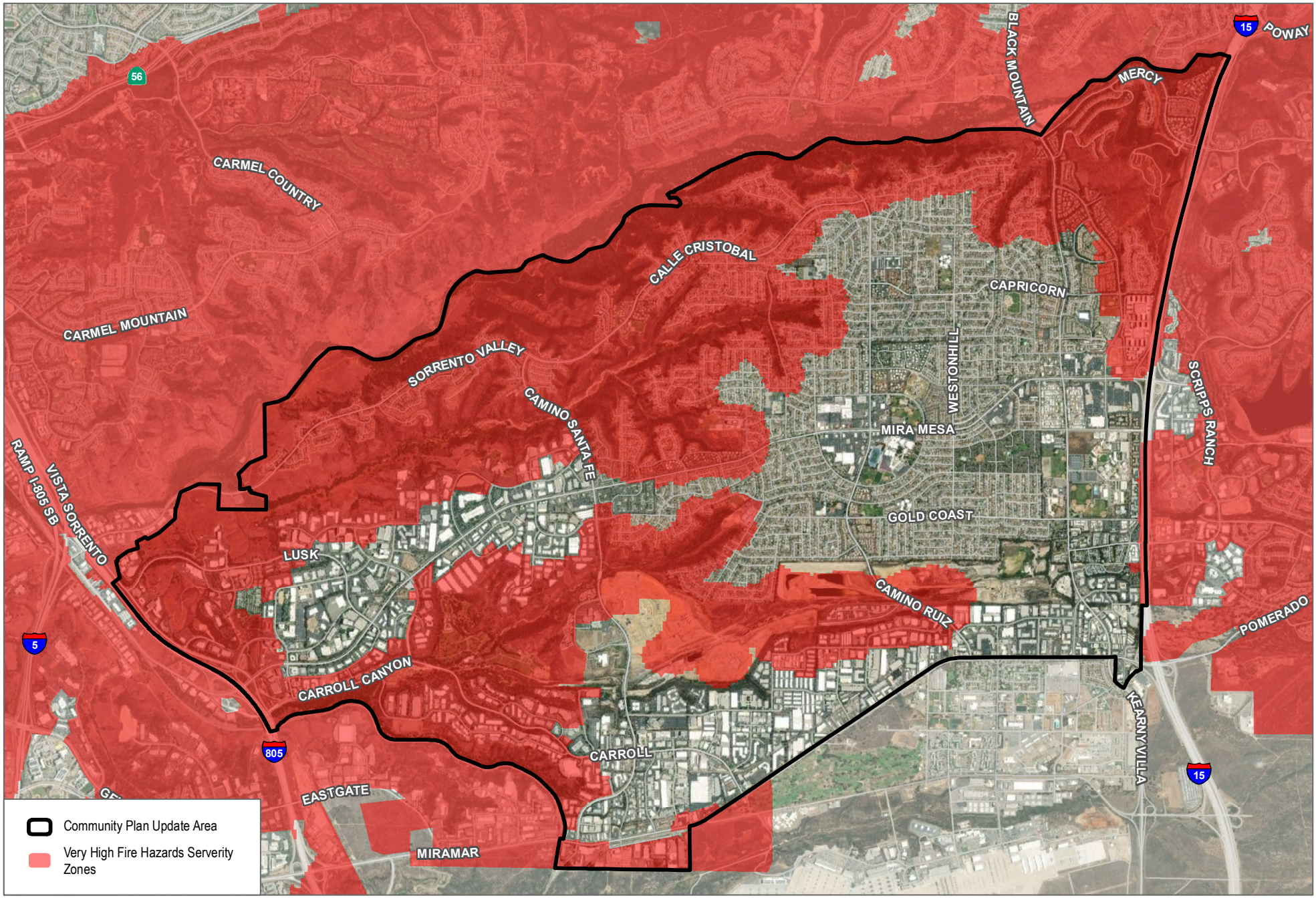

SOURCE: DigitalGlobe 2017; CAL FIRE

SD Planning

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FIGURE 2-9

Very High Fire Hazards Serverity Zones

Mira Mesa Community Plan Update PEIR

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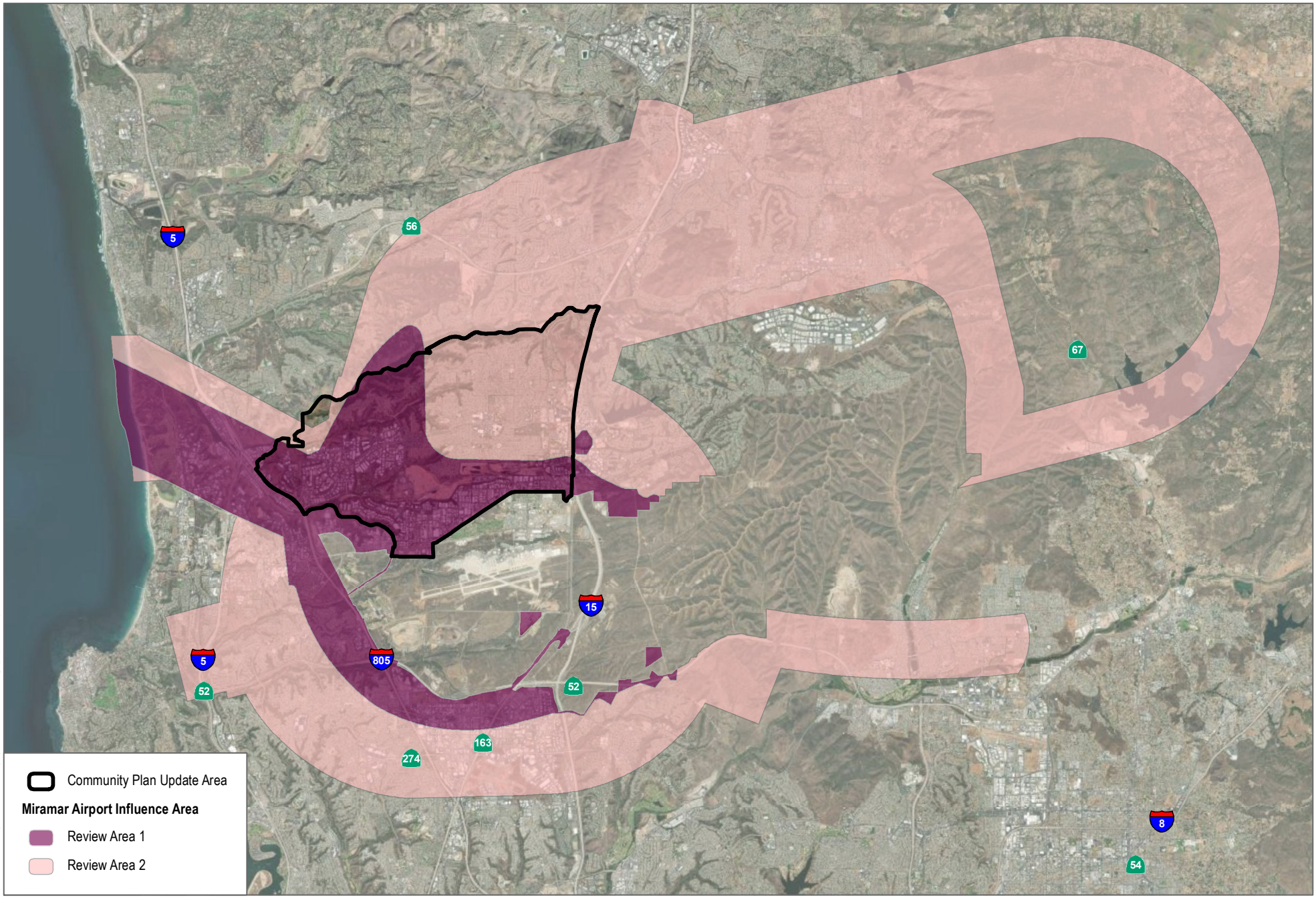

SOURCE: DigitalGlobe 2017; San Diego County Regional Airport Authority

SD Planning

0 6,500 13,000 Feet

FIGURE 2-10

MCAS Miramar Airport Land Use Compatibility Plan Review Areas

Mira Mesa Community Plan Update PEIR

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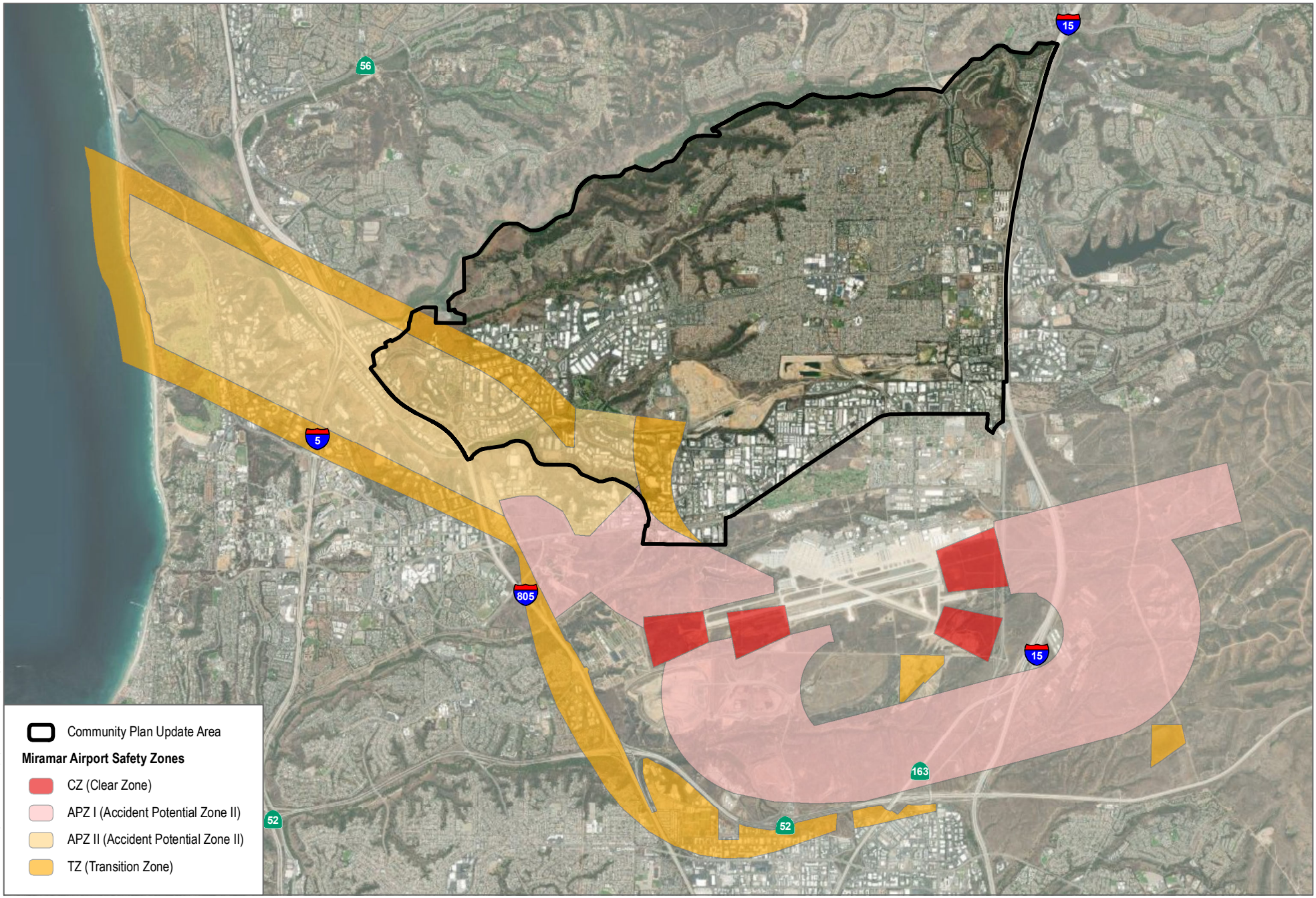

SOURCE: DigitalGlobe 2017; San Diego County Regional Airport Authority

SD Planning

FIGURE 2-11

MCAS Miramar Airport Land Use Compatibility Plan Safety Zones

Mira Mesa Community Plan Update PEIR

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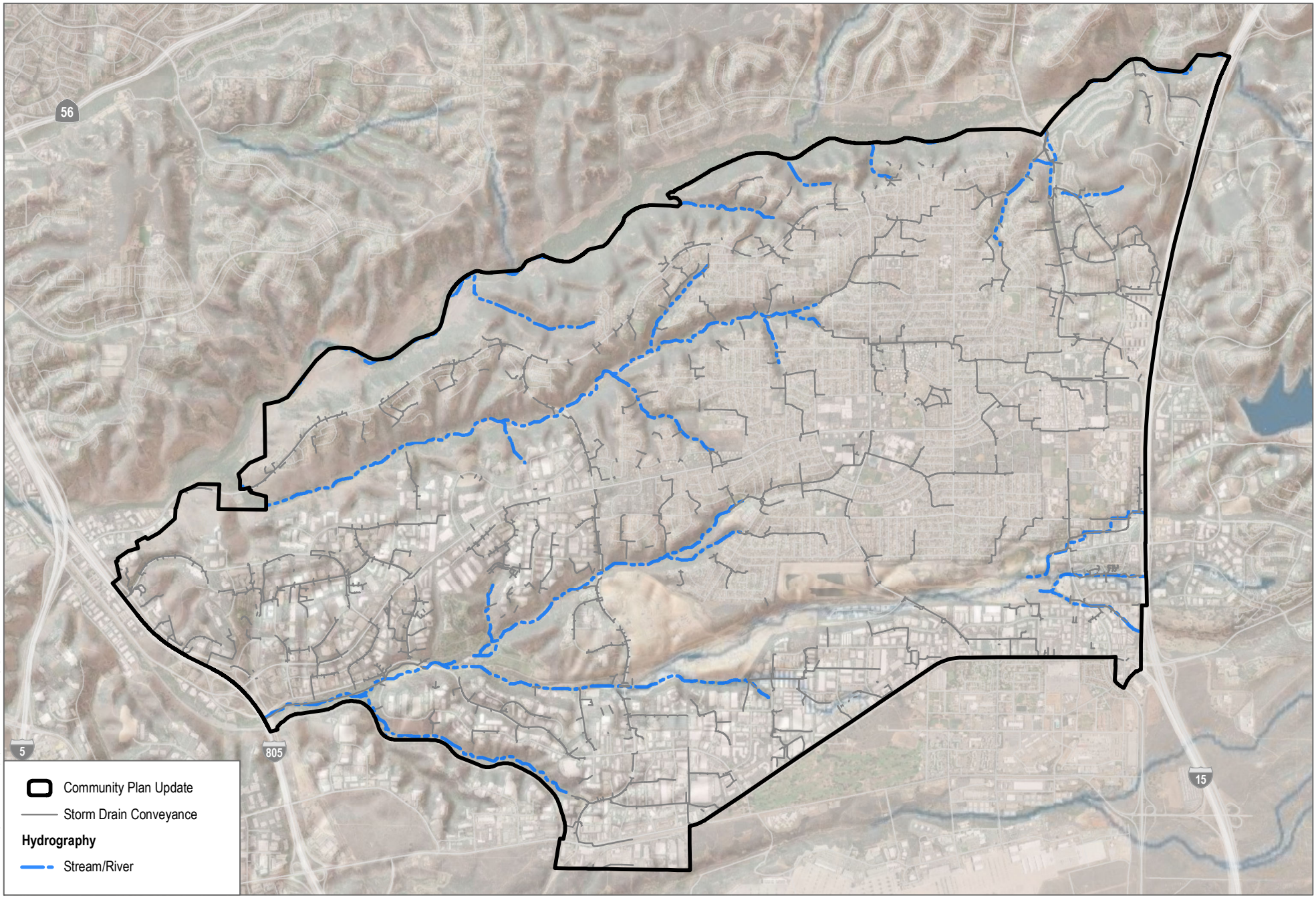

SOURCE: DigitalGlobe 2017; NHD; SanGIS

SD Planning

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FIGURE 2-12

River, Creek, and Storm Drain Map

Mira Mesa Community Plan Update PEIR

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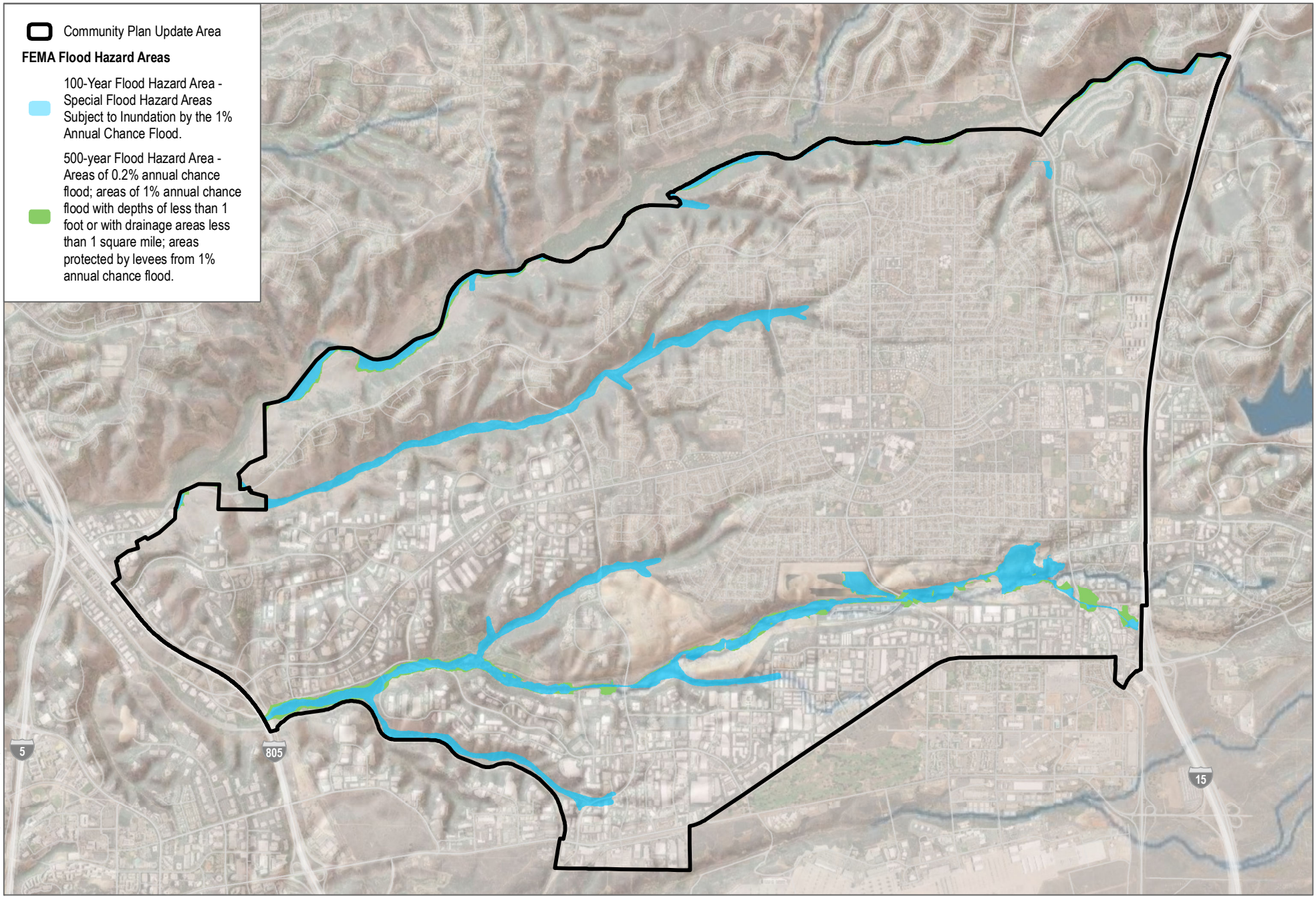

SOURCE: DigitalGlobe 2017; FEMA

SD Planning

0 2,000 4,000 Feet

FIGURE 2-13

Flood Zones

Mira Mesa Community Plan Update PEIR

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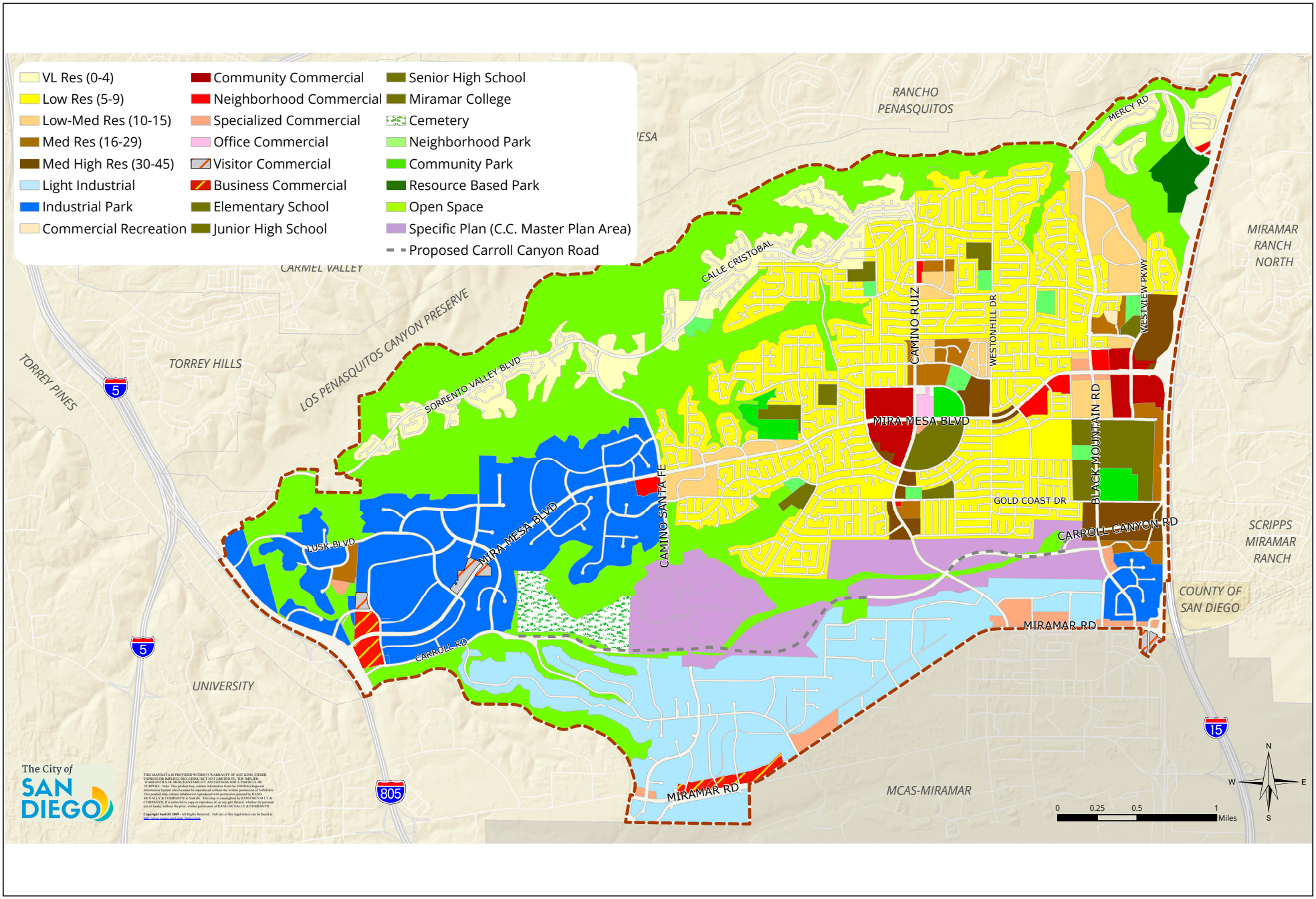

FIGURE 2-14

Existing Community Plan Land Use

Mira Mesa Community Plan Update PEIR

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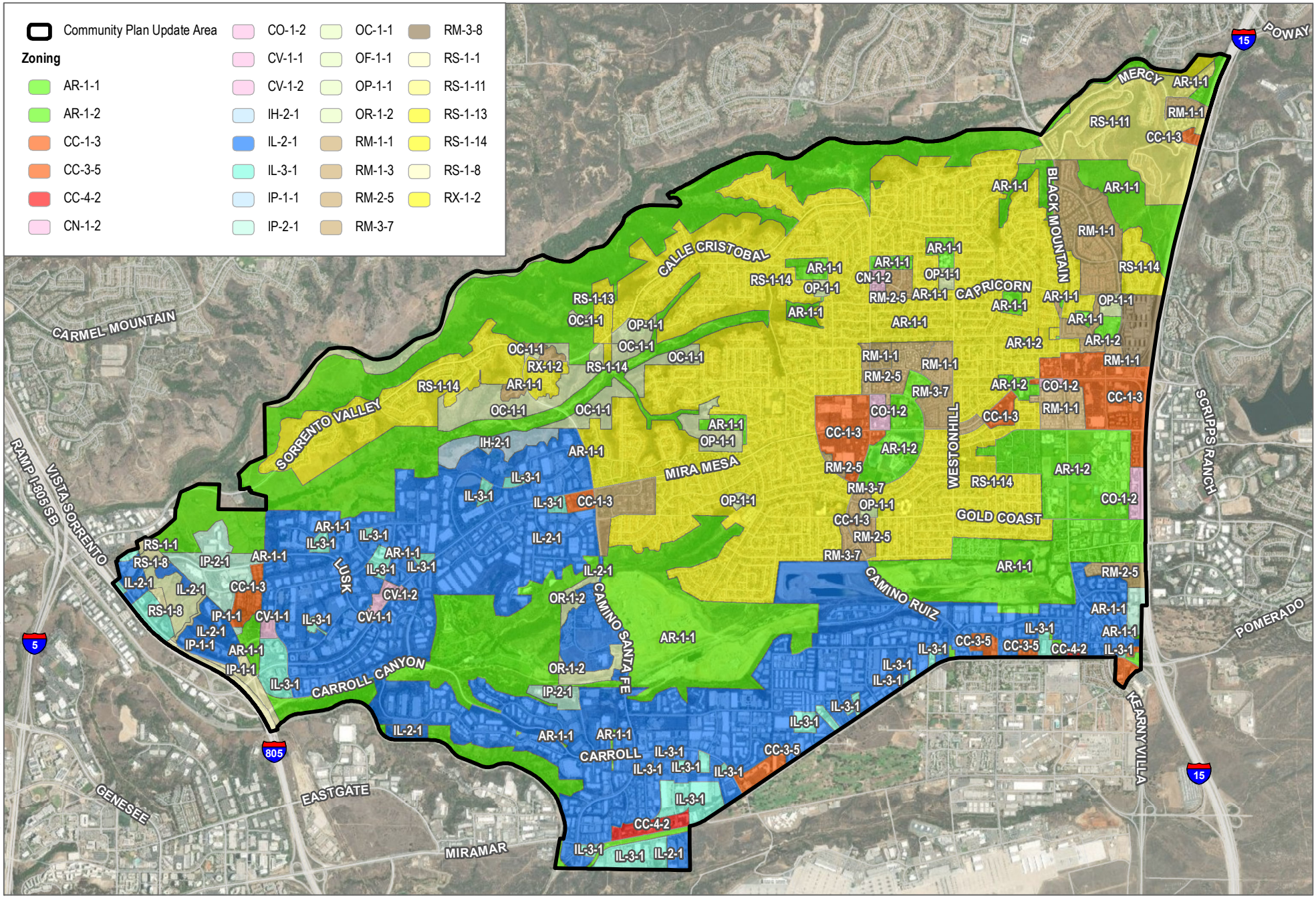

SOURCE: DigitalGlobe 2017; SanGIS 2022

SD Planning

0 2,000 4,000 Feet

FIGURE 2-15

Existing Zoning

Mira Mesa Community Plan Update PEIR

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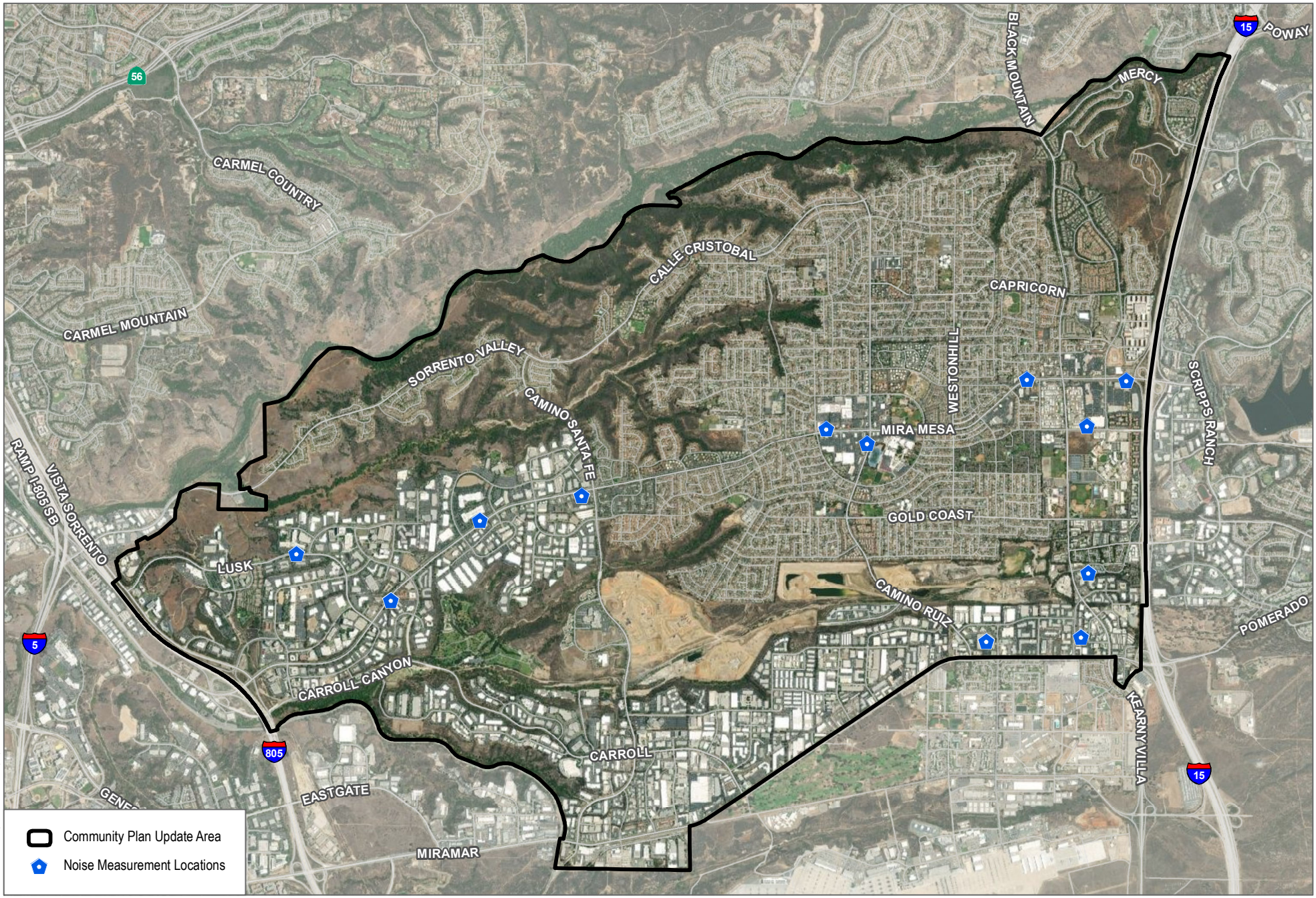

SOURCE: DigitalGlobe 2017

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FIGURE 2-16

Noise Measurement Locations

Mira Mesa Community Plan Update PEIR

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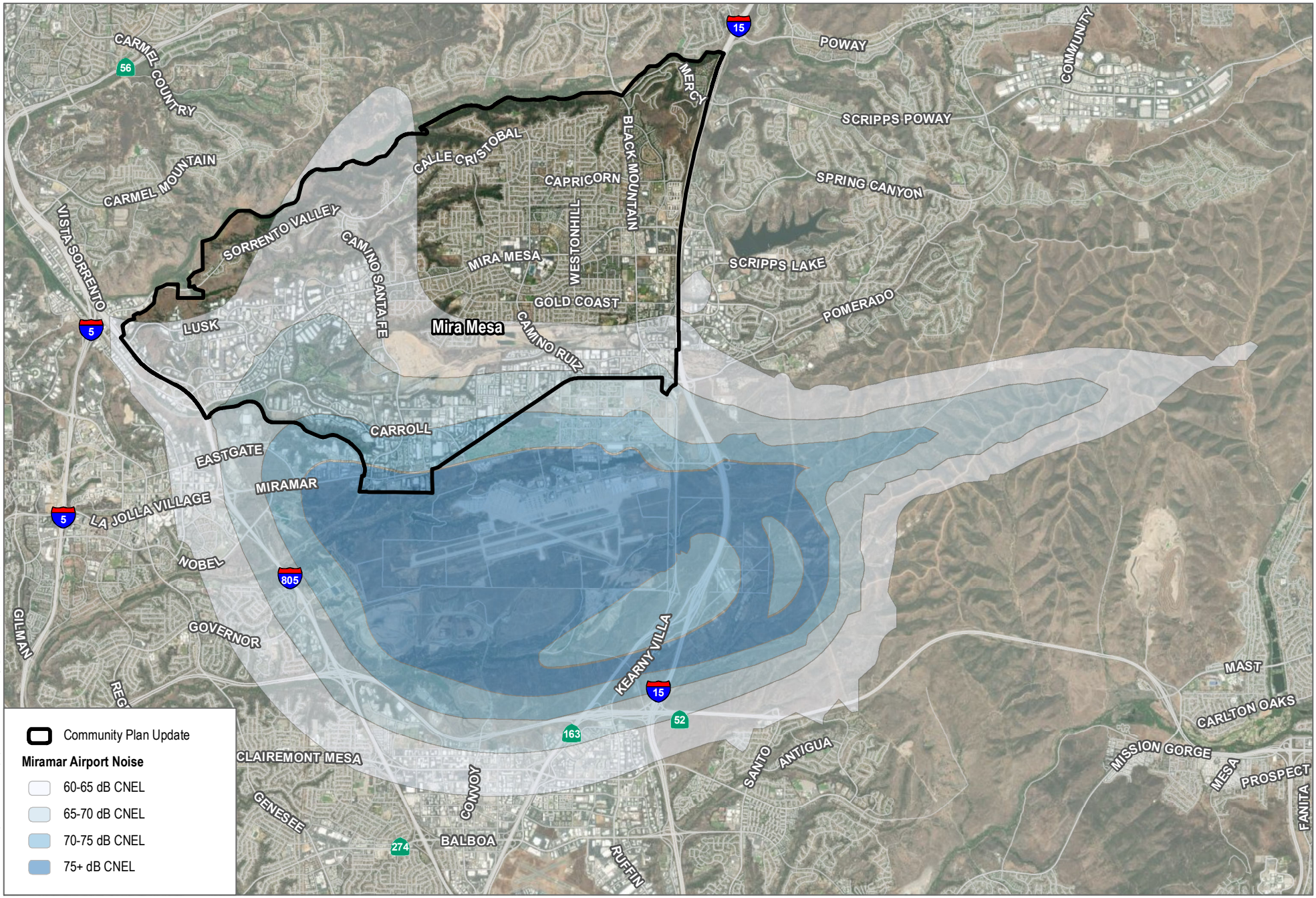

SOURCE: DigitalGlobe 2017; San Diego County Regional Airport Authority

SD Planning

0 3,750 7,500 Feet

FIGURE 2-17

MCAS Miramar Airport Land Use Compatibility Plan Noise Contours

Mira Mesa Community Plan Update PEIR

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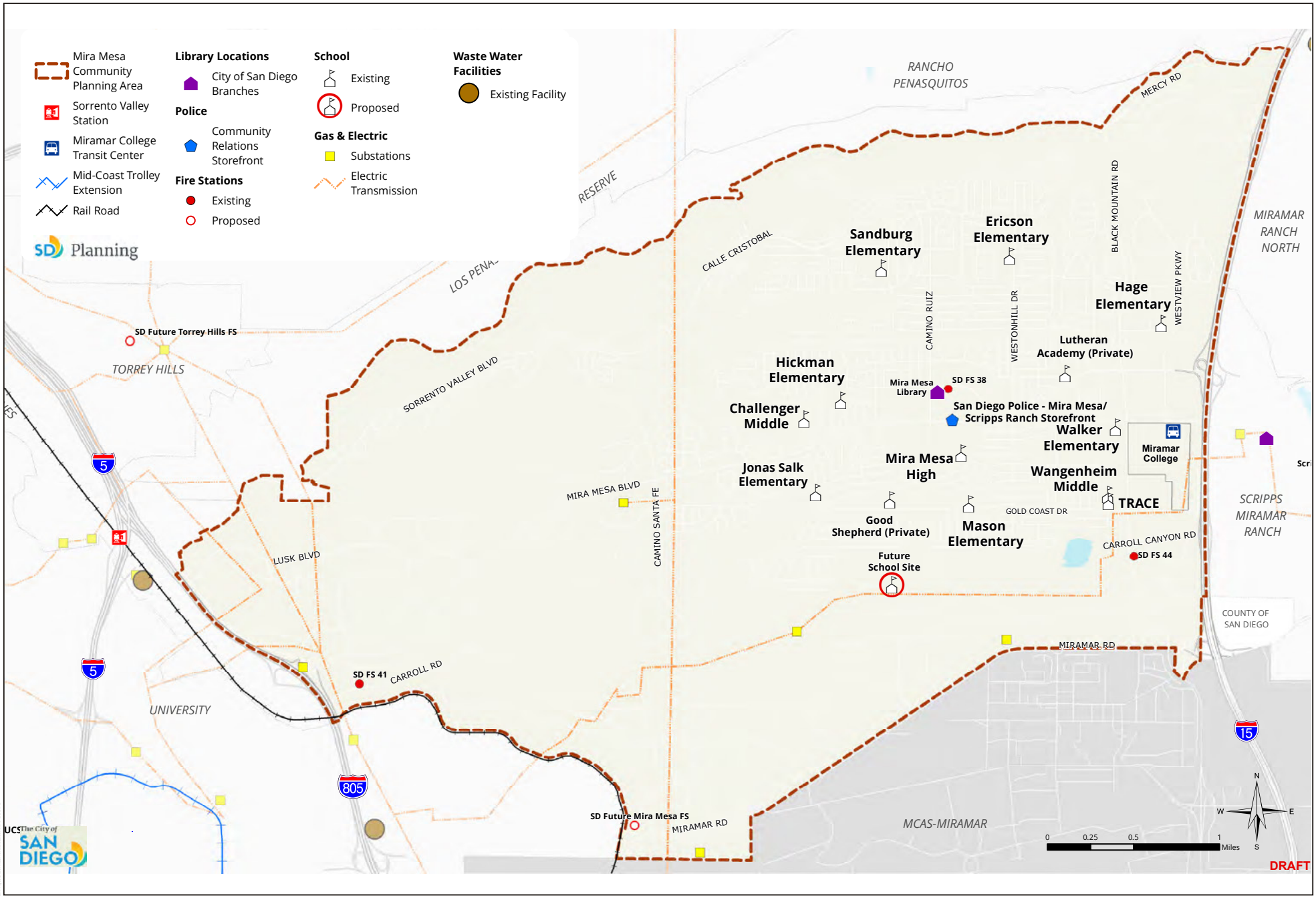

FIGURE 2-18

Existing and Planned Public Facilities

Mira Mesa Community Plan Update PEIR

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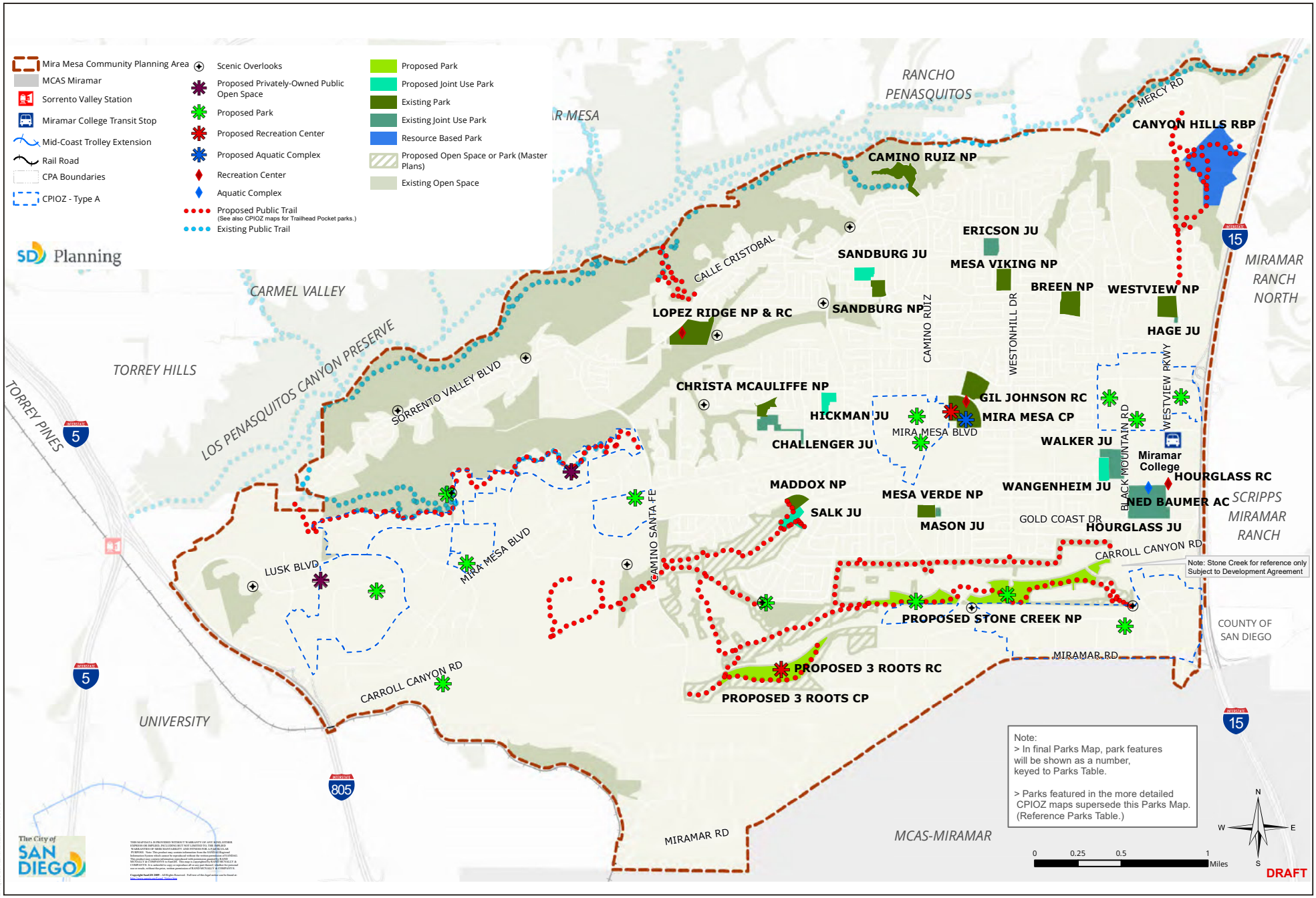

FIGURE 2-19

Existing and Planned Parks and Recreation

Mira Mesa Community Plan Update PEIR

SD Planning

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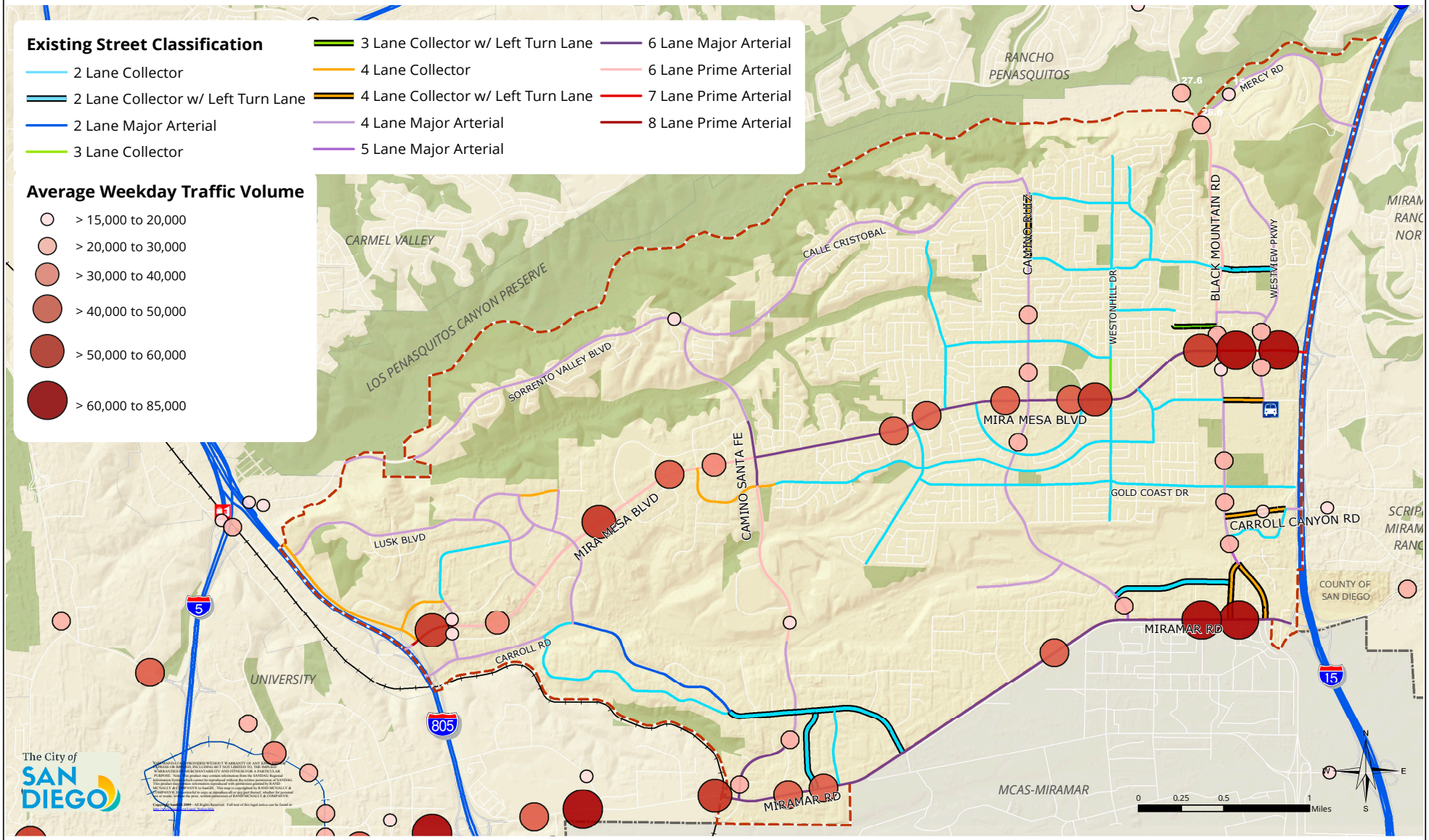

FIGURE 2-20

Existing Roadway Network

Mira Mesa Community Plan Update PEIR

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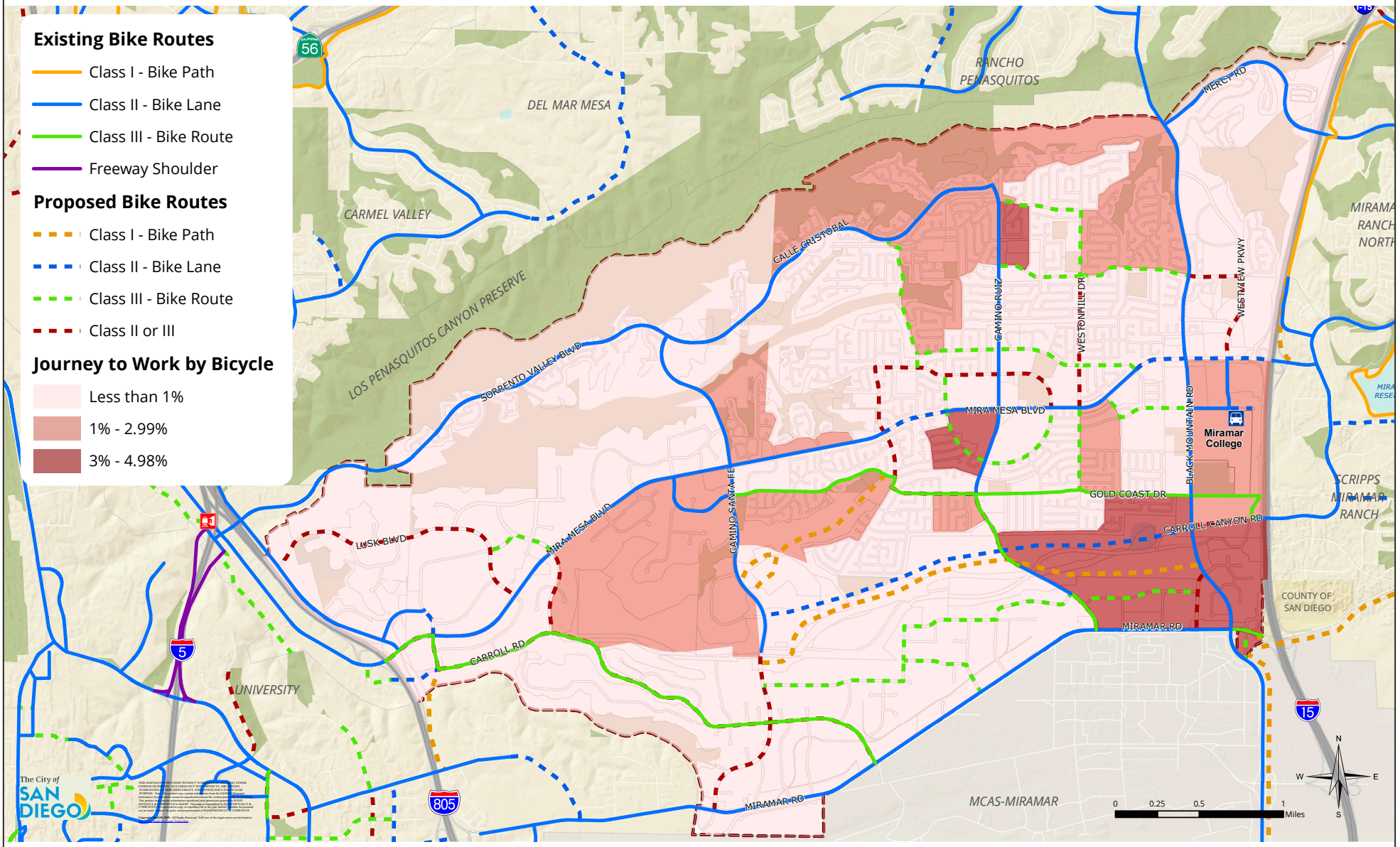

FIGURE 2-21

Existing and Planned Bicycle Facilities

Mira Mesa Community Plan Update PEIR

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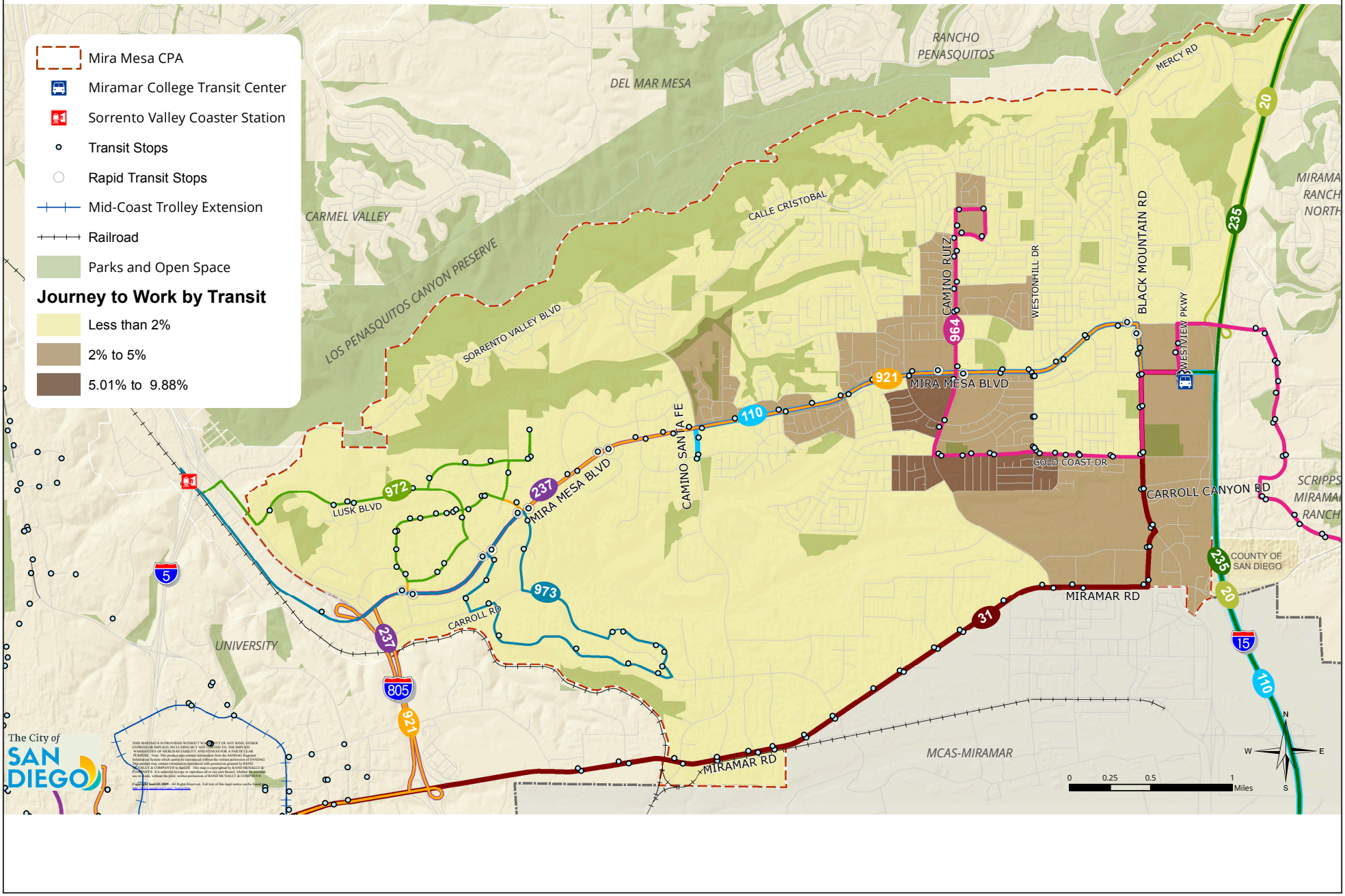

FIGURE 2-22

Existing Transit

Mira Mesa Community Plan Update PEIR

SD Planning

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3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

The project analyzed in this Program Environmental Impact Report (PEIR) is the proposed Mira Mesa Community Plan Update (CPU) and associated discretionary actions (collectively referred to the "proposed project" or "proposed CPU" throughout this PEIR) as listed in Table 3-1, Project Components. The proposed CPU is a policy document and an implementation tool for the City of San Diego (City) General Plan. The proposed CPU provides a long-range guide for the future physical development of the Mira Mesa community. It articulates an overall vision, designates land uses, and provides a comprehensive set of policies for development within the Mira Mesa Community Plan area (CPU area).

Table 3-1
Project Components

Actions
Adoption of the Mira Mesa Community Plan Update
Adoption of the amendments to the General Plan to incorporate the Community Plan Update land use designations and update the Economic Prosperity Element, including Figure EP-1, Industrial and Prime Industrial Land, for the Mira Mesa Community Plan area
Adoption of a Rezone Ordinance rezoning land within Mira Mesa Community Plan area to be consistent with the Community Plan Update
Adoption of an Ordinance amending the San Diego Municipal Code (SDMC) Section 132.1402 (Community Plan Implementation Overlay Zone [CPIOZ]) to adopt a new CPIOZ for the Mira Mesa Community Plan area
Approval of a request for adjustments to the inland boundary of the Coastal Zone pursuant to Public Resources Code Section 30103(b) and 14 C.C.R. §13255.2 et seq. by the California Coastal Commission
Certification of the Program Environmental Impact Report and adoption of the Findings, Statement of Overriding Considerations, and Mitigation, Monitoring and Reporting Program for the proposed CPU
Amendment to the Land Development Manual Historical Resources Guidelines
Certification of the Community Plan Update, amendment to the General Plan Economic Prosperity Element, amendments to the SDMC to rezone land in and adopt a CPIOZ for the Mira Mesa Community Plan area, and amendment to the Land Development Manual Historical Resources Guidelines by the California Coastal Commission

The project description contained within this chapter provides the basis for the environmental analysis in this PEIR for the proposed project. It provides a detailed discussion of the proposed project, including the location, background, objectives, technical, economic, and environmental

characteristics, key features, and environmental design considerations, all agency decisions, and intended uses of this PEIR. This chapter summarizes the key components of the proposed project as they are analyzed in this PEIR. The proposed CPU is hereby incorporated by reference into this project description and should be referred for a more detailed description of the project components that are discussed in the PEIR. The proposed CPU is available for review at the following City website: http://planmiramesa.org.

The adopted Community Plan was last comprehensively updated in 1992. The comprehensive CPU process began in late 2018 with preparation of an existing conditions Community Atlas and a public outreach effort that included a public workshop and stakeholder interviews. In 2019 and 2020, additional public workshops were held, along with meetings of the Mira Mesa Community Plan Update Advisory Committee, a subcommittee of the Mira Mesa Community Planning Group, the City's recognized community planning group for the Mira Mesa CPU area. In 2021, the Mira Mesa Community Planning Group provided a recommendation for the draft land use map, which led to the preparation of the Community Discussion Draft of the proposed CPU, which was released for review in spring of 2022. In response to comments, the draft plan and draft zoning were revised and released for review in Summer 2022.

3.2 RELATIONSHIP TO THE GENERAL PLAN

The General Plan, adopted in 2008, provides the Citywide vision and comprehensive policy framework for how the City should grow and develop and provide public services. The community plans throughout the City should be updated to remain consistent with the vision of the General Plan through comprehensive updates or amendments that include updated land use designations or zoning and identification of community-specific policies to better implement the General Plan framework.

The proposed CPU incorporates relevant policies from the General Plan, and provides a long-range, comprehensive policy framework and vision for growth and development in the Mira Mesa community. Development in Mira Mesa will be guided by this policy framework and implemented through a range of regulatory tools including zoning and the San Diego Municipal Code (SDMC).

Mira Mesa is a major employment area and population center for the City and the region due to the concentration of office, industrial, and retail uses. The adopted Mira Mesa Community Plan, as amended, designates the Miramar and Sorrento Mesa subareas of the CPU area as Industrial Park and Light Industrial to accommodate general industrial, business park, scientific research and development, and heavy commercial uses. Most areas in the CPU area are currently made up of larger blocks or "superblocks" that were designed for vehicular traffic, consistent with its development as a suburban neighborhood and major employment area in the City.

The General Plan's Land Use & Community Planning Element identifies Mira Mesa's Sorrento Mesa subarea as one of the City's Subregional Employment Areas, which is intended to target new growth of employment uses. The General Plan identifies a shortage of available employment land within the City close to housing, transportation, public transit, and other infrastructure and provides a policy framework for evaluating the future role of currently designated industrial land through the CPU process. The General Plan focuses on a strategy to evaluate and preserve critically located base sector areas but to allow, through comprehensive analysis, consideration of conversion or mixed-use of industrial land if it is not critical to the City's or region's base sector employment goals. The proposed CPU utilizes this strategy to balance its land use objectives and support the needs of Mira Mesa as a Subregional Employment Area.

The proposed CPU will support the General Plan City of Villages strategy by increasing housing opportunities in closer proximity to jobs. General Plan policies support growth that is focused in mixed–use activity centers that are pedestrian-friendly and linked to the regional transit system. Mira Mesa also has areas with a medium to high propensity to accommodate new village areas near existing and planned transit. As a centrally located job center with planned additional transit, Mira Mesa has a strong potential for transit-oriented development with new and existing pedestrian and bicyclist facilities that connect employment and housing.

Compact and pedestrian-friendly infill development in new mixed-use village areas is a key component of the proposed CPU and complements the growth in the employment areas. The community's existing infrastructure and need for public facilities, including parks, mobility connections, and public realm improvements to support these new land uses were studied to determine the types and amount of additional investment needed for the future planned growth in a sustainable manner. The proposed zoning for the CPU area establishes appropriate Citywide zones that allow for employment and mixed-use village development consistent with the proposed CPU land use designations.

3.3 PROJECT OBJECTIVES

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15124(b), the following specific objectives for the proposed project support the underlying purpose of the project, assist the City as lead agency in developing a reasonable range of alternatives to evaluate in this PEIR, and will ultimately aid the lead agency in preparing findings and overriding considerations, if necessary. The primary objectives of the proposed project are the following:

- Sustain and enhance employment areas, including industrial and commercial office uses within the Community Plan Area to support the City's economy;

- Provide for a vibrant employment and residential community by establishing mixed-use villages along major corridors with a range of housing types and employment uses within a distinctive, pedestrian-oriented setting;
- Provide housing, employment, and commercial uses in proximity to existing and proposed transit, including bus transit and light rail, by focusing growth in the planned Urban Villages;
- Enhance community connectivity by creating urban pathways, linear parks, paseos, complete streets, and mobility hubs to link land uses and activity centers throughout the community of Mira Mesa;
- Enhance community identity and the pedestrian environment through land use, urban design, specific pedestrian improvements such as pedestrian bridges and expanded sidewalks, and linear parks to retrofit the existing superblocks and to create an inviting destination for residents, businesses, and visitors;
- Provide parks, plazas, and promenades that promote a healthy, active community and provide multiple benefits as areas for recreation, community events, and connections by developing park facilities near employment centers and Urban Villages and keeping pace with population growth;
- Create a robust mobility system of high-quality facilities and connections that promote more transportation choices for pedestrians, bicyclists, and transit users within the community of Mira Mesa and integrate the Urban Villages;
- Locate housing in select areas near employment centers, such as the Urban Villages, to improve jobs-housing balance and sustainability in support of the City's Climate Action Plan; and
- Preserve open space areas and important natural resources, including vernal pools, drainages, sensitive habitat, and steep slopes.

3.4 PROJECT DESCRIPTION

The proposed project is a comprehensive update to the Mira Mesa Community Plan, which is intended to guide future development in the CPU area. It articulates an overall vision, designates land uses, and provides a comprehensive set of policies for new development within the Mira Mesa community. For facility planning, technical evaluation, and environmental review purposes, realistic development capacity buildout is assumed to occur in 2050. The estimated population at buildout would be approximately 143,414 residents and approximately 58,741 dwelling units. Buildout of the proposed CPU would also result in approximately 60,314,214 square feet (SF) of non-residential uses. The proposed land uses are analyzed at buildout. The total dwelling unit yield reflects assumptions based on multiple factors and that properties would not redevelop at a density above maximum as permitted under state and local density bonus regulations. Select properties could develop at residential densities below the maximum due to development constraints (e.g., airport overlays).

The proposed CPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network, implementation of urban design, recommendations preserving and enhancing natural open space and historic and cultural resources, and the prioritization and provisions of public facilities within the Mira Mesa community. The proposed CPU maintains existing employment areas and identifies new and expanded mixed-use village areas that would allow increased density and residential uses. The proposed CPU also enhances community connections with a comprehensive network of complete streets, urban paths, and pedestrian pathways.

The proposed CPU is a component of the General Plan as it expresses the vision, goals, and policies contained within the elements of the General Plan through the provision of more refined, community-specific recommendations. Technical and planning studies have been prepared and considered in the development of the proposed CPU addressing a range of issues. The proposed CPU contains a land use map and mobility network map that will guide future public and private development in the community, as well as policy guidance on land use and economic prosperity; mobility; urban design; parks, recreation, and open space; historic preservation; public services, facilities, and safety; and urban villages and community plan implementation overlay zone.

The proposed CPU is intended to strengthen the existing residential neighborhood and employment base while also integrating additional housing in key locations and improving multi-modal connections in the community. The proposed CPU includes the adoption of a new CPIOZ-Type A and associated Supplemental Development Regulations (SDRs) that will apply to the Urban Village areas in the CPU area. In the Urban Village areas, development that is consistent with the Community Plan, the base zone regulations, and the SDRs identified in the CPIOZ can be processed ministerially. The proposed CPU also includes adoption of rezone ordinance to rezone lands within the CPU area to be consistent with the CPU.

The proposed CPU is divided into eight chapters that focus on key interest areas and provide guiding principles that support the overall vision for the proposed CPU. The key guiding principles focus on the development of compact, mixed-use Urban Villages that offer a variety of housing types near transit, jobs, and amenities, as well as other land use and infrastructure investments that promote diverse businesses. Another focus of the proposed CPU is the provision of a safe and efficient transportation network that provides access to high-quality transit, bike, and pedestrian facilities. The proposed CPU focuses on urban design policies that ensure comfortable and attractive public spaces for users of all ages and abilities. Public facilities would include parks, trails, and open spaces. Lastly, the proposed CPU supports a resilient, carbon-neutral community powered by renewable energy and a clean transportation network. The guiding principles are infused as part of the proposed CPU.

3.4.1 COMMUNITY PLAN COMPONENTS

The proposed project includes the vision for the CPU area and the relevant legislative framework. See Figure 3-1, Mira Mesa Community Planning Area for a depiction of the CPU area boundaries. The proposed CPU focuses on topics relevant to the growth and development of the CPU area, which are described below. The proposed CPU also includes policies to support the discussion in those chapters.

3.4.1.1 Land Use & Economic Prosperity

The Land Use & Economic Prosperity Chapter guides the future growth and development of the CPU area by establishing the overall framework of allowable land uses across the community. This chapter works in concert with the other chapters in the proposed CPU to provide a cohesive vision for Mira Mesa's built- and natural-environments. The proposed CPU land uses are shown in Figure 3-2, Proposed Mira Mesa Community Plan Land Use Designations. The proposed CPU includes a diversity of residential categories to support the future population. The land use plan locates the highest residential density land uses near jobs and along transportation corridors where existing and planned transit is located. As the community grows, the land uses will support job growth and a diversity of employment types in addition to increased residential capacity.

Table 3-2, Proposed Mira Mesa Community Plan Land Use Designations and Base Zones, provides a summary of the CPU's proposed land use designations, associated permitted densities, and implementing Land Development Code (LDC) base zones. The proposed CPU would result in an overall communitywide increase of future housing units at medium- and high-density ranges.

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
Residential	Residential-Very Low	Residential - Very Low is intended for single-family residential development on large lots with front, rear, and side yards. Parking is typically integrated into the ground-floor of the units in an individually secured garage.	RS-1-11 RS-1-13 RS-1-14 RX-1-2	1-4
	Residential-Low	Residential - Low is intended predominantly for single-family residential development on small lots. Single-family homes may be	RS-1-14	5-9

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
		arranged as stand-alone detached units, with front, rear, and side yards. Parking is typically integrated into the ground-floor of the units in a garage.		
	Residential-Low Medium	Residential - Low- Medium allows for a mix of single-family, townhome, and multi-family units. This combination of residential types supports a pedestrian scale. Town homes or row homes are typically clustered in groups of 4 to 6 units. Parking is integrated into the ground-floor of the units.	RM-1-1 CN-1-2 CC-1-3	10-15
	Residential – Medium	Residential - Medium is typically townhomes and garden apartments/condominiums, and can occur on small lots. Buildings can be organized around a central courtyard with individual or shared open space. Parking is typically a mix of garages and surface spaces.	RM-2-5 RM-2-6 CO-1-2	16-29
	Residential-Medium High	Provides for multifamily housing within a medium-high density range. This category supports compact condominium/apartment buildings. Private and shared open space is a key component of the design, along with community amenities.	RM-3-7	30–44
	Residential-High	Allows condominium and apartment buildings within a high-density range with pedestrian connections and usable common outdoor space and amenities to enhance the neighborhood character.	RM-3-9 RMX-1	45–73

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
Commercial, Employment, Retail, and Services	Neighborhood Commercial	Neighborhood Commercial provides local convenience shopping, civic uses, and services serving an approximate 3-mile radius.	CN-1-2	0–29
	Visitor Commercial	Provides for the accommodation, dining, and recreational uses for both tourists and the local population. This designation is intended for land located near employment centers and areas with recreational resources or other visitor attractions. Residential uses may occur only as part of a mixed-use (commercial/residential) project.	CV-1-1 CV-1-2	0-29
	Community Commercial	Provides for shopping areas with retail, office, and services for the community at large. It includes community-serving uses while also including office, hotel, automobile sales, as well as limited industrial uses of moderate intensity, that serve residents and workers in the community and adjacent communities. Areas designated as Community Commercial may range from pedestrian-friendly commercial streets to shopping centers and corridors.	CC-2-4 CC-5-2	N/A
	Community Commercial – Residential Permitted	Provides for a variety of commercial uses, such as retail, personal services, office, and hotel, that serve residents and workers in the community and adjacent communities. Residential uses are allowed as part of mixed-use development that features ground	CC-3-6	0–44
			CC-3-8	0–73

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
		floor commercial uses. A pedestrian-oriented development is encouraged, with active storefronts in addition to outdoor seating and social gathering spaces.		
	Heavy Commercial	Provides for retail sales, commercial services, office uses, and heavier commercial uses such as wholesale, distribution, storage, and vehicular sales and services. This designation is appropriate for transportation corridors where the previous Community Plan may have allowed for both industrial and commercial uses.	CC-4-2 IL-2-1	N/A
Multiple Use	Neighborhood Village	Provides housing in a mixed-use setting and convenience shopping, civic uses as an important component, and services serving an approximate 3-mile radius.	EMX-1	0–44
	Community Village	Provides housing in a mixed-use setting and serves the commercial needs of the community-at-large, including the industrial and business areas. Integration of commercial and residential use is emphasized; civic uses are an important component. Retail, professional/administrative offices, commercial recreation facilities, service businesses, and similar types of uses are allowed.	CC-5-5	0–44
	Urban Village	Serves the region with many types of uses, including housing, in a high-intensity, mixed-use setting. Integration of commercial and residential use is emphasized;	EMX-1 EMX-1	0–54 0–73

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
		larger, civic uses and facilities are a significant component. Uses include housing, business/professional office, commercial service, and retail.		
	Urban Employment Village	Allows mixed-use development where employment and commercial uses are balanced with potential residential uses. Employment uses would be the primary use, and residential uses are allowed. Active street frontages and pedestrian-oriented design are encouraged. Developments can create unique housing opportunities that support creative office, business incubators, and high-tech research and development uses.	EMX-1 EMX-2	0–54 0–109
Industrial Employment	Technology Park	Allows high technology uses related to applied sciences, including research and development, corporate headquarters, light manufacturing, and storage and distribution uses. This designation also allows office uses which provide functions directly related to these high technology uses. Sites with shared amenities, business incubators, and flexible innovation spaces are encouraged.	IL-1-1, IL-2-1, IL-3-1, IP-2-1	N/A
	Light Industrial	Light Industrial allows a wider variety of industrial uses by permitting a full range of light manufacturing and research and development uses and adding other industrial uses such as storage and distribution and transportation	IL-2-1 IL-3-1 IP-2-1	N/A

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
		terminals. Multi-tenant industrial uses and corporate headquarters office uses are permitted. Otherwise, only limited office or commercial uses should be permitted which are accessory to the primary industrial use. Heavy industrial uses that have significant nuisance or hazardous effects are excluded.		
	Business Park	Allows office, research and development, and light manufacturing uses. This designation does not permit storage and distribution uses except as accessory to the primary use. It is appropriate for uses primarily characterized by single- and multi-tenant office development with some light industrial uses.	IL-3-1	N/A
	Business Park – Residential Allowed	Provides for employment uses such as business/professional office and research and development, with limited commercial service, flex-space, and retail uses, as well as residential uses. Mixed business park/residential developments can create unique housing opportunities to support office, business, and other employment uses.	CC-5-5 CO-1-1 CO-3-1 CO-3-2	0–29 0–44 0–54 0–73
Open Space	Open Space	Provides for the preservation of land that has distinctive scenic, natural or cultural features; that contributes to community character and form; or that contains environmentally sensitive	AR-1-1 OC-1-1 OP-1-1 OR-1-1 OR-1-2 IL-2-1	N/A

Table 3-2
Proposed Mira Mesa Community Plan Land Use Designations and Base Zones

General Plan Land Use	Community Plan Land Use	Description/Typical Uses	Base Zones	Residential Density (dwelling units/acre)
		resources. Applies to land or water areas that are undeveloped, generally free from development, or developed with very low-intensity uses that respect natural environmental characteristics and are compatible with the open space use. Open Space may have utility for: primarily passive park and recreation use; conservation of land, water, or other natural resources; historic or scenic purposes; visual relief; or landform preservation.	IH-2-1	
Parks	Parks	This designation allows for passive and active recreational uses, such as linear parks, community parks, and neighborhood parks with facilities to meet the recreational needs of the community and the City.	AR-1-1 OP-1-1	N/A
Institutional	Institutional	Institutional uses provide either public or private facilities that serve a public benefit that may serve the community or a broader area. Institutional land uses within the community consist mainly of fire stations, branch libraries, and public, charter, and private schools, and places of worship.	AR-1-1 AR-1-2 OP-1-1 CO-1-2 RM-2-5	N/A

3.4.1.2 Mobility

The Mobility Chapter promotes an interconnected multimodal network that prioritizes active modes of transportation and capitalizes on transit infrastructure. The Mobility Chapter is closely linked to the Urban Design and the Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ) Chapters. The Mobility Chapter describes the future pedestrian, bicycle, transit, and vehicular

roadway network and lists planned roadway modifications. The proposed mobility improvements will support increased active transportation facilities and access in combination with policies to provide enhancements to streetscapes and street functionality that support pedestrian, bicycle, and transit activity and complete streets features wherever possible. An important component is the planned implementation of multi-use paths and urban pathways, which will provide enhanced pedestrian and bicycle facilities connecting through the community to adjacent communities and recreational resources. The Mobility Chapter includes policies for increased connections for alternative modes of transportation and strategic roadway modifications that could improve existing roadway function. It also provides policies regarding Transportation Demand Management, Intelligent Transportation Systems, and parking management.

Future roadway classifications for the CPU area are shown in Figure 3-4, Planned Roadway Network Classifications, with specific policy direction provided in the Mobility Chapter of the proposed CPU. Figure 3-5, Planned Bicycle Network, illustrates the existing and planned bicycle facilities for those roadways. Figure 3-6, Planned Pedestrian Routes, depicts future pedestrian routes within the CPU area. Figure 3-7, Planned Transit Network, shows existing and planned transit facilities within the CPU area.

3.4.1.3 Public Services, Facilities, and Safety

The Public Services, Facilities, and Safety Chapter outlines the community facilities needed to ensure that appropriate levels of public services are maintained (i.e., fire responders, schools, stormwater, etc.). Proposed CPU policies address public services related to educational facilities, public safety (i.e., police and fire services), infrastructure systems, and public libraries (see Figure 2-18, Existing and Proposed Public Services and Facilities, of the PEIR). Policies support the operation of police and fire facilities in Mira Mesa, as well as the expansion of library services and the appropriate provision of school services to meet the needs of the community. The proposed CPU also includes policies that are intended to reduce potential safety hazards.

3.4.1.4 Historic Preservation

The Historic Preservation Chapter provides a summary of the prehistory and history of the Mira Mesa Community Plan area and establishes policies to support the identification and preservation of the historical, archaeological, and tribal cultural resources of the community. The chapter's stated goals are to identify and preserve the significant historical resources in Mira Mesa community and to provide educational opportunities and incentives related to historical resources in Mira Mesa. The chapter also includes policies that aim to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

The proposed CPU would amend the City's Land Development Manual Historical Resources Guidelines Section II.A.1 to exempt the Tier II and Tier III Communities identified in the Mira Mesa Community Plan Area Focused Reconnaissance Survey (Appendix F) from SDMC section 143.0212 and the City's historic review process for buildings or structures more than 45-years old due to their lower historical significance. Per CPU Policy 5.7, the Tier I Communities identified in the Mira Mesa Community Plan Area Focused Reconnaissance Survey (Appendix F) should complete a future intensive level survey and evaluation for their potential historical significance.

3.4.1.5 Parks, Recreation, and Open Space

The Parks, Recreation, and Open Space Chapter describes opportunities for active recreation, trail connections to passive recreation, and the parks needs for the community while protecting and preserving natural areas and sensitive biological resources. As a major employment hub and population center with changing needs for a growing workforce and with an increasing residential population, there is a greater demand for public open space and areas for recreation that contribute to the health and wellbeing of employees and residents. The proposed CPU includes a combination of existing and new population-based parks and recreational facilities as shown on Figure 2-19, Existing and Planned Parks and Recreation. The proposed CPU includes linear parks along corridors in the Urban Village areas with an urban pathway system. While the urban pathways have pedestrian mobility as the primary purpose, they provide multiple benefits as new open spaces, recreation, and connections between activity centers, new village areas, and transit.

The Parks, Recreation, and Open Space Chapter includes policies regarding the acquisition and development of new parks and recreational facilities in order to expand active and passive recreational opportunities and connect Mira Mesa to parks and open space areas in nearby communities. While park space and concepts are identified in the proposed CPU, specific facilities or the layout of facilities have not been identified.

As an urbanized community with a limited amount of undeveloped land, a combination of enhancements to existing parks, new parks, linear parks, and plazas help meet the needs of the existing and future residents in the community. Additional parks and recreation areas can also help meet the community park needs, such as joint-use facilities, privately owned, publicly accessible parks, and portions of resource-based parks as described in the General Plan. For the community's open space areas, which are primarily within the City's Multi Habitat Planning Area (MHPA), the proposed CPU includes policies encouraging open space linkages and trail heads while preserving sensitive resources in the community.

3.4.1.6 Urban Design

The Urban Design Chapter provides requirements and recommendations for achieving high-quality design of the built environment and the proposed community connections. It addresses the design of the public realm (rights-of-way, streetscapes, signage, public open spaces, etc.), as well as site design and building orientation. The proposed CPU includes policies related to the public realm, urban design for buildings, and streetscape improvements to create distinct neighborhoods, villages, corridors, and a sense of place. Urban design features also include the creation of new open spaces and paseos that provide visible and physical connections between streets, sidewalks, and buildings. The streetscape framework identifies streetscape enhancements, improved pedestrian crossings, and smaller blocks to support a pedestrian-oriented scale of development. See Figure 3-8, Urban Design Framework Map, for the proposed defining physical elements of the community.

The Urban Design Chapter includes policies to include new public gathering spaces and recreational opportunities, neighborhood and community gateways and linkages, and streetscape and pedestrian orientation for future development in the CPU area. Implementation of these policies would result in urban design features that serve environmentally sustainable functions, increase planted areas, and provide green infrastructure that improves stormwater infiltration and provides shaded areas to improve pedestrian facilities.

3.4.1.7 Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ)

The Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ) chapter identifies urban village areas that are pedestrian-friendly and well-connected to activity areas and transit. These areas would implement the General Plan's City of Villages strategy with an integrated mixture of uses, multimodal streets, and public spaces. The village areas described below are generally located along Mira Mesa Boulevard, Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Miramar Road, as shown in Figure 3-3, Urban Villages and CPIOZ Areas. The proposed CPU identifies specific policies and SDRs applicable to new development in Urban Village areas (Policies 8.1 through 8.9 and SDR.1 through SDR.10)

The proposed Urban Villages along Mira Mesa Boulevard connect a key transit corridor and expand the mixed-use area currently present in the eastern portion of the CPU area. The proposed Urban Villages along Mira Mesa Boulevard include Mira Mesa Gateway, Mira Mesa Town Center, Plaza Sorrento, Pacific Heights Boulevard, and Barnes Canyon Road. The proposed land uses, urban design framework, and mobility improvements recommended in the CPU support a pedestrian-oriented urban center in these Urban Villages, with connections to transit and employment areas.

The proposed Urban Villages at Mira Mesa Gateway and Mira Mesa Town Center build on an area with an existing mix of restaurants, entertainment, retail, and office uses. These two areas serve as

community and regional destinations and attractions for Mira Mesa and the surrounding communities. The proposed CPU introduces additional mixed-use development with residential uses to these urban areas. The proposed land use category, Urban Village, that is proposed for the Mira Mesa Gateway and Mira Mesa Town Center is intended to serve the region with commercial and civic uses integrated with medium- to high-density housing and business/office uses.

In addition to the existing and planned transit along Mira Mesa Boulevard, select areas along this major transit corridor are planned as mixed-use with commercial zones that allow varying residential densities to accommodate existing development constraints and provide separation between higher-density residential and employment uses. In all areas, additional pedestrian facilities are proposed to provide shorter, walkable blocks and more direct connections to transit.

The proposed employment-oriented Urban Villages at Barnes Canyon, Pacific Heights, and Plaza Sorrento include office, research and development, business park, light industrial, and limited retail and residential uses. The proposed CPU introduces additional mixed-use development with optional residential uses within the Urban Employment Village areas The proposed land use category, Urban Employment Village, is intended to serve the region with high-intensity employment, medium- to high-density housing and neighborhood supporting commercial uses. In addition to the existing and planned transit along Mira Mesa Boulevard, additional pedestrian facilities are proposed to provide shorter, walkable blocks and more direct connections to transit and amenities.

In addition, Sorrento Mesa Rim currently consists of business parks along the southern rim of the south fork of Lopez Canyon. The CPU would propose the majority of the Sorrento Mesa Rim Urban Village as a Technology Park land use, and certain blocks along Sequence Drive are planned for mixed-use where employment uses would be the primary use and residential uses would be allowed. This would allow for creative housing strategies that incorporate business or research opportunities with housing options.

The Miramar Gateway Urban Village along Miramar Road includes light industrial, commercial, and office uses. The proposed CPU builds on the variety of uses by providing additional mixed-use areas and multi-family residential uses, nearby future parks and recreational facilities, and a retail center.

Plaza Ruiz is currently characterized by strip mall-style commercial and retail development. The proposed CPU land use, Neighborhood Village, would allow for mixed-use development, integrating housing with convenience shopping and civic uses that directly support the local residents.

The proposed CPIOZ for the Mira Mesa CPU area is discussed in Section 3.4.2, Land Development Code, below.

3.4.2 LAND DEVELOPMENT CODE

Zoning

Figure 3-9, Proposed Zoning, shows the new zoning that would be implemented under the proposed project. Table 3-2 shows the proposed CPU land use designations and implementing Land Development Code (LDC) base zones. The proposed base zones listed in Table 3-2 are described in Chapter 13, Zones, of the SDMC.

Community Plan Implementation Overlay Zone (CPIOZ)

The proposed project would also amend SDMC Section 132.1402 to adopt a new CPIOZ for the CPU area. CPIOZs provide SDRs that are customized to specific sites within community plan areas of the City. The intent of these regulations is to ensure that development proposals are reviewed for consistency with the use and development criteria that have been adopted for specific sites as part of the CPU process. The proposed CPU's Urban Village areas are designated as CPIOZ-Type A, and include ten supplemental development regulations (SDR.1 through SDR.10) related to Urban Village Parks, Urban Pathways, Pedestrian Pathways, Linear Parks, Trails and Trail Amenities, Private Street Connections, Pedestrian Bridge at Mira Mesa Gateway, Widening of Barnes Canyon Road, Commercial Uses in Mira Mesa Town Center, and Industrial Uses in Miramar Gateway.

In the areas designated as CPIOZ-Type A, development that is consistent with the Community Plan, the base zone regulations, and the supplemental development regulations identified in each CPIOZ section can be processed ministerially in accordance with the procedures of the CPIOZ. Any development that does not comply with the Community Plan, the base zone regulations, or any of the supplemental development regulations identified in the CPIOZ section is required to obtain a discretionary permit

3.5 ENVIRONMENTAL DESIGN CONSIDERATIONS

The proposed policies of the CPU provide guidance regarding development and design standards for future development in the CPU area. Along with serving to guide community growth and development, many proposed CPU recommendations, policies, and development standards would also serve to avoid or reduce potential environmental impacts. These policies and development standards are discussed below and are considered in the PEIR analysis.

3.5.1 OUTDOOR PUBLIC SPACES AND FRONTAGES

Urban design policies within Chapter 7, Urban Design, of the proposed CPU encourage enhancements within public spaces to promote an active, pedestrian-oriented, walkable

environment. Recommended amenities include active street frontages with seating areas, plazas, pocket parks, and linear parks, shade trees or other shade elements, wide sidewalks and parkways, and urban pathways, paseos, and other pedestrian connections (Public Realm Policies 7.1-7.12). The intent of incorporating such design features is to prioritize walking and bicycling and provide the amenities to accommodate multiple transportation modes (including Active Transportation Policies 3.1, 3.2, 3.3, 3.7; and Transit Policies 3.17, 3.20, 3.22, and 3.23), which would have net benefits with regard to emissions of air pollutants in addition to providing facilities that provide multiple benefits related to visual relief and recreational purposes.

3.5.2 STORMWATER, GREEN STREETS, AND URBAN FORESTRY

New development proposed in accordance with the proposed project would be required to adhere to requirements for the retention and treatment of stormwater. The proposed CPU includes goals and policies that go above and beyond mandatory regulations by recommending the installation of urban greening components such as green streets, enhanced landscaping, bioswales/bioretention facilities, porous pavement, and green roofs. For example, Public Realm Policy 7.8 encourages the provision of shade primarily using broad canopy trees, in addition to other elements such as umbrellas, awnings, canopies, and/or other structures; and Curbside and Parking Management Policy 3.38 encourages, where appropriate, the repurposing of on-street parking for alternative uses (e.g. pedestrian and bicycle facilities, urban greening, placemaking, and micro-mobility corrals). The proposed CPU offers recommended tree species based on the *City of San Diego Street Tree Selection Guide* to enhance the existing urban tree canopy. Improving the urban forest would have the potential to reduce air pollution and the urban heat island effect, and expand habitat. Implementation of the recommended green streets would have the potential to improve water quality and reduce stormwater runoff, replenish groundwater, and reduce flooding risk. These features provide environmental benefits by filtering pollutants, increasing absorption of carbon dioxide and air pollutants, and reducing urban heat island effects.

3.5.3 TRANSIT-ORIENTED DEVELOPMENT

The proposed CPU encourages concentrating higher-density, mixed-use development along existing and planned transit corridors within the community by establishing seven Urban Villages along major transit corridors such as Mira Mesa Boulevard, Carroll Canyon Road, Camino Ruiz, Black Mountain Road, and Miramar Road (see Chapter 8, Urban Villages and CPIOZ, of the proposed CPU). Providing employment and residential uses in close proximity to transit can result in a decrease in trip lengths, vehicle miles traveled, and the reliance on the automobile. Transit priority measures and Transportation Demand Management policies (Transit Policies 3.17 through 3.-25; Intelligent Transportation System Policies 3.42 and 3.43; and Transportation Demand Management Policy 3.44) would improve transit efficiency and increase ridership.

3.5.4 COMPLETE STREETS

The proposed CPU recommends the reconfiguration of existing public rights-of-way, as appropriate, to provide bicycle, pedestrian, and transit facilities while maintaining vehicular access and circulation. Transit Policies 3.1 through 3.16 would support the continued provision of pedestrian, bicycle, and transit facilities as roadways are improved and expanded, which would facilitate the development of complete streets. Complete Streets are streets that are designed and operated to enable mobility for all users regardless of age or ability. The provision of complete streets along select transportation corridors within the community would promote the use of multiple travel modes and would provide residents and employees with more transportation options beyond the automobile. Reducing the reliance on the automobile could result in less vehicle miles traveled and air pollutant emissions.

3.5.5 GREENHOUSE GAS EMISSIONS

The proposed CPU is designed to facilitate implementation of the City's 2022 Climate Action Plan (CAP), which provides strategies for reducing greenhouse gas emissions through local actions. The proposed CPU implements the CAP primarily through land use, mobility, and urban design strategies (some of which are described in this section, such as recommendations for an improved urban canopy). The proposed CPU provides additional capacity to develop residential and employment uses in Transit Priority Areas (TPAs) (i.e., within 0.5 miles of a major existing or planned transit stop). The proposed CPU also recommends mobility improvements to provide for more travel modes and encourage walking, bicycling, and transit use. These improvements include Active Transportation Policies 3.1 through 3.10, which encourage the development of pedestrian and bicycle facilities, and Transit Policies 3.17 through 3.25, which promote public transit and multimodal transportation options. As stated above, these strategies reduce vehicle miles traveled and trip lengths, with a corresponding decrease in greenhouse gas emissions.

3.6 PLAN PROJECTIONS

For the purposes of the analysis, future development projections based on realistic development capacity per the proposed land uses are expected to occur by 2050. These projections are used for facility planning, technical evaluation, and environmental review purposes for this PEIR.

3.6.1 LAND USE DISTRIBUTION

Table 3-4, Comparison of Base Year and Estimated Buildout of the Proposed CPU, shows the amount of area for base year and future land uses according to future land use assumptions and analysis undertaken for the proposed project. The assumptions were developed based on the Draft Community Plan vision, land use map, and policies, market demand, existing conditions, and

development constraints. The predominant land uses in Mira Mesa would remain residential, commercial, office, technology park, light industrial, and business park. The proposed CPU would introduce more mixed-use areas with multi-family residential and higher intensity employment uses in areas served by transit.

Table 3-4
Comparison of Base Year and Estimated Buildout of the Proposed CPU

	Base Year (2012)		Proposed CPU		Difference	
Land Use Category	*Acres*	*% of Total*	*Acres*	*% of Total*	*Change (acres)*	*Change (%)*
Residential						
Single family	2,035	22	2009	22	-26	-1
Multi-family	633	7	878	10	245	39
Mobile home	35	<1	0	0	-35	-100
Subtotal	*2,704*	*30*	*2,887*	*33*	*183*	*7*
Institutional and Educational						
Institutional	127	1	148	2	21	17
Educational	264	3	278	3	14	5
Subtotal	*390*	*4*	*426*	*5*	*35*	*9*
Commercial						
Office	392	4	650	7	258	66
Retail	371	4	376	4	5	1
Visitor	30	<1	31	<1	1	5
Subtotal	*793*	*5*	*1057*	*12*	*264*	*33*
Industrial Employment[1]						
Industrial Employment	2,251	25	1,584	17	-667	-30
Parks/Open Space						
Parks	121	1	185	2	64	53
Recreation	64	<1	102	1	38	60
Open Space	2503	27	2799	31	296	12
Subtotal	*2,688*	*29*	*3,086*	*34*	*398*	*15*
Transportation and Utilities						
Transportation and Utilities	41	<1	25	<1	-16	-39
Vacant						
Vacant	160	2	0	0	-160	-100
Total	**9,144**	**100**	**9,151**	**100**	**7**	**<1**

Source: City of San Diego 2022

Notes: The Community Plan Update (CPU) area is approximately 10,729 acres; right-of-way is excluded from the total.

[1] This category includes industrial uses such as manufacturing, warehousing, logistics, as well as technology, life sciences, and other innovation sectors.

Table 3-5, Comparison of Base Year and Proposed CPU Residential Development, and Table 3-6, Comparison of Base Year and Proposed CPU Non-Residential Development, show the comparison between base year and future residential development and non-residential development based on realistic development capacity buildout estimates of the proposed project. As shown, the proposed project would include a substantial increase in multi-family housing units and additional building floor space for commercial, industrial, educational, and recreational uses. The proposed project is projected to result in an approximately 92% increase in population within the CPU area over base year conditions. The buildout population takes into consideration the estimate of housing units in the base year and at buildout. The total number of jobs was calculated based on jobs per square foot assumptions for each applicable land use category. These assumptions used for this calculation is based on a methodology developed by SANDAG for the regional forecast (SANDAG 2021). The proposed project is projected to result in an approximately 54% increase in jobs over base year conditions.

Table 3-5
Comparison of Base Year and Proposed CPU Residential Development

Residential Development	Base Year (2012)		Proposed CPU		Difference	
	Dwelling Units	*% of Total*	*Dwelling Units*	*% of Total*	*Change*	*Change (%)*
Housing Units						
Single family	13,929	56	17,070	29	3,141	23
Multifamily[1]	10,734	43	41,671	71	30,937	288
Mobile home	286	<1	0	0	-286	-100
Total Housing Units	**24,949**	**100**	**58,741**	**100**	**33,792**	**135**
Household Population	74,539	—	143,414	—	68,875	92

Source: City of San Diego 2022.
[1] Includes estimated residential units in mixed-use development.
CPU = Community Plan Update

Table 3-6
Comparison of Base Year and Proposed CPU Non-Residential Development

Land Use Category	Base Year (2012)		Proposed CPU		Difference	
	Floor Area (square feet)	*% of Total*	*Floor Area (square feet)*	*% of Total*	*Change (square feet)*	*Change (%)*
Office Commercial	9,445,503	21	16,753,537	28	7,308,034	77
Retail Commercial	5,020,397	11	5,791,587	10	771,190	15
Visitor Commercial	643,951	1	965,688	2	321,737	50
Industrial	27,113,012	61	33,650,802	56	6,537,790	24
Institutional	570,901	1	1,014,396	2	443,495	78
Educational	1,781,152	4	1,906,851	3	125,699	7
Recreation	189,298	<1	231,353	<1	42,055	22
Total Non-residential Development	**44,764,214**	**100**	**60,314,214**	**100**	**15,549,999**	**35**
Total Employment	**76,398**	**—**	**117,310**	**—**	**40,912**	**54**

Source: City of San Diego 2022.
CPU = Community Plan Update

3.7 FUTURE ACTIONS ASSOCIATED WITH THE PROPOSED PROJECT

3.7.1 FUTURE IMPLEMENTATION ACTIONS

The future implementation actions of the proposed project include, but are not limited to, the following:

- Future implementation of capital improvements and other projects necessary to accommodate present and future community needs as identified throughout the CPU;
- Implement facilities and other public improvements in accordance with the CPU;
- Pursue local, state, and federal grant funding available to implement unfunded infrastructure needs; and
- Pursue formation of assessment districts and/or financing districts, as appropriate, through the cooperative efforts of property owners and the community to construct and maintain improvements.

3.7.2 FUTURE DISCRETIONARY ACTIONS

Due to the lack of site-specific development proposals associated with the proposed project, site-specific environmental analyses of future development anticipated within the CPU area was not undertaken within this PEIR. The programmatic analysis of environmental impacts presented in this PEIR anticipates that future development that would occur within the CPU area would be subject to applicable development regulations and requirements. Future development within the CPU area would involve subsequent approval of public and private development proposals through both ministerial and discretionary reviews in accordance with the zoning and development regulations and proposed CPU policies. These subsequent activities may be public projects (i.e., road/streetscape improvements, parks, public facilities) or private projects (i.e., housing or commercial development or redevelopment), and are referred to as future development or future projects in the text of the PEIR. A non-exhaustive list of discretionary actions that may occur as the CPU is implemented is shown in Table 3-7, Potential Future Discretionary Actions Associated with the Proposed Project.

Table 3-7
Potential Future Discretionary Actions Associated with the Proposed Project

Agency	Discretionary Action
City of San Diego	Subdivision maps
	Discretionary permits (e.g., Site Development Permits, Conditional Use Permits, Neighborhood Development Permits, Planned Development Permits, Neighborhood Use Permits, Coastal Development Permits)

Table 3-7
Potential Future Discretionary Actions Associated with the Proposed Project

Agency	Discretionary Action
	Water, sewer, and storm drain infrastructure and road improvements (public right-of-way permits)
	Street Vacations, Release of Irrevocable Offers of Dedication, and Dedications
	Establishment of public facilities financing mechanisms
	Water, sewer, and storm drain infrastructure and road improvements (public rights-of-way permits)
	Variances
State of California	Caltrans Encroachment Permits
	Water Quality Certification Determinations for Compliance with Section 401
	California Department of Fish and Wildlife Streambed Alteration Agreements
	SANDAG Right-of-Way permits
	California Coastal Commission Coastal Development Permits
	California Coastal Commission approval of a request for adjustments to the inland boundary of the Coastal Zone pursuant to Public Resources Code Section 30103(b) and 14 C.C.R. §13255.2 et seq.
	California Coastal Commission certification of the Community Plan Update, amendment to the General Plan Economic Prosperity Element, amendments to the SDMC to rezone land in and adopt a CPIOZ for the Mira Mesa Community Plan area, and amendment to the Land Development Manual Historical Resources Guidelines.
Federal	U.S. Army Corps of Engineers Section 404 permits
	U.S. Fish and Wildlife Service Section 7 or 10(a) permits
Other	SDG&E/Public Utilities Commission approvals of power line relocations or undergrounding

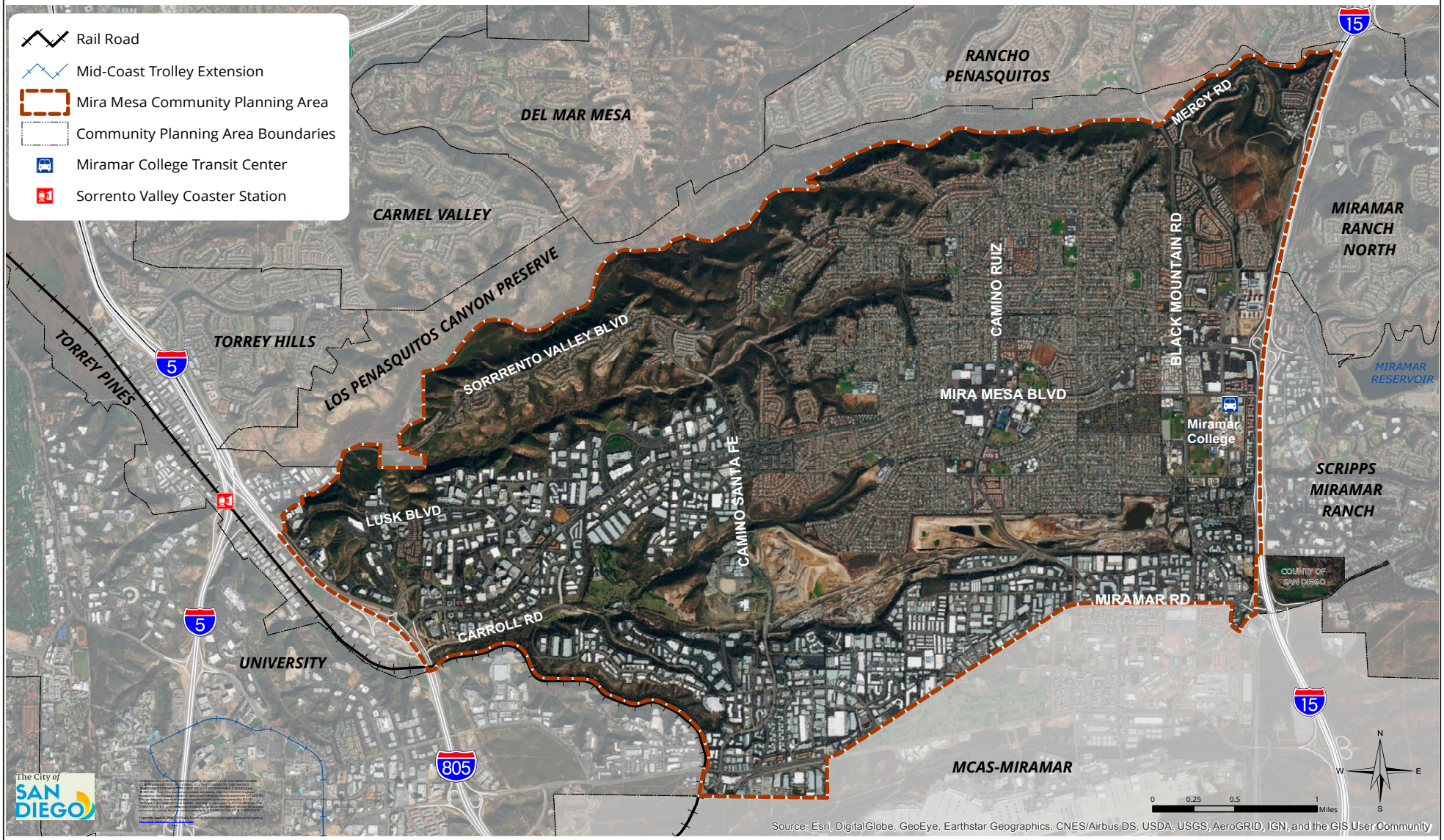

FIGURE 3-1

Mira Mesa Community Planning Area

Mira Mesa Community Plan Update PEIR

SD Planning

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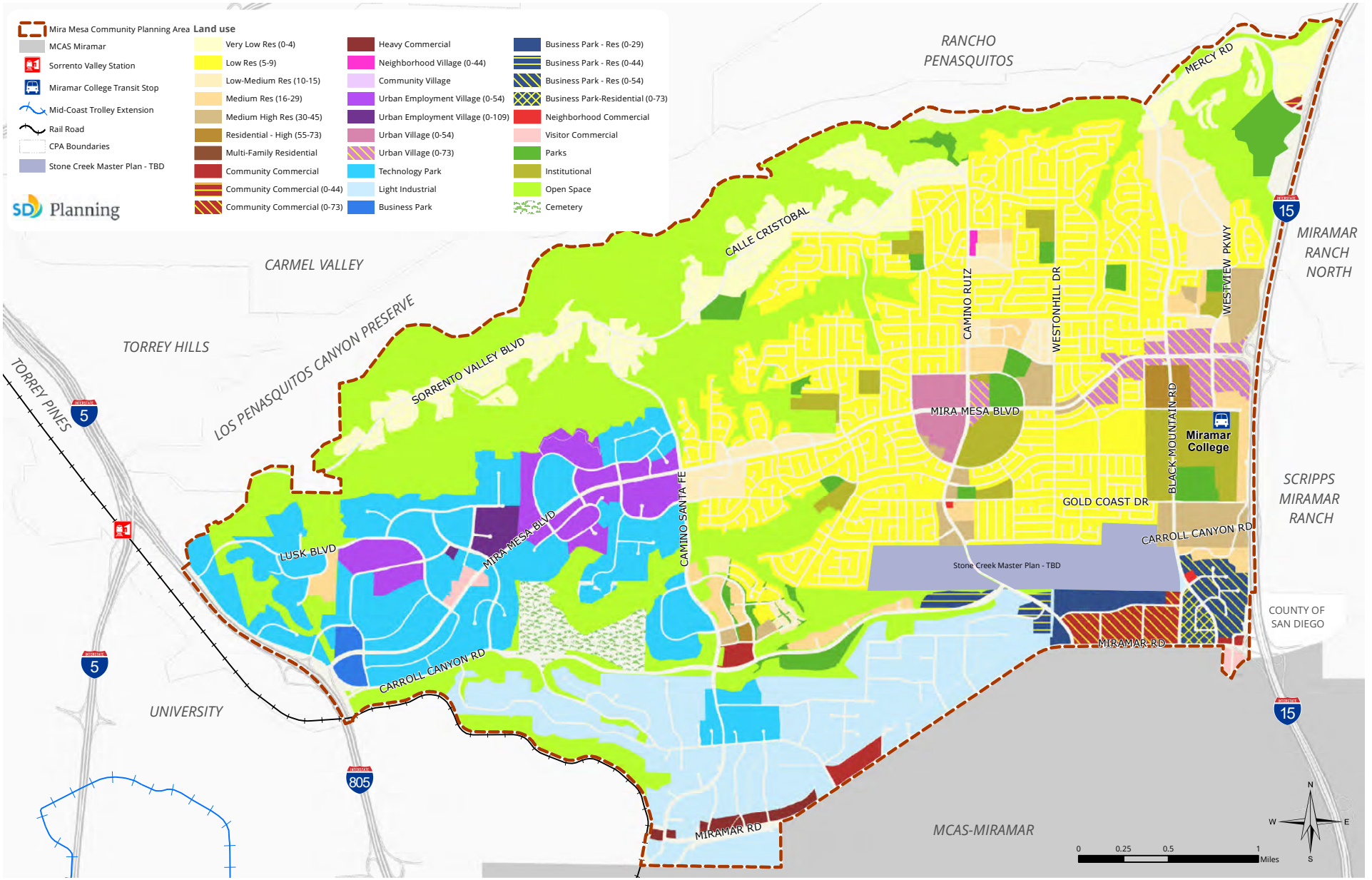

FIGURE 3-2

Proposed Mira Mesa Community Plan Land Use Designations

Mira Mesa Community Plan Update PEIR

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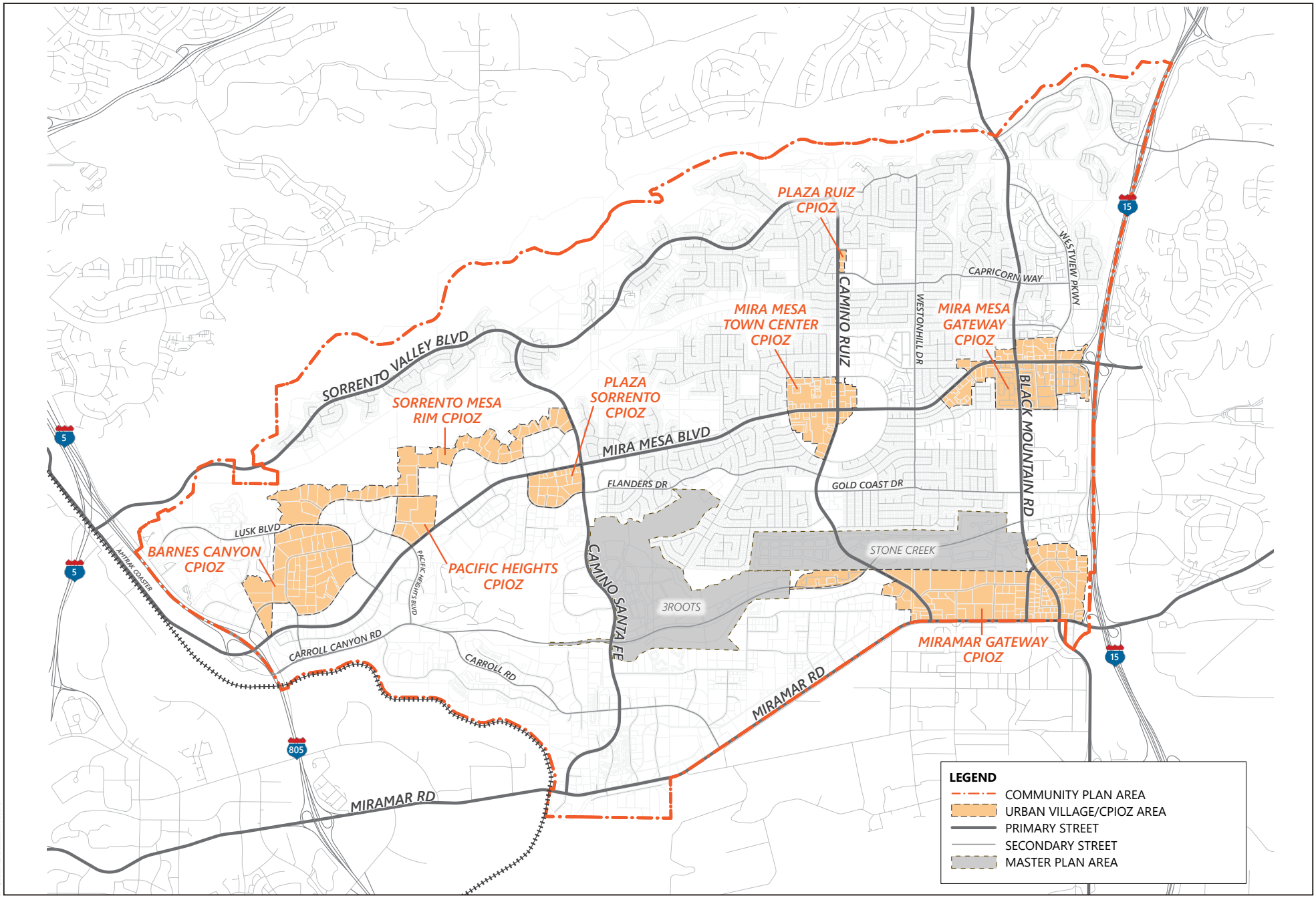

FIGURE 3-3

Urban Villages and CPIOZ Areas

Mira Mesa Community Plan Update PEIR

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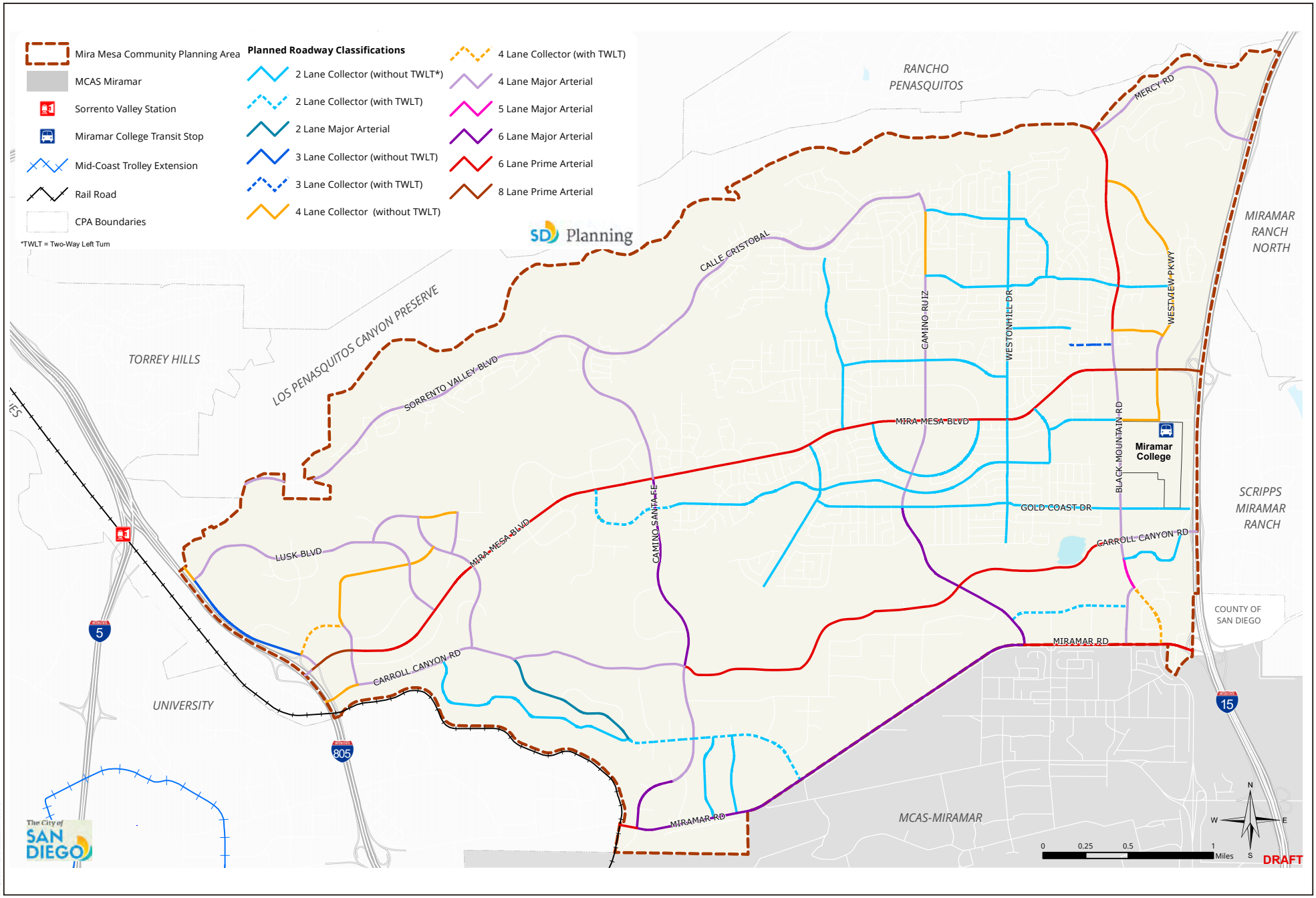

FIGURE 3-4

Proposed Street Reconfigurations

Mira Mesa Community Plan Update PEIR

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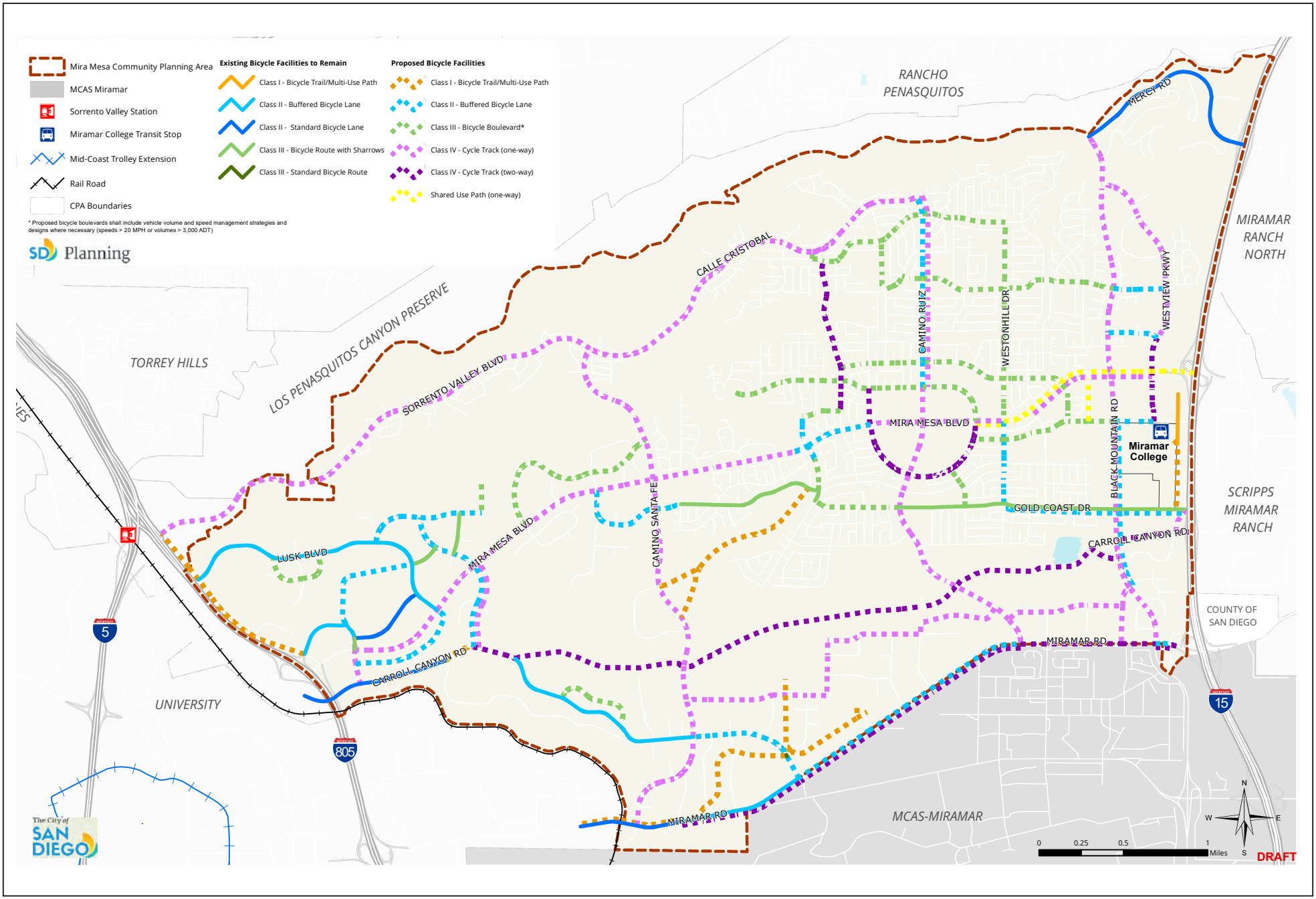

FIGURE 3-5

Proposed Bicycle Network Improvements

Mira Mesa Community Plan Update PEIR

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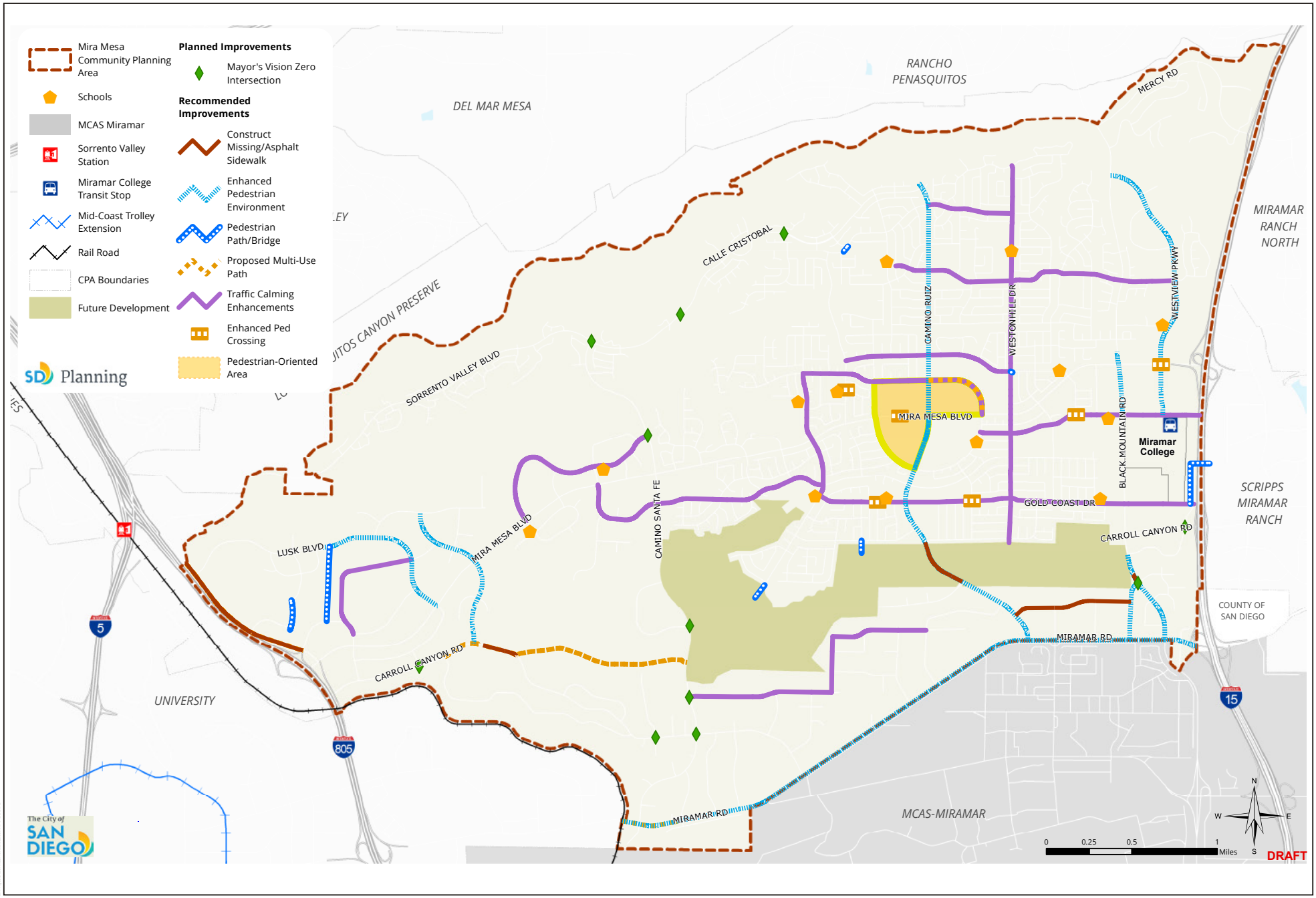

FIGURE 3-6

Proposed Pedestrian Improvements

Mira Mesa Community Plan Update PEIR

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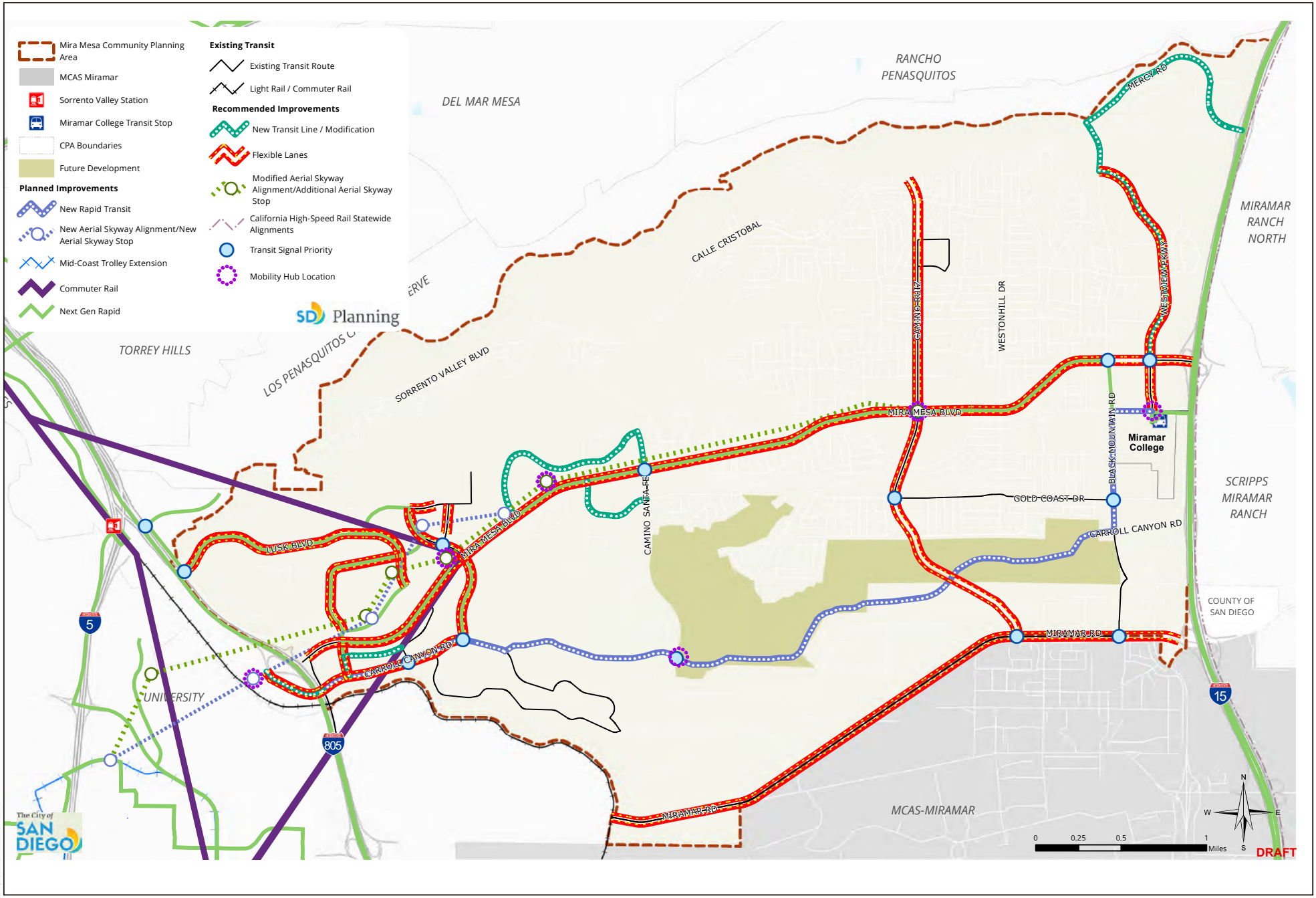

FIGURE 3-7

Proposed Network of Transit Improvements

Mira Mesa Community Plan Update PEIR

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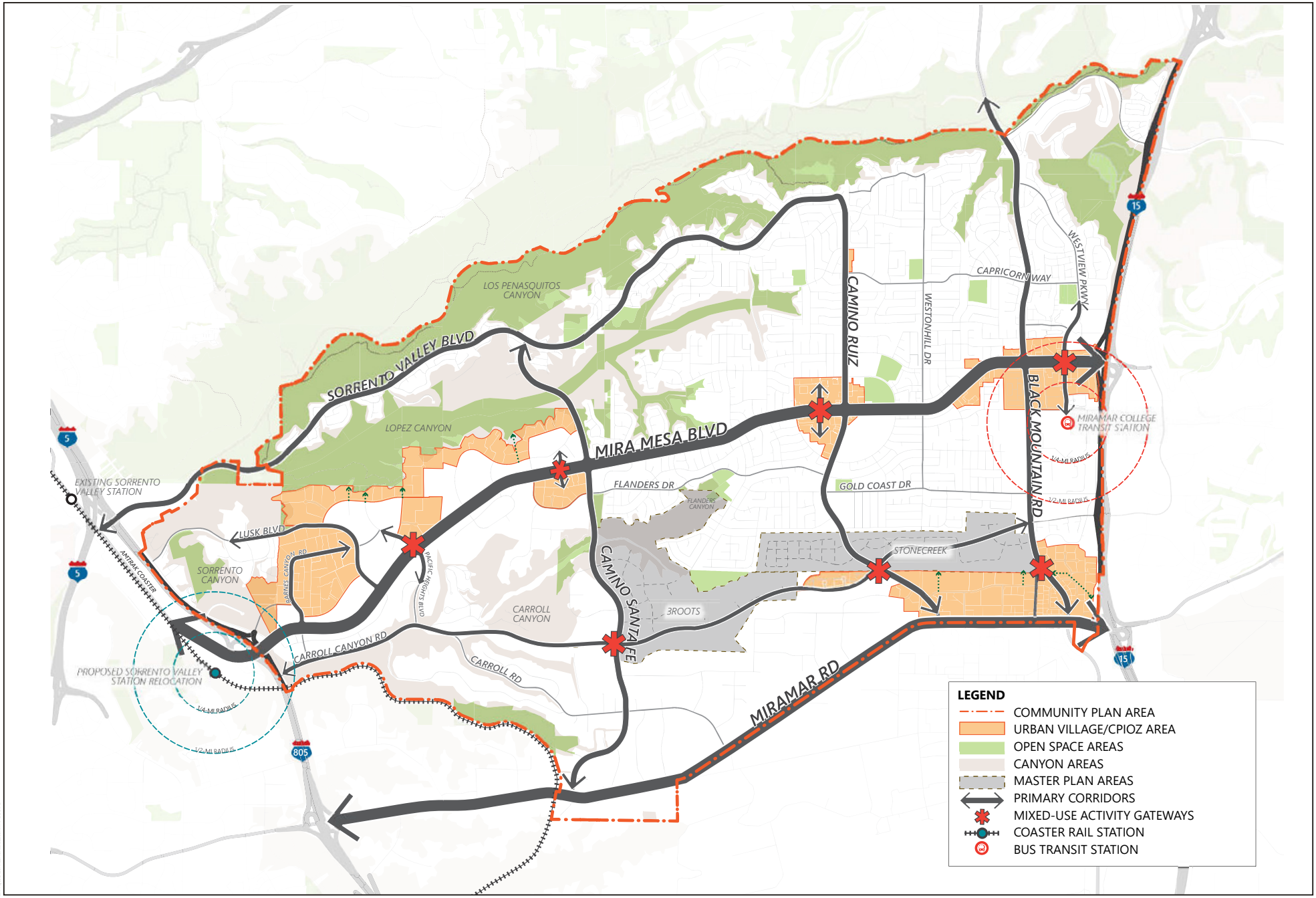

FIGURE 3-8

Urban Design Framework Map

Mira Mesa Community Plan Update PEIR

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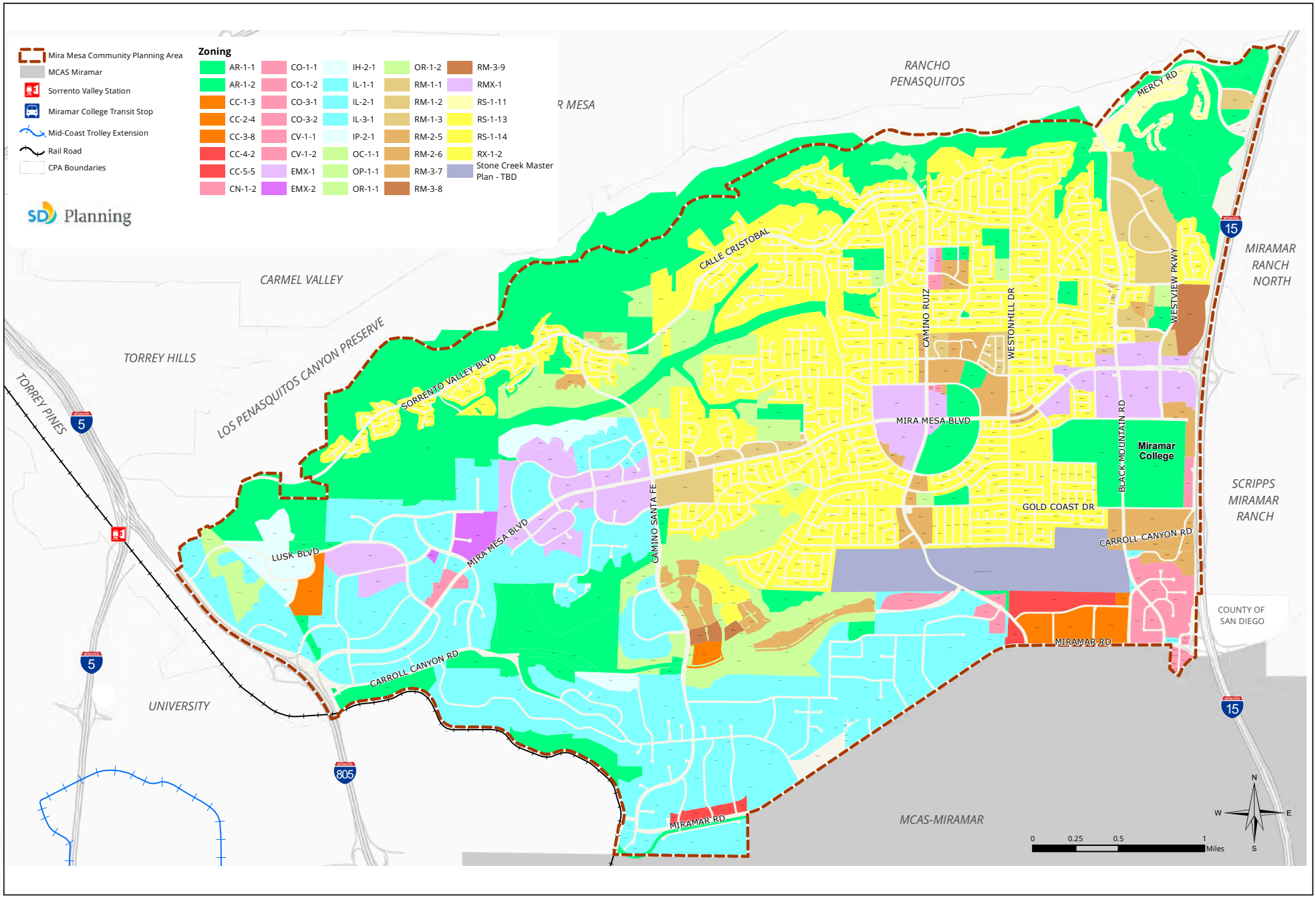

FIGURE 3-9

Proposed Zoning

Mira Mesa Community Plan Update PEIR

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4.0 REGULATORY FRAMEWORK

The regulatory framework applicable to the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU") and each environmental issue area addressed in the Environmental Analysis chapter of this Program Environmental Impact Report (PEIR) (Chapter 5.0, Sections 5.1 through 5.13) are included in this chapter.

4.1 AIR QUALITY

4.1.1 FEDERAL

4.1.1.1 Federal Clean Air Act/National Ambient Air Quality Standards

Air quality is defined by ambient air concentrations of specific pollutants identified by the U.S. Environmental Protection Agency (EPA) to be of concern with respect to the health and welfare of the general public. The EPA is responsible for enforcing the federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 amendments. CAA required the EPA to establish National Ambient Air Quality Standards (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 EPA established both primary and secondary standards for several criteria pollutants, including ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, respirable particulate matter, and lead. Table 4-1, Ambient Air Quality Standards, shows the federal and state ambient air quality standards for these pollutants.

Table 4-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[1]	*Secondary*[2]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	—	—
	8 Hours	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM_{10}	24 Hours	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	—	Same as Primary
$PM_{2.5}$	24 Hours	—	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8 Hours	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—

Table 4-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[1]	*Secondary*[2]
	8 Hours (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 Hours	—	—	0.5 ppm (1,300 µg/m^3)
	24 Hours	0.04 ppm (105 µg/m^3)	—	—
Lead	30-day Avg.	1.5 µg/m^3	—	
	Calendar Quarter	—	1.5 µg/m^3	Same as Primary
Lead	Rolling 3-month Avg.	—	0.15 µg/m^3	—
Visibility Reducing Particles	8 Hours	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	—
Sulfates	24 Hours	25 µg/m^3	0.15 µg/m^3	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	**No Federal Standards**	
Vinyl Chloride	24 Hours	0.01 ppm (26 µg/m^3)		

Source: CARB 2016, USEPA 2016.

Notes: 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.

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.

4.1.1.2 National Emission Standards for Hazardous Air Pollutants

In accordance with Section 112 of the CAA, the EPA established the National Emission Standards for Hazardous Air Pollutants (NESHPA) with the purpose of protecting the public from exposure to hazardous air pollutants, or air toxics, which include specific compounds known or suspected to cause cancer or other serious health effects. One of the primary air toxics regulated under NESHPA is asbestos, which was identified as a hazardous pollutant by the EPA in 1971. The EPA's regulations for asbestos under NESHPA are intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Specifically, NESHPA includes regulations that require thorough inspection and proper handling of asbestos-containing materials prior to and during demolition and renovation of facilities.

4.1.1.3 Lead Renovation, Repair, and Painting Rule

EPA's Lead Renovation, Repair, and Painting Rule, established in 2008 and amended in 2010 and 2011, aims to protect the public from lead-based paint hazards associated with renovation, repair, and painting activities. The Lead Renovation, Repair, and Painting Rule requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, childcare facilities, and preschools built before 1978 receive EPA certification (or certification by an authorized state), use certified renovators who are trained by EPA-approved training providers, and follow lead-safe work practices.

4.1.2 STATE

4.1.2.1 California Clean Air Act/California Ambient Air Quality Standards

The EPA allows states the option to develop different (stricter) standards on criteria pollutants. The State of California has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants (see Table 4-1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 4-1). The California Clean Air Act (CAA), also known as the Sher Bill or California Assembly Bill (AB) 2595, was signed into law on September 30, 1988, and became effective on January 1, 1989. The California CAA requires that air quality districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures.

The California Air Resources Board (CARB) is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The San Diego Air Pollution Control District (SDAPCD) is responsible for developing and implementing the rules and regulations designed to attain the NAAQS and CAAQS, as well as permitting new or modified sources,

developing air quality management plans, and adopting and enforcing air pollution regulations for San Diego County (County).

SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for the attainment and maintenance of the ambient air quality standards in the San Diego Air Basin (SDAB). SDAPCD prepared the San Diego County Regional Air Quality Strategy (RAQS); the most recent version of RAQS was adopted by the SDAPCD in 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 RAQS from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to the CARB, which develops the California State Implementation Plan (SIP).

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 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 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.

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.

4.1.2.2 State Implementation Plan

The SIP is a collection of documents that set forth a state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in 40 CFR 52.220.

SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

4.1.2.3 California Energy Code

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings was 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 3 years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2019 and went into effect on January 1, 2020. The 2019 update to the Building Energy Efficiency Standards focuses on the several key areas to improve the energy efficiency for new construction of, and additions and alterations to, residential and nonresidential buildings.

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 CPU is required to be designed to meet the current Title 24 energy efficiency standards.

4.1.2.4 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 serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the criteria pollutants previously discussed because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

The California Health and Safety Code (H&SC) (Section 39655, subd. [a]) defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of the federal Clean Air Act Section 112 (42 USC Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA),

acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (AB 1807: H&SC Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase and the second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emissions data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII.

a. Diesel-exhaust Particulate Matter

Of particular concern statewide are diesel-exhaust particulate matter (DPM) emissions. DPM was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by CARB and are listed as carcinogens under California's Proposition 65 or under the Federal Hazardous Air Pollutants program.

Following the identification of DPM as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles* (CARB 2000).

b. Asbestos Containing Materials

The California Division of Occupational Safety and Health, known as Cal/OSHA, enforces asbestos standards in construction, shipyards, and general industry. Following identification

of Asbestos-Containing Materials (ACMs) in facilities proposed for demolition or renovation, the California Division of Occupational Safety and Health regulations require that asbestos trained and certified abatement personnel perform asbestos abatement and that all ACMs removed from on-site structures must be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Registration with the California Division of Occupational Safety and Health is required for contractors and employers that remove ACMs having an asbestos fiber content of more than 0.1% and 100 square feet or more of ACMs.

4.1.3 LOCAL

4.1.3.1 Regional Air Quality Strategy

SDAPCD prepared the RAQS in response to the requirements set forth in AB 2595. The draft was adopted, with amendments, on June 30, 1992. Attached, as part of the RAQS, are the Transportation Control Measures for the air quality plan prepared by SANDAG in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The required triennial updates of the RAQS and corresponding Transportation Control Measures were adopted in 1995, 1998, 2001, 2004, and 2009, with the most recent version adopted by the SDAPCD in 2016. The RAQS and Transportation Control Measures set forth the steps needed to accomplish attainment of the CAAQS.

The California CAA requires areas that are designated non-attainment of CAAQS for ozone, carbon monoxide, sulfur dioxide, or nitrogen dioxide to prepare and implement State plans to attain the standards by the earliest practicable date (H&SC Section 40911[a]). With the exception of State ozone standards, each of these standards has been attained in SDAB (SDAPCD 2016).

4.1.3.2 San Diego Air Pollution Control District 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 fine particulate matter. 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.

4.1.3.3 San Diego Air Pollution Control District Rule 51 (Nuisance)

SDAPCD Rule 51 prohibits emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to any considerable number of persons 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. It is generally accepted that the "considerable number of persons" requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days.

4.1.3.4 San Diego Air Pollution Control District 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.

4.1.3.5 San Diego Air Pollution Control District Rule 67.0.1 (Architectural Coatings)

Future development pursuant to the proposed CPU is required to comply with SDAPCD Rule 67.0.1 (Architectural Coatings) that sets the following standards:

- Residential interior coatings are to be less than or equal to 50 grams of volatile organic compounds (VOC) per liter
- Residential exterior coatings are to be less than or equal to 100 grams VOC per liter
- Non-residential interior/exterior coatings are to be less than or equal to 100 grams VOC per liter

4.1.3.6 City of San Diego Municipal Code

The City of San Diego Municipal Code, Off-Site Development Impact Regulations (SDMC Chapter 14, Article 2, Division 7) are intended to provide standards for air contaminants, noise, electrical/radioactivity disturbance, glare, and lighting. These regulations apply to development that

produces air contaminants, noise, electrical/radioactivity disturbance, glare, or lighting in any zone. Section 142.0710 establishes that air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located.

4.2 BIOLOGICAL RESOURCES

4.2.1 FEDERAL

4.2.1.1 Endangered Species Act

Administered by the U.S. Fish and Wildlife Service (USFWS), the federal Endangered Species Act (ESA) 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 jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. ESA Section 9(a) 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.

USFWS designates critical habitat for endangered and threatened species. 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 ESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the ESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for the preparation of a Habitat Conservation Plan and issuance of an incidental take permit.

4.2.1.2 Migratory Bird Treaty Act

Migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds. In common practice, the

MBTA is now used to place restrictions on the disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

4.2.1.3 Clean Water Act

The U.S. Army Corps of Engineers regulates impacts to waters of the United States under Section 404 of the Clean Water Act (CWA) (33 USC 401 et seq.; 33 USC 1344; 33 USC 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the United States. 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 1 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 Regional Water Quality Control Board (RWQCB) must be issued prior to issuance of a Section 404 Permit.

4.2.2 STATE

4.2.2.1 California Endangered Species Act

Similar to the ESA, the California Endangered Species Act (CESA) of 1970 provides protection to species considered threatened or endangered by the State of California (California Fish & Game Code (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 California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the ESA and CESA, pursuant to a federal Incidental Take Permit if the California Department of Fish and Wildlife (CDFW) certifies that the incidental take is consistent with CESA (CFGC Code Section 2080.1[a]). For state-only listed species, California Fish and Game Code (CFGC) Section 2081 authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met. The City was issued a take permit for their adopted Multiple Species Conservation Program (MSCP) Subarea Plan pursuant to Section 2081.

4.2.2.2 California Fish and Game Code

The CFGC provides specific protection and listing for several types of biological resources. Pursuant to CFGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFGC 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 CDFW. CFGC 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 will not be disturbed, subject to approval by CDFW and/or USFWS.

Under sections 1600 et. seq. of CFGC, 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.

4.2.3 LOCAL

4.2.3.1 Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City of San Diego, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms.

The City's MSCP Subarea Plan (SAP) was approved in March 1997. The MSCP SAP provides a plan and process for the issuance of permits under the federal and state Endangered Species Acts and the California Natural Communities Conservation Planning Act of 1991. The primary goal of the MSCP SAP is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth.

In July 1997, the City of San Diego signed an Implementing Agreement with USFWS and CDFW. The Implementing Agreement serves as a binding contract between the City, USFWS, and CDFW that identifies the roles and responsibilities of the parties to implement the MSCP and Subarea Plan. The Implementing Agreement became effective on July 17, 1997, and allows the City to issue Incidental

Take Authorizations under the provisions of the MSCP. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.

Multi-Habitat Planning Area

The Multi-Habitat Planning Area (MHPA) is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, with limited development permitted based on the development area allowance of the OR-1-2 zone (open space residential zone).

Private land entirely within the MHPA is only allowed up to 25% development in the least sensitive area per the City's MSCP Subarea Plan unless a deviation from the City's Environmentally Sensitive Lands Regulations is requested and approved pursuant to SDMC Section 143.0150. Should more than 25% development be desired, an MHPA boundary line adjustment may be proposed. The City's MSCP SAP states that adjustments to the MHPA boundary line are permitted without the need to amend the City's SAP, provided the boundary adjustment results in an area of equivalent or higher biological value. To meet this standard, the area proposed for addition to the MHPA must meet the six functional equivalency criteria set forth in Section 5.4.2 of the Regional MSCP Plan. All MHPA boundary line adjustments require approval by the wildlife agencies and the City.

For parcels located outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by state and federal agencies) and narrow endemic species." However, "impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's Biology Guidelines.

The MSCP includes management priorities to be undertaken by the City as part of its MSCP implementation requirements. Those actions identified as Priority 1 are required to be implemented by the City as a condition of the MSCP Take Authorization to ensure that covered species are adequately protected. The actions identified as Priority 2 may be undertaken by the City as resources permit.

MHPA Land Use Adjacency Guidelines

To address the integrity of the MHPA and mitigate for indirect impacts to the MHPA, guidelines were developed to manage land uses adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines are intended to be incorporated into the mitigation monitoring and reporting program and/or applicable permits during the development review phase of a project. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and

grading/land development. The MHPA Land Use Adjacency Guidelines are discussed in Section 1.4.3 of the MSCP SAP.

Boundary Adjustments

Section 1.1.1 of the MSCP SAP discusses MHPA boundary line adjustments. Boundary line corrections are also allowable under certain circumstances.

MHPA Boundary Line Adjustments

MHPA boundary line adjustments may be made without the need to amend a community plan in cases where the new MHPA boundary results in an area of equivalent or higher biological value. The determination of the biological value of a proposed boundary change will be made by the City in accordance with the MSCP SAP, with the concurrence of the wildlife agencies. If the determination is that the adjustment will result in the same or higher biological value of the MHPA, no further action by the jurisdictions or wildlife agencies shall be required.

Any adjustment to the MHPA boundary would be disclosed in the environmental document as part of the project description prepared for the specific future project. An evaluation of the proposed boundary adjustment would be provided in the biological technical report and summarized in the land use and biological resources sections of the environmental document associated with a future project. An adjustment that does not meet the equivalency test shall require additional documentation and may result in an amendment to the MSCP SAP.

MHPA Boundary Line Corrections

The original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. MHPA boundary line corrections are allowed under the City's MSCP SAP to rectify minor mapping inaccuracies at the project level, and can processed with the project's discretionary review. MHPA corrections typically involve removing existing, pre-MSCP development (e.g., existing homes) from the mapped MHPA.

The fundamental difference between MHPA boundary line corrections and adjustments is that MHPA boundary line adjustments involve removing habitat or buffer areas from the MHPA, whereas MHPA boundary line corrections do not. An MHPA boundary line correction will typically be considered by the City when it can be shown that there is a discrepancy between the adopted MHPA boundary and other mapping information (e.g., aerial photography, vegetation maps, topographic maps), which results in inclusion of existing developed areas in the MHPA due to the regional scale of the MHPA mapping.

During preparation of the proposed project, the City conducted a broad-scale review of the CPU area to evaluate areas designated as open space and areas within the MHPA for their contribution to conservation of ESL to determine if any MHPA boundary line corrections were required. No areas requiring MHPA boundary line corrections were identified.

Future projects, however, may identify the need for MHPA boundary line corrections during the more detailed studies conducted during the planning process for these projects. To determine if an MHPA boundary line correction is required, the applicant should review applicable available GIS layers for the project area and should document the existing conditions on the project site. If there appears to be a mapping error, an MHPA boundary line correction may be considered if it would not result in (a) removal of habitat, including wetlands; or (b) impacts to biological buffer areas (e.g., wetland buffers, wildlife corridors).

An MHPA boundary line correction would not prevent the applicant from having to comply with the City's MHPA Land Use Adjacency Guidelines, ESL Regulations, and Steep Hillside Regulations, and other applicable regulations as outlined in the MSCP SAP.

MSCP Subarea Plan: Land Use Considerations

Section 1.4 of the MSCP SAP describes compatible land uses, general planning policies and design guidelines, and the MHPA Land Use Adjacency Guidelines. Each of these topics is discussed in this section.

Compatible Land Uses

Section 1.4.1 of the MSCP SAP outlines land uses that are conditionally compatible with the biological objectives in the MSCP and thus are allowed within the MHPA. These include passive recreation, utility lines and roads in compliance with the General Planning Policies and Design Guidelines described in Section 1.4.2 of the MSCP SAP (discussed below), limited water facilities and other essential public facilities, limited low-density residential uses, brush management (Zone 2), and limited agriculture.

General Planning Policies and Design Guidelines

Section 1.4.2 of the MSCP SAP describes the general planning policies and design guidelines that should be applied to the review and approval of development projects within or adjacent to the MHPA. These guidelines would apply to projects within the CPU area that are within or adjacent to the MHPA.

Framework Management Plan

The MSCP SAP Framework Management Plan, included in Section 1.5.1 of the City's MSCP SAP, sets management goals and objectives to maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats, thereby preventing local extirpation and ultimate extinction, and minimizing the need for future listings, while enabling economic growth in the region. Section 1.5.2 of the SAP lists general management directives that apply throughout the SAP area related to mitigation, restoration, public access, trails, and recreation, litter/trash and materials storage, adjacency management issues, invasive exotics control and removal, and flood control.

The CPU area is identified within Section 1.2.3 of the SAP as being in an "Urban Area" and as containing "Urban Habitat Lands." The urban habitat areas within the City's MHPA are primarily concentrated in existing urbanized locations and consist mainly of vernal pool areas, urbanized canyons and stream areas, and associated hillsides which support native habitats and species and promote wildlife movement. Specific and overall management policies and directives for Urban Habitat Lands are listed in SAP Section 1.5.7. Future development within areas identified as Urban Habitats is required to support the overall goals and objectives for urban habitat lands as follows:

> The optimum future condition for the urban habitat lands scattered throughout the City of San Diego is as a system of canyons that provide habitat for native species remaining in urban areas; i.e., as "stepping stones" for migrating birds and those establishing new territories and providing environmental educational opportunities for urban dwellers of all ages. The system of urban habitat canyons and natural open space throughout the City provides important areas for people to enjoy and learn about the natural world and local environment. These areas also afford visual beauty and psychological relief from urbanization, while supporting habitat for the maintenance of both common and rare species. These habitats, surrounded by development and modified by urban edge effects, also present unique opportunities for research into habitat fragmentation, viability, and urban wildlife ecology.

4.2.3.2 Vernal Pool Habitat Conservation Plan

The City adopted the Vernal Pool Habitat Conservation Plan (VPHCP) in 2018 (City of San Diego 2017). The VPHCP is a comprehensive plan to provide the conservation of vernal pool habitats and seven sensitive species that do not have coverage under the City's MSCP SAP. The VPHCP encompasses the entire City and MSCP SAP coverage area of approximately 206,124 acres and includes some lands owned by the City that are within unincorporated San Diego County (i.e., Cornerstone Lands that include water supply areas for the City). Some lands within the City limits not under City jurisdiction (e.g., school districts, water districts, federal and state lands, etc.)

are not automatically covered by the VPHCP; however, those landowners can seek coverage under the VPHCP through a Certificate of Inclusion.

In addition to authorizing the take of sensitive vernal pool species, the VPHCP serves to expand the City's MHPA, with a focus on the management and conservation of vernal pool habitats and their associated species, particularly the covered species of the VPHCP. The VPHCP is comprised of three Planning Units: north, central, and south. The CPU area is located within the north Planning Unit of the VPHCP.

The VPHCP includes a list of four covered projects that involve development within the City and for which hardline Preserve boundaries have been established and incidental take of VPHCP-covered species would be approved through implementation of the VPHCP. For these projects, adequate avoidance and/or minimization measures have been identified and compensatory mitigation (i.e., conservation measures) have been incorporated for anticipated impacts to VPHCP-covered species and their vernal pool habitat. One of the covered projects—Tierra Alta—occurs within the CPU area. This project includes construction of eight single-family residences on an approximately 4.44-acre site located at the northern terminus of Caminito Rodar on currently undeveloped land adjacent to Los Peñasquitos Canyon Preserve.

The VPHCP also identifies three planned projects, which are defined as projects involving land use development within the City for which hardline Preserve boundaries have been established and take has been authorized or exempted through a process other than VPHCP (such as an approved USFWS Biological Opinion). These planned projects have planned development footprints that have been negotiated as take-authorized areas along with associated hardline conserved lands within the Preserve. Their conservation areas are identified as 100% conserved and would be added to the MHPA. Consistent with the project approvals and/or Biological Opinions, the permittee shall be responsible for the implementation of the mitigation measures (i.e., restoration plans) and funding of the long-term management and monitoring plan

Any future proposed development not included as one of the four covered projects or three planned projects, and actions not included in the list of covered activities (i.e., land use and public infrastructure and conservation activities) are required to undergo project-specific analyses (including applicable public environmental review) to identify vernal pool resources and evaluate impacts and provide any required avoidance/mitigation relative to the provisions of the VPHCP. A list of covered activities and the allowable conditions within the VPHCP are described in Section 4 of the VPHCP. If a future proposed project is determined by the City to be consistent with the requirements of the VPHCP, the project could be authorized to impact vernal pools and covered species through the City's VPHCP Incidental Take Permit.

Regardless of impact authorization, the VPHCP first requires all feasible impacts to be avoided and/or minimized to limit any impact to vernal pools and their associated species. Such measures include, but are not limited to the following:

- Redesigning a project to avoid resources
- Performing preconstruction biological surveying
- Translocating soils, propagules, and/or species
- Conducting biological monitoring throughout project construction
- Conducting contractor environmental awareness training
- Directing project runoff away from vernal pools
- Installing temporary construction fencing to protect off-site vernal pools
- Installing artificial watering to control/eliminate fugitive dust
- Conducting seasonally timed grading operations
- Top soil salvaging
- Installing permanent protective fencing
- Conducting other typical general construction best management practices (BMPs)

4.2.3.4 City of San Diego Environmentally Sensitive Lands Regulations

Environmentally Sensitive Lands (ESL) include sensitive biological resources (e.g., MHPA), steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the requirements of the City's Biology Guidelines (2016) as outlined in the City's ESL Regulations (SDMC Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the City's ESL Regulations, which serve to implement standards and requirements of the California Environmental Quality Act (CEQA) and the City's MSCP Subarea Plan.

The purpose of the ESL Regulations is to "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations require that development avoid impacts to certain sensitive biological resources as much as possible including, but not limited to, MHPA lands, wetlands and vernal pools in naturally occurring complexes, federal and state-listed, non-MSCP Covered Species, and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect

wetland-associated functions and values. While a 100-foot buffer width is generally required in the coastal zone and recommended in areas outside the coastal zone, this width may be increased or decreased on a case-by-case basis in consultation with the City, CDFW, U.S. Army Corps of Engineers, and USFWS (City of San Diego 2018). Future development within the CPU area would be required to comply with all applicable City ESL Regulations.

4.2.3.5 Biology Guidelines

In September 1991, the City's Biology Guidelines, part of the *Land Development Manual* (LDM), were adopted, to aid in the implementation and interpretation of the ESL Regulations (SDMC Chapter 14, Article 3, Division 1) and the OR-1-2 Zone (SDMC Chapter 13, Article 1, Division 2). Section III of the Biology Guidelines serve as standards for the determination of impact and mitigation under CEQA and the Coastal Act. The guidelines are the baseline biological standards for processing Neighborhood Development Permits, Site Development Permits, and Coastal Development Permits issued pursuant to the ESL Regulations. The City's Biology Guidelines were most recently updated in February 2018.

4.2.3.6 General Plan Conservation Element

The General Plan establishes citywide policies to be cited in conjunction with a Community Plan. The General Plan presents goals and policies for biological resources in the Conservation Element, which generally aim to do the following:

- Protect and conserve the landforms, canyon lands, and open spaces
- Limit development of floodplains and sensitive biological areas, including wetlands, steep hillsides, canyons, and coastal lands
- Manage and/or minimize runoff, sedimentation, and erosion due to construction activity in order to improve watershed management and water quality
- Manage wetland areas for natural flood control and preserve wetland areas
- Preserve areas within the MSCP and implement the goals and policies of the City's MSCP Subarea Plan
- Support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values
- Work with private, state, and federal organizations or people in order to implement an effective wetland management system

4.3 GEOLOGY AND SOILS

4.3.1 STATE

4.3.1.1 Earthquake Fault Zoning Act (Alquist-Priolo Act)

The State of California Alquist-Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the Act, the State Geologist has established regulatory zones (known as Earthquake Fault Zones) around surface traces of active faults. These have been mapped for affected cities, including San Diego. Application for a development permit for any project within a delineated earthquake fault zone shall be accompanied by a geologic report, prepared by a geologist registered in the State of California, that is directed to the problem of potential surface fault displacement through a project site.

4.3.1.2 California Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act (Public Resources Code [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. 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 (14 CCR 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.

4.3.1.3 California Code of Regulations

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, and the American Society for Testing and Materials International, with appropriate amendments and modifications to reflect site-specific conditions and requirements in California.

4.3.2 LOCAL

4.3.2.1 City of San Diego Seismic Safety Study

The San Diego Seismic Safety Study includes geologic hazards and fault maps of the City. Areas of the City are identified by geologic hazard category, which reflects the geologic hazard type and related risks. These are generalized maps, and site-specific geologic/geotechnical investigations may be necessary for proposed development or construction. LDC Section 145.1803 describes when a geotechnical investigation is required for building permits, and City of San Diego Development Services Information Bulletin 515 describes the minimum submittal requirements for geotechnical and geological reports that may be required for development permits, subdivision approvals, or grading permits.

4.3.2.2 City of San Diego Land Development Code

The City's LDC sets forth the regulations that apply to the development of land in the City, and comprises Chapters 11, 12, 13, 14, and 15 of the SDMC. The LDC describes situations where grading permits are needed, which include the following:

- Grading within a 100-year floodplain or which changes the existing drainage pattern
- For grading, geotechnical investigations, well drilling, or agricultural activity on environmentally sensitive lands or on properties with historical resources
- For any activity that disturbs soil or vegetation in ESL
- If grading is being performed as a condition of a development permit or for restoring damage caused by illegal grading
- If the grading is within privately owned open space easements or City-owned open space
- For modification of slope on a canyon or excavation of a hillside
- For grading of any nonenvironmentally sensitive land of 1 acre or more
- For fill with more than 5% broken concrete, asphalt, masonry or construction debris, or with any single piece larger than 12 inches in any direction

4.3.2.3 City of San Diego Building Regulations

The City's Building Regulations (SDMC Chapter 14, Article 5) are intended to regulate the construction of applicable facilities and encompass (and formally adopt) associated elements of the CBC. Specifically, the regulations mentioned in SDMC Chapter 14, Article 5 includes guidelines regulating the "construction, alteration, replacement, repair, maintenance, moving, removal, demolition, occupancy, and use of any privately owned building or structure or any appurtenances

connected or attached to such buildings or structures within this jurisdiction, except work located primarily in a public way, public utility towers and poles, mechanical equipment not specifically regulated in the Building Code, and hydraulic flood control structures." (SDMC Section 145.0102(a)).

4.3.2.4 General Plan Public Facilities, Services, and Safety Element

The Public Facilities, Services and Safety Element of the General Plan (City of San Diego 2022) identifies a number of applicable policies related to seismic, geologic, and structural considerations. Specifically, Policies PF-Q.1 and PF-Q.2 include measures regarding conformance with State laws related to seismic and geologic hazards, conducting/reviewing geotechnical investigations, and maintaining structural integrity with respect to geologic hazards.

4.4 GREENHOUSE GAS EMISSIONS

4.4.1 FEDERAL

4.4.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that carbon dioxide is an air pollutant, as defined under the CAA, and that the EPA has the authority to regulate emissions of GHGs. The EPA announced that GHGs (including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the EPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the EPA and the National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation. 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.

4.4.2 STATE

4.4.2.1 California Energy Code

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings was 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 3 years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2019 and went into effect on January 1, 2020. The 2019 update to the Building

Energy Efficiency Standards focuses on the several key areas to improve the energy efficiency of for new construction of, and additions and alterations to, residential and nonresidential buildings.

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.

4.4.2.2 California Green Building Code Standards

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 City of San Diego adopted CALGreen with city-specific amendments to Chapter 14 Article 10 of SDMC. The current 2019 Standards continue to improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 Standards went into effect on January 1, 2020. The 2022 edition of Title 24 was published July 1, 2022, with an effective date of January 5, 2023.

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 as they relate to building standards. In short, CALGreen 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 stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. CALGreen 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.

4.2.2.3 Executive Order S-3-05–Statewide GHG Emission Targets

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. 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% below 1990 levels by 2050.

4.2.2.4 Assembly Bill 32–California Global Warming Solutions Act

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that the 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 emission reductions.

4.2.2.5 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 to meet the targets. The alternative planning strategy 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 the *San Diego Forward: The Regional Plan* (Regional Plan) (SANDAG 2021) discussed in greater detail in Section 4.4.3.1.

4.2.2.6 Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process that changed transportation impact analysis as part of CEQA compliance. These changes included the

elimination of auto delay, level of service, 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.

4.2.2.7 Senate Bill 97

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

4.2.2.8 Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40% 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 is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40% below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80% under 1990 levels by 2050.

4.2.2.9 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 reduction target of 40% 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.

4.2.2.10 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 Corporate Average Fuel Economy 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).

4.2.2.11 Assembly Bill 341

The State legislature enacted AB 341 (PRC Section 42649.2), increasing the waste diversion target to 75% 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.

4.2.2.12 Executive Order S-01-07–Low Carbon Fuel Standard

This EO, signed by Governor Schwarzenegger 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% 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 a 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.

4.2.2.13 Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33% by 2020 to 50% 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.

4.2.2.14 Climate Change Scoping Plan

In 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) in accordance with H&SC Section 38561. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020 (CARB 2008). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
6. Creating targeted fees, including a public goods charge on water use, fees on high global warming potential (GWP) gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 29% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations [referred to as "business-as-usual"]). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG-reduction regulations (CARB 2011). Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 22% (down from 29%) from the business-as-usual conditions. When the 2020 emissions

level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009 through 2016) and the Renewables Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 29%) from the business-as-usual conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are energy, transportation (e.g., vehicles/equipment, sustainable communities, housing, fuels, infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes, large-scale electrification of on-road vehicles, buildings, and industrial machinery, decarbonizing electricity and fuel supplies, and the rapid market penetration of efficient and clean energy technologies (CARB 2014).

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the Intergovernmental Panel on Climate Change. Using the recalculated 1990 emissions level (431 metric tons of carbon dioxide equivalent) and the revised 2020 emissions level projection identified in the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 29% or 16%) from the business-as-usual conditions (CARB 2014).

On January 20, 2017, CARB released the *2017 Climate Change Scoping Plan Update* (Second Update) for public review and comment (CARB 2017a). This update proposed CARB's strategy for achieving the state's 2030 GHG target as established in SB 32 (discussed below), including continuing the cap-

and-trade program through 2030. The Second Update incorporated approaches to cutting short-lived climate pollutants under the Short-Lived Climate Pollutant Reduction Strategy (a planning document adopted by CARB in March 2017), and acknowledged the need for reducing emissions in agriculture and highlighted the work underway to ensure that California's natural and working lands increasingly sequester carbon (CARB 2017b). During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2017 Scoping Plan Update (CARB 2017a). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update stated, "Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under [the California Environmental Quality Act (CEQA)]" (CARB 2017a). The Second Update was approved by CARB's Governing Board on December 14, 2017.

4.2.3 LOCAL

4.2.3.1 San Diego Forward: The Regional Plan

The Regional Plan (SANDAG 2021) 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 preservation of important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation.

The Regional Plan also addresses border issues, providing an important guideline for communities bordering 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.

4.2.3.2 City of San Diego General Plan

The City of San Diego General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element

policy CE-A.2 aims to reduce the City's carbon footprint and to develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth related to climate change (City of San Diego 2008a). The Land Use and Community Planning Element, the Mobility Element, the Urban Design Element, and the Public Facilities, Services and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or State and federal legislation.

4.2.3.3 City of San Diego Climate Action Plan

The City's 2022 Climate Action Plan (CAP) builds on the 2015 CAP and establishes a community-wide goal of net zero GHG emissions by 2035, committing San Diego to an accelerated trajectory for GHG reductions and making the City more sustainable and healthier for residents. The primary purposes of the CAP are to provide a roadmap for the City to achieve GHG reductions, conform the City's climate change efforts to California laws and regulations, promote climate equity, implement climate change actions from the General Plan, and provide CEQA tiering for the GHG emissions of new development.

In August 2022, the City Council adopted an update to the CAP which included amendments to the Land Development Code to adopt the CAP Consistency Regulations. The CAP Consistency Regulations apply to the following ministerial and discretionary projects: 1) residential development that results in 3 or more total dwelling units on all premises in the development; 2) non-residential development that adds more than 1,000 square feet and results in 5,000 square feet or more of total gross floor area, excluding unoccupied spaces such as mechanical equipment and storage areas; and 3) parking facilities as a primary use. The CAP also meets the criteria for a qualified GHG emissions reduction plan for use in cumulative impact analysis for development projects under CEQA Guidelines Section 15183.5. The CAP Consistency Regulations contain measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would further ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects for new development that are consistent with the CAP, as determined through compliance with the CAP Consistency Regulations, may rely on the CAP for the cumulative impacts analysis of GHG emissions.

4.5 HISTORICAL, ARCHAEOLOGICAL, AND TRIBAL CULTURAL RESOURCES

4.5.1 FEDERAL

4.5.1.1 National Historic Preservation Act of 1966 and National Register of Historic Places

The National Historic Preservation Act of 1966 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. 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.

Criteria for listing in the NRHP are stated in 36 CFR 60. A resource may qualify for listing if there is quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and where such resources are the following:

- Are associated with events that have made a significant contribution to the broad patterns of our history;
- Are associated with the lives of persons important in our past;
- Embody 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
- Have yielded, or may be likely to yield, information important in prehistory or history.
- Eligible properties must meet at least one of the NRHP criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original historic fabric has been retained, and the reversibility of changes to the property. The fourth criterion is typically reserved for archaeological and paleontological resources. These criteria have largely been incorporated into the CEQA Guidelines (14 CCR Section 15064.5) as well.

4.5.1.2 Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act of 1990 ensures that Native American human remains and cultural items are treated with respect and dignity during all phases of project evaluation.

4.5.2 STATE

4.5.2.1 California Register of Historic Resources/California Environmental Quality Act

For the purposes of CEQA, a significant historical resource is one which qualifies for the California Register of Historical Resources (CRHR) or is listed in a local historic register or deemed significant in a historical resource survey, as provided under PRC Section 5024.1(g). A resource that is not listed in or determined to be eligible for listing in the CRHR, is not included in a local register of historic resources, or is not deemed significant in a historical resource survey may nonetheless be deemed historically significant by a lead agency (14 CCR Section 15064.5; PRC Section 21084.1).

The 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 a 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:

- 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;
- Is associated with the lives of persons important to the nation or to California's past;
- 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
- Has yielded, or may be likely to yield, information important in the prehistory or history of the state or nation.

As indicated above, the California criteria (14 CCR Section 15064.5) for the registration of significant architectural, archaeological, and historical resources in the CRHR are nearly identical to those for the NRHP. Furthermore, PRC Section 21083.2(g) defines the criteria for determining the significance of archaeological resources. These criteria include definitions for a "unique" resource based on its:

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

Properties listed, or formally designated eligible for listing, in the NRHP are automatically listed in the CRHR as are State Historical Landmarks and Points of Interest. CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

CEQA was amended in 1998 to define "historical resources" as a resource listed in or determined eligible for listing in 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, as well as any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant.

The City's determination of the significance of impacts on historical and unique archaeological resources is based on the criteria found in CEQA Guidelines Section 15064.5. Archaeological resources are considered "historical resources" for the purposes of CEQA. Most archaeological sites which qualify for the CRHR do so under criterion 4 (i.e., research potential).

Since resources that are not listed or determined eligible for the state or local registers may still be historically significant, their significance would be determined if they are affected by a development proposal. The significance of a historical resource under criterion 4 rests on its ability to address important research questions.

4.5.2.2 Native American Burials (Public Resources Code Section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and designates the Native American Heritage Commission to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to a year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

4.5.2.3 California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (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.

4.5.2.4 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.

4.5.2.5 Assembly Bill 52

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 (ND), Mitigated Negative Declaration (MND) or Environmental Impact Report (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 ND, MND, 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 21074). It also defines tribal cultural resources as either of the following:

> 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.
>
> 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.

4.5.2.6 California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. H&SC Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (H&SC Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the Native American Heritage Commission within 24 hours (H&SC Section 7050.5c). The Native American Heritage Commission will notify the

Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the MLD by the Native American Heritage Commission. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

4.5.3 LOCAL

4.5.3.1 City of San Diego Municipal Code: Historical Resources Regulations

In January 2000, the City's Historical Resources Regulations (SDMC Sections 143.0201–143.0280), were adopted, providing a balance between sound historic preservation principles and the rights of private property owners. The regulations were developed to implement applicable local, state, and federal policies and mandates. Included in these are the General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Historical resources, in the context of the City's Historical Resources Regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the City. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These are usually over 45 years old, and they may have been altered or still be in use.

The City's Historical Resources Guidelines are incorporated in the City's LDM by reference. These Guidelines set up a Development Review Process to review projects in the City. This process is composed of two aspects: the implementation of the regulations and the determination of impacts and mitigation under CEQA.

Compliance with the regulations begins with the determination of the need for a site-specific survey for a project. The need for a survey is based on historical resource information and the date and results of any previous surveys of a project site. Section 143.0212(b) of the Historical Resources Regulations requires that historical resource sensitivity maps be used to identify properties in the City that have a probability of containing historic or prehistoric archaeological sites. These maps are based on records maintained by the South Coastal Information Center at San Diego State University of the California Historical Resources Information System, and the San Diego Museum of Man, as well as site-specific information in the City's files. If the records show an archaeological site exists on or immediately adjacent to a subject property, the City shall require a survey. In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a 1-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. Archaeological surveys are

also required if more than 5 years have elapsed since the last survey and the potential for archaeological resources exists. A historic property (built environment) survey can be required on a project if the structure/site is over 45 years old, may meet one or more criteria for designation, and appears to have integrity of setting, design, materials, workmanship, feeling, and association. Section 143.0212(d) of the Historical Resources Regulations states that if a property-specific survey is required, it shall be conducted according to the Historical Resources Guidelines criteria. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located. If the survey results are negative, the review process is complete, and no mitigation is required.

In addition to direct and indirect impacts, cumulative impacts must also be addressed during the CEQA review process. Cumulative impacts are a result of individually minor but collectively significant projects occurring over a period of time. Data recovery may be considered a cumulative impact due to the loss of a portion of the resource data base. Cumulative impacts also occur in districts when several minor changes to contributing properties, their setting, or landscaping eventually results in a significant loss of integrity.

4.5.3.2 Historical Resources Register

The City's Historical Resources Guidelines, amended in April 2001, are designed to implement the City's Historical Resources Regulations. If any resources have been recorded on the property, those resources must be evaluated for significance/importance in accordance with the Guidelines.

The City provides a set of criteria for eligibility for the City's Historical Resources Register. As stated in the City's Guidelines, "Any improvement, building, structure, sign, interior element and fixture, site, place, district, area, or object may be designated as historic by the City Historical Resources Board (HRB) if it meets any of the following criteria":

A. Exemplifies or reflects special elements of the City's, a community's or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;

B. Is identified with persons or events significant in local, state, or national history;

C. 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;

D. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman;

E. Is listed on or has been determined eligible by the National Park Service for listing on the NHRP or is listed or has been determined eligible by the California Office of Historic Preservation (OHP) for listing on the State Register of Historical Resources; or

F. Is a finite group of resources related to one another in a clearly distinguishable way; or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest or aesthetic value; or which represent one or more architectural periods or styles in the history and development of the City.

Historical resources determined to be significant/important must either be avoided or for archaeological resources, a data recovery program for important archaeological sites must be developed and approved prior to permit issuance in order to assure adequate mitigation for the recovery of cultural and scientific information related to the resource's significance/importance.

4.5.3.3 General Plan Historic Preservation Element

The Historic Preservation Element of the General Plan provides guidance on archaeological and historic site preservation in San Diego, including the roles and responsibilities of the Historical Resources Board, the status of cultural resource surveys, the Mills Act, conservation easements, and other public preservation incentives and strategies. A discussion of criteria used by the Historical Resources Board to designate landmarks is included, as is a list of recommended steps to strengthen historic preservation in San Diego. The Historic Preservation Element sets a series of goals for the City for the preservation of historic resources, and the first of these goals is to preserve significant historical resources. These goals are realized through implementation of policies that encourage the identification and preservation of historical resources.

General Plan Policies HP-A.1 through HP-A.5 are associated with the overall identification and preservation of historical resources. This includes policies to provide for comprehensive historic resource planning and integration of such plans within City land use plans, such as the proposed CPU being analyzed within this PEIR. These policies also focus on coordinated planning and preservation of tribal resources and promoting the relationship with Kumeyaay/Diegueño tribes. Historic Preservation Policies HP-B.1 through HP-B.4 address the benefits of historical preservation planning and the need for incentivizing maintenance, restoration, and rehabilitation of designated historical resources. This is proposed to be completed through a historic preservation sponsorship program and through cultural heritage tourism.

4.6 HAZARDS AND HAZARDOUS MATERIALS

4.6.1 FEDERAL

4.6.1.1 U.S. Environmental Protection Agency

The EPA is the primary federal agency regulating hazardous wastes and materials. EPA broadly defines a hazardous waste as one that is specifically listed in EPA regulations, has been tested, and meets one of the four characteristics established by EPA (toxicity, ignitability, corrosiveness, and reactivity), or that has been declared hazardous by the generator based on its knowledge of the waste. EPA defines hazardous materials as any item or chemical that can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emptying, discharging, injecting, leaching, dumping, or disposing into the environment. Federal regulations pertaining to hazardous wastes and materials are generally contained in Titles 29, 40, and 49 of the CFR, which are discussed herein.

4.6.1.2 Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act of 1976 (RCRA) (42 USC Sections 6901–6987), including the Hazardous and Solid Waste Amendments of 1984, protects human health and the environment, and imposes regulations on hazardous waste generators, transporters, and operators of treatment, storage, and disposal facilities. The Hazardous and Solid Waste Amendments also require EPA to establish a comprehensive regulatory program for underground storage tanks. The corresponding regulations in 40 CFR 260–299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

4.6.1.3 Hazardous Materials Transportation Act

The U.S. Department of Transportation, the Federal Highway Administration, 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 the U.S. Department of Transportation and enforced by the EPA.

4.6.1.4 Comprehensive Environmental Response, Compensation, and Liability Act

The 1980 Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, 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 the 1980 Comprehensive Environmental Response, Compensation, and Liability Act are limited to sites on the National Priorities List for cleanup activities, with National Priorities

List listings based on the EPA Hazard Ranking System. The Hazard Ranking System 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. The 1980 Comprehensive Environmental Response, Compensation, and Liability Act was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986.

SARA is primarily intended to address the emergency management of accidental releases, and to establish state and local emergency planning committees responsible for collecting hazardous material inventory, handling, and transportation data. Specifically, under Title III of SARA, a nationwide emergency planning and response program established reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. Title III of SARA also requires each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when significant quantities of hazardous or acutely toxic substances are stored or handled at a facility. This data is made available to the community at large under the "right-to-know" provision, with SARA also requiring annual reporting of continuous emissions and accidental releases of specified compounds.

4.6.2 STATE

4.6.2.1 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 EPA through Title 22, which does not include as many exemptions or exclusions as the equivalent federal regulations. Similar to the H&SC (as outlined below), 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 provides a number of requirements related to fire safety, including applicable elements of Part 2, the CBC, Part 2.5, the California Residential Code, and Part 9, the California Fire Code. Specifically, CBC Chapter 7 (Fire and Smoke Protection Features) includes standards related to building materials, systems, and assembly methods to provide fire resistance and prevent the internal and external spreading of fire and smoke (such as the use of non-combustible materials

and fire/ember/smoke barriers). CBC Chapter 9 (Fire Protection Systems) provides standards regarding when fire protection systems (such as alarms and automatic sprinklers) are required, as well as criteria for their design, installation, and operation. California Residential Code Section R327 includes measures to identify Fire Hazard Severity Zones and assign agency responsibility (i.e., Federal, State, and Local Responsibility Areas, refer to the discussion below under California Department of Forestry and Fire Protection), and provides fire-related standards for building design, materials, and treatments. The California Fire Code establishes minimum standards to safeguard public health and safety from hazards including fire in new and existing structures. Specifically, this includes requirements related to fire hazards from building use/occupancy (e.g., access for fire-fighting equipment/personnel and the provision of water supplies), the installation or alteration/removal of fire suppression or alarm systems, and the management of vegetative fuels and the provision of defensible space.

4.6.2.2 Hazardous Materials Release Response Plans and Inventory

Two programs in the H&SC Chapter 6.95 are directly applicable to the CEQA issue of risk due to hazardous substance release. In San Diego County, these two programs are referred to as the Hazardous Materials Business Plan program and the California Accidental Release Prevention program. The County of San Diego Department of Environmental Health is responsible for the implementation of the Hazardous Materials Business Plan program and the California Accidental Release Prevention program in San Diego County. The Hazardous Materials Business Plan and California Accidental Release Prevention programs provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a Hazardous Materials Business Plan or Risk Management Plan is required pursuant to the regulations. Congress requires EPA Region 9 to make Risk Management Plan information available to the public through EPA's Envirofacts Data Warehouse. The Envirofacts Data Warehouse is considered the single point of access to select EPA environmental data. H&SC Section 25270, Aboveground Petroleum Storage Act, requires registration and spill prevention programs for aboveground storage tanks that store petroleum. In some cases, aboveground storage tanks for petroleum may be subject to groundwater monitoring programs implemented by the RWQCBs and the State Water Resources Control Board (SWRCB).

4.6.2.3 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.

4.6.2.4 California Department of Toxic Substances Control

Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law. Since August 1, 1992, DTSC has been authorized to implement the State's hazardous waste management program for CalEPA.

DTSC is responsible for compiling a list of hazardous materials sites pursuant to Government Code Section 65962.5, which includes five categories:

- Hazardous waste facilities subject to corrective action pursuant to H&SC Section 25187.5
- Land designated as "hazardous waste property" or "border zone property"
- Properties with hazardous waste disposals on public land
- Hazardous substance release sites selected for (and subject to) a response action
- Sites included in the Abandoned Site Assessment Program

4.6.3 LOCAL

4.6.3.1 County of San Diego Department of Environmental Health

The Hazardous Materials Division of the County of San Diego Department of Environmental Health regulates hazardous waste and tiered permitting, underground storage tanks, aboveground petroleum storage and risk management plans, hazardous materials business plans and chemical inventory, and medical waste. The Hazardous Materials Division's goal is "to protect human health and the environment by ensuring that hazardous materials, hazardous waste, medical waste, and underground storage tanks are properly managed" (County of San Diego 2022).

4.6.3.2 CalEPA's Unified Program

In 1993, SB 1082 gave CalEPA the authority and responsibility to establish a unified hazardous waste and hazardous materials management and regulatory program, commonly referred to as the Unified Program. The purpose of this program is to consolidate and coordinate six different hazardous materials and hazardous waste programs, and to ensure that they are consistently implemented throughout the state. CalEPA oversees the Unified Program with support from DTSC, the RWQCBs, the San Diego County Office of Emergency Services, and the State Fire Marshal.

State law requires county and local agencies to implement the Unified Program. The agency in charge of implementing the program is called the Certified Unified Program Agency. The County of San Diego

Department of Environmental Health, Hazardous Materials Division, is the designated Certified Unified Program Agency for the County. In addition to the Certified Unified Program Agency, other local agencies help to implement the Unified Program. These agencies are called Participatory Agencies. The Hazardous Materials Division is the Participatory Agency for San Diego County.

4.6.3.3 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 2017 San Diego County Multi-Jurisdictional Hazard Mitigation Plan, which was finalized in October 2017. It is intended to educate the public, help serve as a decision-making tool, supplement local policies regarding disaster planning, and improve multijurisdictional coordination. The Multi-Jurisdictional Hazard Mitigation Plan 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 human-made hazards.

4.6.3.4 San Diego County Operational Area Emergency Plan

The *2018 San Diego County Operational Area Emergency Plan* describes a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and providing for the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

4.6.3.5 City of San Diego Municipal Code

Hazardous Materials

The Hazardous Waste Establishment division of the SDMC (SDMC Chapter 4, Article 2, Division 8) enables the Health Officer to establish a program to monitor establishments where hazardous wastes are produced, stored, handled, disposed of, treated, or recycled, and to provide healthcare information and other appropriate technical assistance on a 24-hour basis to emergency responders in the event of a hazardous waste incident involving community exposure. The Disclosure of Hazardous Materials division (SDMC Chapter 4, Article 2, Division 9) establishes a system for the provision of information on potential hazards or hazardous materials in the community, including

appropriate education and training for use of information. Elements of the system include the Health Officer's ability to seek advice from the Hazardous Materials Advisory Committee, the filing of a hazardous substance disclosure form, the content of the disclosure form, emergency response information, and penalty for violations.

Airport Land Use Compatibility Overlay Zone

The SDMC addresses issues related to safety compatibility in the airport land use compatibility overlay zone. Chapter 13 Article 2, Division 15 establishes the Airport Land Use Compatibility Overlay Zone, which ensures that new development located within an Airport Influence Area (AIA) for Marine Corps Air Station (MCAS) Miramar is compatible with respect to airport-related noise, public safety, airspace protection, and aircraft overflight areas. Regulations include safety compatibility and aircraft overflight notification.

Brush Management

The City's Brush Management Regulations (SDMC Section 142.0412) are intended to minimize wildland fire hazards through prevention activities and programs. These regulations require the provision of mandatory setbacks, irrigation systems, regulated planting areas, and plant maintenance in specific zones, and are implemented at the project level through the grading and building permit process.

Brush management is required in all base zones on publicly or privately owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. The City requires Brush Management Plans for all new development, which are intended to reduce the risk of significant loss, injury, or death involving wildland fires. Unless otherwise approved by the City Fire Marshal, the brush management plans for all future development would consist of two separate and distinct zones as follows:

- Zone One consists of the area adjacent to structures where flammable materials would be minimized through the use of pavement and/or permanently irrigated ornamental landscape plantings. This zone is not allowed on slopes with a gradient greater than 4:1.
- Zone Two consists of the area between Zone One and any area of native or non-irrigated vegetation and consists of thinned native or naturalized vegetation.

4.6.3.6 General Plan Public Facilities, Services, and Safety Element

The General Plan's Public Facilities, Services, and Safety Element presents goals and policies relating to hazardous materials and disaster preparedness.

4.6.3.7 Airport Land Use Compatibility Plans

The Airport Authority serves as the Airport Land Use Commission (ALUC) for San Diego County. The ALUC is responsible for adopting Airport Land Use Compatibility Plans (ALUCPs) for 16 public-use and military airports in San Diego County. 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. 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 AIA for each airport over a 20-year horizon. The City implements the adopted ALUCPs with the Airport Land Use Compatibility Overlay Zone, see Section 4.6 and 3.5.

The CPU area is within the AIA for MCAS Miramar. The AIA serves as the boundary for the ALUCP and is divided into two review areas. Review Area 1 is defined by the combination of the 60 Community Noise Equivalent Level (CNEL) noise contour, the outer boundary of all safety zones, and the airspace Threshold Siting Surfaces. All policies and standards in the ALUCP apply within Review Area 1. Review Area 2 is defined by the combination of the airspace protection and overflight boundaries beyond Review Area 1. Only airspace protection and overflight policies and standards apply within Review Area 2.

The ALUCPs contain policies and criteria that address land use compatibilities concerning noise and safety aspects of airport operations and land uses, building heights, residential densities and intensities, and the disclosure of aircraft overflight. The adopted ALUCPs contain policies that limit residential uses in areas experiencing noise above 60 CNEL by placing conditions on residential uses within the 60 CNEL noise contour. Residential uses in such areas may require sound attenuation to reduce interior noise levels to 45 A-weighted decibels (dBA). Since the ALUC does not have land use authority, the City implements the ALUCPs through land use plans, development regulations, and zoning regulations. The City is required to submit discretionary and ministerial development applications within an AIA to the ALUC until the City adopts regulations implementing the ALUCP and the ALUC determines the City's zoning, development regulations, and land use plans are consistent with the ALUCP, or the City Council takes action to overrule the ALUC with a two-thirds vote.

4.7 HYDROLOGY AND WATER QUALITY

4.7.1 FEDERAL

4.7.1.1 Clean Water Act

The CWA (33 USC Section 1251 et seq.) (1972) is the primary federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. The CWA established basic guidelines for

regulating discharges of pollutants into waters of the United States and requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

CWA Section 401 requires that any applicant for a federal permit to conduct any activity, including the construction or operation of a facility that may result in the discharge of any pollutant, must obtain certification from the state. CWA Section 402 established the National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants from point sources, and Section 404 established a permit program to regulate the discharge of dredged material into waters of the United States. In California, the SWRCB and RWQCBs administer the NPDES permitting programs and are responsible for developing waste discharge requirements. Each local RWQCB is responsible for developing waste discharge requirements specific to its jurisdiction. General waste discharge requirements that may apply to projects within the CPU area include the SWRCB Construction General Permit and Industrial General Permit and the regional Municipal Separate Storm Sewer System (MS4) Permit administered by the San Diego RWQCB.

Under CWA Section 303(d), states, territories, and authorized tribes are required to develop lists of impaired waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop total maximum daily loads for these waters. A total maximum daily load is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

4.7.1.2 Executive Order 11988, Floodplain Management

The major requirements of this EO are to avoid support of floodplain development, to prevent uneconomic, hazardous, or incompatible use of floodplains, to protect and preserve the natural and beneficial floodplain values, and to be consistent with the standards and criteria of the National Flood Insurance Program. The basic tools for regulating construction in potentially hazardous floodplain areas are local zoning techniques. Proper floodplain zoning can be beneficial in the preservation of open space, retention of floodplains as groundwater recharge areas, and in directing development to less flood-prone areas.

4.7.1.3 National Flood Insurance Program

The National Flood Insurance Program is a federal program enabling property owners in participating communities to purchase insurance protection against losses from flooding. In support of the National Flood Insurance Program, the Federal Emergency Management Agency identifies flood hazard areas throughout the United States and its territories by producing Flood Hazard Boundary Maps, Flood Insurance Rate Maps, and Flood Boundary & Floodway Maps. Several areas of flood hazards are

commonly identified on these maps, such as Special Flood Hazard Areas. Development may take place within mapped Special Flood Hazard Areas, provided that it complies with local floodplain management regulations, which must meet the minimum federal requirements.

The City is a participating community in the National Flood Insurance Program. Therefore, the City is responsible for adopting a floodplain management ordinance that meets certain minimum requirements intended to reduce future flood losses. The City has adopted Development Regulations for Special Flood Hazard Areas in SDMC Sections 143.0145 and 143.0146. If development is proposed within one of the Special Flood Hazard Area Zones, these regulations will apply.

4.7.2 STATE

4.7.2.1 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 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 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.

4.7.2.2 NPDES Construction General Permit

SWRCB Order No. 2009-0009-DWQ, NPDES General Permit No. CAS000002 WDRs for Discharges of Stormwater Runoff Associated with Construction Activity (Construction General Permit) was adopted on September 2, 2009, and amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The Construction General Permit is due to be reissued, which will likely occur several times during the life of the proposed project.

Construction activities exceeding one acre (or meeting other applicable criteria) are subject to pertinent requirements under the Construction General Permit. Specific conformance requirements include implementing a Stormwater Pollution Prevention Plan, an associated Construction Site Monitoring Program, employee training, and minimum BMPs, as well as a Rain Event Action Plan for applicable projects (e.g., those in Risk Categories 2 or 3). Under the Construction General Permit, project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment erosion and receiving water risk), with Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the Stormwater Pollution Prevention Plan and related

plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in stormwater runoff. Depending on the risk level, these may include efforts such as minimizing/ stabilizing disturbed areas, mandatory use of technology-based action levels, effluent and receiving water monitoring/reporting, and advanced treatment systems. Specific pollution control measures require the use of best available technology economically achievable and/or best conventional pollutant control technology levels of treatment, with these requirements implemented through applicable BMPs.

Site-specific measures will vary with conditions such as risk level, proposed grading, and slope/soil characteristics, and detailed guidance for construction-related BMPs is provided in the permit and in related City standards.

4.7.2.3 NPDES Groundwater Permit

If construction activities entail the discharge of extracted groundwater into receiving waters, the applicant would be required to obtain coverage under the Groundwater Permit (Order No. R9-2008-0002, NPDES No. CAG919002). Conformance with this permit is generally applicable to all temporary and certain permanent groundwater discharges to surface waters, estuaries, and the Pacific Ocean, with some 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).

4.7.2.4 NPDES Municipal Permit

The most current MS4 Permit for Region 9, Order No. R9-2013-0001, was adopted on May 8, 2013, by the San Diego RWQCB and became effective on June 27, 2013. This Order was amended by adoption of Order No. R9-2015-0001 on February 11, 2015, and adoption of Order No. R9 2015-0100 on November 18, 2015. This is an update to the 2007 MS4 Permit, Order No. R9-2007-0001. Updated City of San Diego Stormwater Standards (based on the Copermittees' Model BMP Design Manual) were adopted on February 16, 2016.

The MS4 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. MS4 Permit conformance entails considerations such as receiving water limitations, waste load allocations, and numeric water quality based effluent limitations. Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable involve methods such as: (1) using jurisdictional planning efforts (e.g., discretionary general plan approvals) to provide water quality protection, (2) requiring coordination between individual jurisdictions to provide watershed-based water quality protection, (3) implementing appropriate BMPs, including low impact development measures, to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification[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.

4.7.2.5 NPDES Industrial Permit

Industrial facilities are subject to the requirements of SWRCB Water Quality Order No. 2014-0057-DWQ, NPDES Permit No. CAS000001, "Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities" (General Industrial Permit). This permit was adopted on April 1, 2014, and amended November 6, 2018. The permit was originally scheduled to expire on June 30, 2020, but remains effective as of July 1, 2020. This permit currently applies to operation of existing industrial facilities associated with 10 broad categories of industrial activities and will apply to operation of proposed new industrial facilities within those 10 categories. The General Industrial Permit requires the implementation of stormwater management measures and development of a Stormwater Pollution Prevention Plan.

4.7.3 LOCAL

4.7.3.1 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

[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.

Plan for the 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.

4.7.3.2 City of San Diego Jurisdictional Runoff Management Plan

This plan describes how the City of San Diego plans to protect and improve the water quality of rivers, bays, and the ocean in the region in compliance with the RWQCB permits referenced above. The document describes how the City incorporates storm water BMPs into land use planning, development review and permitting, the City's capital improvement program project planning and design, and the execution of construction contracts.

4.7.3.3 Water Quality Improvement Plans

The MS4 Permit also requires development of water quality improvement plans (WQIPs) that guide the co-permittees' jurisdictional runoff management programs toward achieving improved water quality in MS4 discharges and receiving waters. The WQIPs further the CWA's objectives to protect, preserve, enhance, and restore the water quality and designated beneficial uses of waters of the state. The requirement sets forth a collaborative and adaptive planning and management process that identifies the highest-priority water quality conditions within a watershed management area and implements strategies through the jurisdictional runoff management programs of the respective jurisdictions.

The Mira Mesa community is located within the Los Peñasquitos Watershed Management Area. The Los Peñasquitos Watershed Management Area encompasses 94 square miles of urban land and undeveloped open space. The Los Peñasquitos WQIP includes strategies that the City can implement to improve water quality within the watershed. Development projects within the Watershed Management Area would be required to comply with the City's *Stormwater Standards Manual*, which is consistent with the strategies of the WQIP.

4.7.3.4 Drainage Design Manual

SDMC Chapter 14, Article 2, Division 2 outlines Stormwater Runoff and Drainage Regulations, which apply to all development in the City, regardless of whether a development permit or other approval is required. In addition, drainage design policies and procedures are provided in the City's Drainage Design Manual (which is incorporated in the LDM as Appendix B). The Drainage Design Manual provides a guide for designing drainage and drainage-related facilities for developments within the City.

Stormwater Standards Manual

The City's *Stormwater Standards Manual* provides information to project applicants on how to comply with permanent and construction storm water quality requirements in the City. Significant elements of the *Stormwater Standards Manual* include:

1. Low impact development Best Management Practices Requirements
2. Source Control BMPs
3. BMPs Applicable to Individual Priority Development Project Categories
4. Treatment Control BMPs

Although the footprint of the low impact development BMPs can often fit into planned landscaping features, this requires early planning to ensure that the features are located in places where they can intercept the drainage and safely store the water without adverse effects to adjacent slopes, structures, roadways, or other features. The Stormwater Standards Manual also addresses "Hydromodification – Limitations on Increases of Runoff Discharge Rates and Durations." Hydromodification management requirements would dictate design elements in locations where downstream channels are susceptible to erosion from increases in stormwater runoff discharge rates and durations. Future development projects proposed within areas draining to San Diego Bay would typically be exempt from hydromodification management requirements because of the location and hardened drainage systems. Exemptions from hydromodification management requirements shall adhere to the City's *Stormwater Standards Manual*. Projects discharging into underground storm drains discharging directly to bays or the ocean are exempt, subject to conditions listed in the City's *Stormwater Standards Manual*.

The *Stormwater Standards Manual* also provides minimum requirements for construction site management, inspection, and maintenance of construction BMPs, monitoring of the weather and implementation of emergency plans as needed, and minimum performance standards, including the following:

- Pollution prevention measures so that there would be no measurable increase of pollution (including sediment) in runoff from the site
- No slope erosion
- Water velocity moving off-site must not be greater than pre-construction levels
- Natural hydraulic features and riparian buffers preserved where possible
- The City's *Stormwater Standards Manual* is consistent with the Regional Best Management Practices Design Manual.

City of San Diego Grading Ordinance

The City Grading Ordinance (SDMC Section 142.0101 et seq.) incorporates a number of requirements related to hydrology and water quality, including the BMPs necessary to control stormwater pollution from sources such as erosion/sedimentation and construction materials during project construction and operation. Specifically, these include elements related to slope design, erosion/sediment control, revegetation requirements, and material handling/control.

City of San Diego General Plan

The General Plan presents goals and policies for stormwater infrastructure in the Public Facilities, Services, and Safety Element, and presents goals and policies for open space (including floodplain management) and urban runoff management in the Conservation Element.

4.8 LAND USE

4.8.1 STATE

4.8.1.1 General Plan Consistency with the Airport Land Use Compatibility Plan

Public Utilities Code Section 21675 requires each ALUC to formulate ALUCPs. California Government Code Section 65302.3 further requires that general plans and any applicable specific plan be consistent with ALUCPs. In addition, general plans and applicable specific plans must be amended to reflect amendments to the ALUCP.

4.8.1.2 Sustainable Communities and Climate Protection Act of 2008

The Sustainable Communities and Climate Protection Act of 2008 (Chapter 728, Statutes of 2008), otherwise known as SB 375, requires the integration of land use, housing, and transportation planning to achieve regional GHG emission reductions, adopted by the CARB. SB 375 requires Metropolitan Planning Organizations (MPOs) to develop a Sustainable Community Strategy (SCS)—a new element of the Regional Transportation Plan (RTP)—to plan for achieving these GHG reduction targets. The City must demonstrate the attainment of the regional GHG emissions reduction targets while accommodating the full projected population of the region.

4.8.2 LOCAL

4.8.2.1 City of San Diego General Plan

The citywide General Plan was adopted in 2008 and it provides the long-range vision and guide for future development within the City of San Diego. The General Plan growth strategy is referred to as

the City of Villages and relies on infill development to accommodate growth while attempting to preserve the character of its communities and its most treasured natural resources and amenities. The General Plan provides the overall structure to guide CPUs and amendments, as well as the implementation of an action plan.

Under the City of Villages strategy, the General Plan aims to direct new development projects away from natural undeveloped lands into already urbanized areas and/or areas where conditions allow the integration of housing, employment, civic, and transit uses. It is a development strategy that mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development in areas with available public infrastructure.

The General Plan includes 10 elements intended to provide guidance for future development. These elements are listed here and discussed in more detail below: (1) Land Use and Community Planning Element, (2) Mobility Element, (3) Urban Design Element, (4) Economic Prosperity Element, (5) Public Facilities, Services, and Safety Element, (6) Recreation Element, (7) Conservation Element, (8) Noise Element, (9) Historic Preservation Element, and (10) Housing Element. The Housing Element, which must be updated every 8 years under state law, was last updated in 2021 and is provided under a separate cover due to the need for more frequent updates. It is required to be consistent with the General Plan's goals and City of Villages strategy.

a. Land Use and Community Planning Element

The Land Use and Community Planning Element provides overarching policies to integrate the City of Villages strategy and guides the provision of public facilities while accommodating planned growth. Policies within this element, in combination with other elements, also ensure consistency with zoning regulations (e.g., SDMC).

The Land Use and Community Planning Element is seen as the structure and framework for developing Community Plans. When appropriate, policies call for Community Plans to further identify appropriate land uses to meet the goals set by the General Plan and City of Villages strategy. The policies also indicate that mixed-use areas, villages, and community-specific policies are developed with public input and involvement.

The Land Use and Community Planning Element contains five goals related to community planning. These goals are to provide:

- Community plans that are clearly established as essential components of the General Plan to provide focus upon community-specific issues.
- Community plans that are structurally consistent yet diverse in their presentation and refinement of citywide policies to address specific community goals.

- Community plans that maintain or increase planned density of residential land uses in appropriate locations.
- Community plan updates that are accompanied by updated public facilities financing plans.
- Community plans that are kept consistent with the future vision of the General Plan through comprehensive updates or amendments.

Community Plans are important because they contain policies tailored to a community's issues and goals. Future public and private projects will be evaluated for consistency with policies in the Community Plans.

b. Mobility Element

The Mobility Element contains policies that promote a balanced, multimodal transportation network while minimizing environmental and neighborhood impacts. In addition to addressing walking, bicycling, driving, and taking transit, the Mobility Element also includes policies related to regional collaboration, streets, parking, the movement of goods, and other components of the transportation system.

c. Urban Design Element

The Urban Design Element includes goals and policies that call for development that respects the City's natural setting, enhances the distinctiveness of neighborhoods, strengthens the natural and built linkages, and creates mixed-use, walkable villages throughout the City. The Urban Design Element addresses urban form and design through policies relative to San Diego's natural environment that work to preserve open space systems and target new growth into compact villages.

d. Economic Prosperity Element

The Economic Prosperity Element contains policies intended to improve the City's economic prosperity. This goal will be accomplished by ensuring that the economy grows in ways that strengthen San Diego industries and create good jobs with self-sufficient wages, increase average income, and stimulate economic investment in the community.

e. Public Facilities, Services, and Safety Element

The Public Facilities, Services, and Safety Element is directed at providing adequate public facilities and services through policies that address public financing strategies, public and developer financing responsibilities, prioritization, and the provision of specific facilities and services that must accompany growth. The policies within this element also apply to fire-rescue and police services, wastewater collection and treatment, stormwater infrastructure, water supply and distribution, solid waste management, libraries, schools, public utilities, and disaster preparedness.

f. Recreation Element

The City has over 38,930 acres of park and open space lands that offer a diverse range of recreational opportunities. The Recreation Element contains park and recreation guidelines with the goal of creating a sustainable park and recreation system that meets the needs of residents and visitors The purpose of the element is to help manage the increasing demand on existing/remaining usable park and recreation resources/facilities, develop open space lands and resource-based parks for population-based recreational purposes, ensure the distribution and access to parks is achieved equally citywide recognizing the unique differences among communities, and achieve livable neighborhoods and communities. The Recreation Element also addresses alternative methods, or "equivalencies," to achieve citywide equity where constraints make meeting City guidelines for public parks infeasible, or to satisfy community-specific needs and demands.

g. Conservation Element

The Conservation Element contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, that help define the City's identity, and that are relied upon for continued economic prosperity. San Diego's resources include, but are not limited to water, land, air, biodiversity, minerals, natural materials, recyclables, topography, viewsheds, and energy.

h. Noise Element

The focus of the Noise Element is to minimize excessive noise effects and improve the quality of life of people working and living in the City. The Noise Element identifies goals and related policies with regards to noise and land-use compatibility, motor vehicle traffic noise, and trolley noise that are relevant to the proposed CPU. While the Noise Element articulates the City's goals, the enforcement mechanism to control noise is the City's Noise Ordinance, which is discussed in Section 4.9, Noise.

i. Historic Preservation Element

The Historic Preservation Element guides the preservation, protection, restoration, and rehabilitation of historical and cultural resources.

j. Housing Element

The separately adopted 2021–2029 Housing Element is intended to assist with the provision of adequate housing to serve San Diegans of every economic level and demographic group. The Housing Element includes objectives, policies, and programs for five major goals, including the provision of sufficient housing of all income groups, maintaining the safety and livability of the housing stock, streamlining processes for the creation of new housing development, promoting

affordable housing, and cultivating the City as a sustainable model for development (City of San Diego 2020).

Climate Action Plan

Refer to Section 4.4.3.3 for discussion of the City's CAP.

LAND DEVELOPMENT CODE REGULATIONS

Chapters 11 through 15 of the SDMC are referred to as the LDC, as they contain the City's planning, zoning, subdivision, and building regulations that regulate how land is to be developed/built and used within the City. The LDC contains citywide base zones that specify permitted land uses, residential density, floor area ratio, and other development requirements for given zoning classifications, as well as overlay zones and supplemental regulations that provide additional development requirements. Development of the CPU area is subject to the development regulations of the LDC.

General Development Regulations

Chapter 14 of the LDC includes the general development regulations, supplemental development regulations, building regulations, and electrical/plumbing/mechanical regulations that govern all aspects of project development. The grading, landscaping, parking, signage, fencing, and storage requirements are all contained within the general regulations. Also included within the general regulations are the ESL Regulations, discussed below.

Environmentally Sensitive Lands Regulations

The purpose of the ESL Regulations (SDMC Sections 143.0101 through 143.0160) is to protect, preserve and, where damaged, restore the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. These regulations are intended to assure that development occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area, encourages a sensitive form of development, retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline, and reduces hazards due to flooding in specific areas while minimizing the need for the construction of flood control facilities. These regulations are intended to protect the public health, safety, and welfare while employing regulations that are consistent with sound resource conservation principles and the rights of private property owners.

Environmentally sensitive lands include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and special flood hazard areas. Development on a site containing

environmentally sensitive lands requires a Site Development Permit in accordance with LDC Section 126.0502.

Historical Resources Regulations

The purpose of the City's Historical Resources Regulations (contained in Chapter 14, Article 3, Division 2 of the LDC) is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties/ tribal cultural resources. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. It is further the intent of these regulations to protect the educational, cultural, economic, and general welfare of the public, while employing regulations that are consistent with sound historical preservation principles and the rights of private property owners. The Historical Resources Regulations require that development affecting historical resources or historical districts shall provide full mitigation for the impact to the resource, in accordance with the Historical Resources Guidelines of the City's LDM, as a condition of approval. If development cannot, to the maximum extent feasible, comply with the development regulations for historical resources, then a project would require a Site Development Permit in accordance with LDC Section 126.0502.

Affordable Housing Regulations

The purpose of these regulations (contained in Chapter 14, Article 3, Division 7 of the LDC) is to provide increased residential density to developers who guarantee that a portion of their residential development will be available to moderate-income, low-income, very low-income, or other noted household types. The regulations are intended to materially assist the housing industry in providing adequate and affordable housing for all economic segments of the community and to provide a balance of housing opportunities throughout the City. These regulations implement the provisions of California Government Code Sections 65915 through 65918, and go beyond the required state density bonus law. It is intended that the affordable housing density bonus and any additional development incentive be available for use in all residential development of five or more units, using criteria and standards provided in the General Plan as part of this proposed CPU. All requests are required to be processed by the City and implemented by the San Diego Housing Commission.

Airport Land Use Compatibility Overlay Zone

Refer to Section 4.6.3.5 for a discussion of the Airport Land Use Compatibility Overlay Zone.

Community Plan Implementation Overlay Zone

Pursuant to Chapter 13, Article 2, Division 14 of the SDMC, the purpose of the Community Implementation Overlay Zone (CPIOZ) is to provide supplemental development regulations that are tailored to specific sites within the Community Plan areas of the City. CPIOZs are intended to ensure that development proposals are reviewed for consistency with the use and development criteria that have been adopted for these specific areas of the community. CPIOZs are characterized as either "Type A" or "Type B," depending upon whether or not the applicable Community Plans contain specific development standards and criteria or policies and guidelines, respectively, to address development proposals within an identified area. The CPIOZ Type A is ministerial, and no discretionary permit is required if the proposed development complies with the supplemental development regulations or criteria. The CPIOZ Type B means that a discretionary permit is required for all new development.

Multiple Species Conservation Program

Refer to Section 4.2.3.1 for discussion of the MSCP, MHPA, and MHPA Land Use Adjacency Guidelines.

Carroll Canyon Master Plan

The Carroll Canyon Master Plan was originally approved in December 1994 (City of San Diego 1994). The master plan area is located within the central portion of the CPU area. The master plan defines suitable land uses, design guidelines, and development standards for this portion of the CPU area. The master plan provides the framework for the redevelopment of 573 acres with industrial, commercial, and residential uses.

3roots Master Plan

The 3Roots Master Plan was adopted as an amendment to the Mira Mesa Community Plan on September 29, 2020. The Master Plan is located in the central portion of the CPU area. The master plan provides the framework for the restoration of circulation and open space, residential, and commercial uses of approximately 413 acres.

Stone Creek Master Plan

An amendment to the Mira Mesa Community Plan was initiated on June 10, 2004 to incorporate the proposed Stone Creek Master Plan into the Mira Mesa Community Plan. The Stone Creek Master Plan proposes an approximately 293-acre development that will include mixed-use transit-oriented development with multi-family residential, office, business park, retail, light industrial, parks, and

trails. City Council approval of the Stone Creek Master Plan will occur as a separate action from the proposed CPU.

California Coastal Resources And Local Coastal Program

The California Coastal Act requires all jurisdictions within the Coastal Zone to prepare a Local Coastal Program, which includes issue identification, a land use plan, and implementation (zoning) ordinances. A small portion of the northwestern area of the CPU area is located within the Coastal Zone and the Local Coastal Program for these Coastal Zone areas is integrated into the proposed CPU.

Marine Corps Air Station Master Plan

The MCAS Master Plan encompasses 23,065 acres and is served by approximately 15,000 service members. MCAS Miramar is located adjacent to the southern boundary of the CPU area. The MCAS Master Plan identifies the development of new facilities to support the Marine Corps. Although MCAS is not a part of the CPU area, the CPU area is within the AIA for MCAS Miramar.

Los Peñasquitos Preserve Master Plan

The Los Peñasquitos Preserve Master Plan outlines the recreational and educational opportunities in the Master Plan area and the preservation of unique natural and cultural resources. The Master Plan is located to the north of the CPU area and encompasses approximately 4,000 acres. Although the Master Plan is not located within Mira Mesa, it includes recreational opportunities with the trails that connect Mira Mesa to Los Peñasquitos canyon.

Airport Land Use Compatibility Plans

Refer to Section 4.6.3.7 for discussion of ALUCPs.

San Diego Forward: The Regional Plan

Refer to Section 4.4.3.1 for a discussion of SANDAG's Regional Plan.

4.9 NOISE

4.9.1 STATE

4.9.1.1 California Noise Control Act of 1973

California H&SC 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.

exposure to certain levels of noise can result in physiological, psychological, and economic damage. The California Noise Control Act also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

4.9.1.2 California Noise Insulation Standards (California Code of Regulations Title 24)

CCR Title 24 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. The regulations also specify that acoustical studies must be prepared whenever a multifamily residential building or 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 dBA CNEL.

4.9.1.3 California Green Building Standards Code (CALGreen)

Section 5.507 of CALGreen (CBSC 2019) establishes requirements for acoustical control in non-residential buildings. The standards require that wall and roof-ceiling assemblies making up the building envelope shall have a Sound Transmission Class value of at least 50, and exterior windows shall have a minimum Sound Transmission Class of 40 or Outdoor-Indoor Sound Transmission Class of 30 for buildings within: the 65 CNEL noise contour of an airport, or the 65 CNEL or day/night average sound level noise contour of a freeway or expressway, railroad, industrial source, or fixed-guideway source. Wall and floor-ceiling assemblies separating tenant spaces and public places shall have a Sound Transmission Class of at least 40. Additionally, Section A5.507.5 requires that classrooms have a maximum interior background noise level of no more than 45 dBA average sound level.

4.9.2 LOCAL

4.9.2.1 General Plan Noise Element

The Noise Element (City of San Diego 2015a) includes the following policies intended to minimize noise through standards, site planning, and noise mitigation:

- Policy NE-A.1: Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.
- Policy NE-A.2: Assure the appropriateness of proposed developments relative to existing and future noise levels by consulting the guidelines for noise-compatible land use (shown on Table NE-3) to minimize the effects on noise-sensitive land uses.

- Policy NE-A.3: Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.
- Policy NE-A.4: Require an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use - Noise Compatibility Guidelines (Table NE-3), so that noise mitigation measures can be included in the proposed project design to meet the noise guidelines.
- Policy NE-A.5: Prepare noise studies to address existing and future noise levels from noise sources that are specific to a community when updating community plans.
- Policy NE-B.1: Encourage noise-compatible land uses and site planning adjoining existing and future highways and freeways.

In addition, the Noise Element includes Land Use–Noise Compatibility Guidelines that identify the limits for acceptable noise levels for different land use categories, as illustrated in Table 4-2, City of San Diego Land Use–Noise Compatibility Guidelines.

Table 4-2
City of San Diego Land Use – Noise Compatibility Guidelines[1]

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	<60	*60-65*	*65-70*	*70-75*	*75+*
Parks and Recreational					
Parks, Active and Passive Recreation					
Outdoor Spectator Sports, Golf Courses, Water Recreational Facilities, Indoor Recreation Facilities					
Agricultural					
Crop Raising and Farming, Community Gardens, Aquaculture, Dairies, Horticulture Nurseries and Greenhouses, Animal Raising, Maintain and Keeping, Commercial Stables					
Residential					
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units		45	45		
Institutional					
Hospitals, Nursing Facilities, Intermediate Care Facilities, Kindergarten through Grade 12 Educational Facilities, Libraries, Museums, Childcare Facilities		45			
Other Educational Facilities including Vocational/Trade Schools and Colleges, and Universities		45	45		

Table 4-2
City of San Diego Land Use – Noise Compatibility Guidelines[1]

Land Use Category	Exterior Noise Exposure (dBA CNEL)				
	<60	*60-65*	*65-70*	*70-75*	*75+*
Cemeteries					
Retail Sales					
Building Supplies/Equipment, Food, Beverages and Groceries, Pets and Pet Supplies, Sundries, Pharmaceutical, and Convenience Sales, Wearing Apparel and Accessories			50	50	
Commercial Services					
Building Services; Business Support, Eating and Drinking, Financial Institutions, Maintenance and Repair, Personal Services, Assembly and Entertainment (includes public and religious assembly), Radio and Television Studios, Golf Course Support			50	50	
Visitor Accommodations		45	45	45	
Offices					
Business & Professional, Government, Medical, Dental and Health Practitioner, Regional and Corporate Headquarters			50	50	
Vehicle and Vehicular Equipment Sales and Services Use					
Commercial or Personal Vehicle Repair and Maintenance, Commercial or Personal Vehicle Sales and Rentals, Vehicle Equipment and Supplies Sales and Rentals, Vehicle Parking					
Wholesale, Distribution, Storage Use Category					
Equipment and Materials Storage Yards, Moving and Storage Facilities, Warehouse, Wholesale Distribution					
Industrial					
Heavy Manufacturing, Light Manufacturing, Marine Industry, Trucking and Transportation Terminals, Mining and Extractive Industries					
Research and Development				50	

	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.
		Outdoor Uses	Activities associated with the land use may be carried out.
45, 50	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number (45 or 50) for occupied areas.

Table 4-2
City of San Diego Land Use – Noise Compatibility Guidelines[1]

Land Use Category				Exterior Noise Exposure (dBA CNEL)				
				<60	*60-65*	*65-70*	*70-75*	*75+*
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.					
	Incompatible	Indoor Uses	New construction should not be undertaken.					
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.					

Source: City of San Diego 2015a
Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level
[1] Compatible noise levels and land use definitions reflect amendments to the City's General Plan Noise Element approved in 2015

As shown, the "compatible" noise level for noise-sensitive receptors, including single-family and multifamily residential, is 60 dBA CNEL. Compatibility indicates that standard construction methods will attenuate exterior noise to an acceptable indoor noise level and people can carry out outdoor activities with minimal noise interference.

Exterior noise levels ranging between 60 and 65 dBA CNEL are considered "conditionally compatible" for single-family units, and between 65 and 70 dBA CNEL for multiple units. The Noise Element also states (Section B, Motor Vehicle Traffic Noise) that although not generally considered compatible, the City conditionally allows multifamily and mixed-use residential uses up to 75 dBA CNEL in areas affected primarily by motor vehicle traffic noise with existing residential uses. Future residential uses above the 70 dBA CNEL are required to include noise attenuation measures to ensure an interior noise level of 45 dBA CNEL where a Community Plan allows multifamily and mixed-use residential uses.

Park uses are considered compatible in areas up to 70 dBA CNEL and conditionally compatible in areas between 70 and 75 dBA CNEL.

4.9.2.2 City of San Diego Municipal Code Noise Abatement and Control Ordinance

SDMC Chapter 5 Article 9.5, Noise Abatement and Control, declares that the making, creation, or continuance of excessive noises are detrimental to the public health, comfort, convenience, safety, welfare, and prosperity of the residents of the City. SDMC Section 59.5.0401 establishes sound level limits. The exterior noise limits for each land use classification are summarized in Table 4-3, City of San Diego Table of Applicable Noise Limits. One-hour average sound levels are not to exceed the

applicable limit. The noise subject to these limits is defined as that part of the total noise at the specified location that is due solely to the action of said person.

Table 4-3
City of San Diego Table of Applicable Noise Limits

Land Use Zone	Time of Day	One-hour Average Sound Level (dBA)
Single Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multifamily Residential (up to a maximum density of 1/2000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

Source: SDMC Chapter 5, Article 9.5, Division 4, Section 59.5.0401, Sound Level Limits
Note: dBA = A-weighted decibel.

Per SDMC Section 59.5.0404, construction noise levels measured at or beyond the property lines of any property zoned residential shall not exceed an average sound level greater than 75 dBA during the 12-hour period from 7:00 a.m. to 7:00 p.m. Further, construction activity is prohibited between the hours of 7:00 p.m. of any day to 7:00 a.m. of the following day, or on legal holidays as specified in SDMC Section 21.0104. Exceptions are allowed and are subject to a permit granted by the Noise Abatement and Control Administrator.

4.9.2.3 Airport Land Use Compatibility Plans

As discussed in Section 4.6.3.5, the CPU area is within the AIA for MCAS Miramar. In addition to the policies and criteria addressing land use compatibility, including building heights and densities, the ALUCP contain policies and criteria concerning noise (in Section 3.3 of the MCAS Miramar ALUCP).

4.10 PUBLIC SERVICES AND FACILITIES

4.10.1 STATE

4.10.1.1 Assembly Bill 2926

AB 2926, passed in 1986, allows school districts to collect impact fees from developers of new residential and commercial/industrial building space to assist in providing school facilities for students. Development impact fees are also referenced in the 1987 Leroy Greene Lease-Purchase Act, which requires school districts to contribute a matching share of costs for construction, modernization, and reconstruction projects.

4.10.1.2 Senate Bill 50, State School Funding, Education Code Section 17620

California Education Code 17620 establishes the authority of any school district to levy a fee, charge, dedication, or other requirements against any development within the school district for the purposes of funding the construction of school facilities, as long as the district can show justification for the fees. SB 50, adopted in 1998, limits the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. It also authorizes school districts to levy statutory developer fees at levels higher than previously allowed and according to new rules. The legislation holds that an acceptable method of offsetting a project's effect on the adequacy of school facilities is through the payment of a school impact fee prior to issuance of a building permit.

4.10.2 LOCAL

4.10.2.1 City of San Diego Municipal Code

The City requires payment of development impact fees to collect a proportional fair share cost of capital improvements needed to offset the impact of the development (SDMC Section 142.0640).

4.10.2.2 City of San Diego General Plan

Public Facilities, Services, and Safety Element

The General Plan Public Facilities, Services, and Safety Element includes a number of policies that address financing of public facilities to ensure new development pays its proportional fair share of public facilities costs through payment of development impact fees. Facility types that are eligible for development impact fee funding include transportation, storm drains, parks and recreation, fire-rescue and police facilities, and libraries.

4.10.2.3 Police Protection

As specified in the Public Facilities, Services, and Safety Element Policy PF-E.2, the City goal is to maintain average response time goals as development and population growth occurs. Average response time guidelines are as follows:

- Priority E Calls (imminent threat to life) within 7 minutes
- Priority 1 Calls (serious crimes in progress) within 12 minutes
- Priority 2 Calls (less serious crimes with no threat to life) within 30 minutes
- Priority 3 Calls (minor crimes/requests that are not urgent) within 90 minutes
- Priority 4 Calls (minor requests for police service) within 90 minutes

4.10.2.4 Fire Protection

The San Diego Fire Department has an active program that promotes the clearing of canyon vegetation away from structures in accordance with SDMC Section 142.0412 and the San Diego Fire Department's Canyon Fire Safety guidelines and policies related to brush management. The City thins brush on City property within 100 horizontal feet of a previously conforming structure unless a site-specific report, which indicates that a greater distance is necessary, is approved by the San Diego Fire Department (per SDMC Section 142.0412(i) or a previously recorded entitlement requires a width more or less than the standard 100 feet). Other fire prevention measures include adopting safety codes and an aggressive brush management program. Citywide fire service goals, policies, and standards are located in the Public Facilities, Services, and Safety Element of the General Plan and the San Diego Fire Department's Standards of Response Coverage Deployment Study.

Response time standards are provided in the Public Facilities, Services, and Safety Element Policy PF-D.1 and are summarized below:

- To treat medical patients and control small fires, the first-due unit should arrive within 7.5 minutes, 90 percent of the time from the receipt of the 911 call in fire dispatch. This equates to 1-minute dispatch time, 1.5-minute company turnout time, and 5-minute drive time in the most populated areas.
- To provide an effective response force for serious emergencies, a multiple-unit response of at least 17 personnel should arrive within 10.5 minutes from the time of 911-call receipt in fire dispatch, 90 percent of the time.
    - This response is designed to confine fires near the room of origin, to stop wildland fires to under 3 acres when noticed promptly, and to treat up to 5 medical patients at once.

- This equates to 1-minute dispatch time, 1.5 minutes company turnout time, and 8-minute drive time spacing for multiple units in the most populated areas.

- To direct fire station location timing and crew size planning as the community grows (per Policy PF-D.2), fire unit deployment performance measures are established based on population density zones and are provided in Table 4-4, Deployment Measures to Address Future Growth by Population Density per Square Mile.

Table 4-4
Deployment Measures To Address Future Growth By Population Density Per Square Mile

	>1,000 people/ sq. mi.	1,000 to 500 people/sq. mi.	500 to 50 people/sq. mi.	Permanent Open Space Areas
1st Due Travel Time	5 minutes	12 minutes	20 minutes	10 minutes
Total Reflex Time	7.5 minutes	14.5 minutes	22.5 minutes	12.5 minutes
1st Alarm Travel Time	8 minutes	16 minutes	24 minutes	15 minutes
1st Alarm Total Reflex	10.5 minutes	18.5 minutes	26.5 minutes	17.5 minutes

Source: City of San Diego 2018b
Note: sq. mi. = square miles

The following population-based performance measures are used to plan for needed facilities (per Policy PF-D.2). Where more than 1 square mile is not populated at similar densities, and/or a contiguous area with different zoning types aggregates into a population "cluster," these measures guide the determination of response time measures (Table 4-5, Deployment Measures to Address Future Growth by Population Clusters) and the need for fire stations.

Table 4-5
Deployment Measure to Address Future Growth By Population Clusters

Area	Aggregate Population	First-Due Unit Travel Time Goal
Metropolitan	>200,000 people	4 minutes
Urban-Suburban	<200,000 people	5 minutes
Rural	500-1,000 people	12 minutes
Remote	< 500 people	>15 minutes

Source: City of San Diego 2018b

4.10.2.5 Libraries

General Plan Public Facilities, Services, and Safety Element Policy PF-J.2 establishes a goal of a minimum of 15,000 square feet of dedicated library space for branch libraries.

4.10.2.6 Parks and Recreation Facilities

The City has over 38,930 acres of park and open space lands that offer a diverse range of recreational opportunities. The Recreation Element contains park and recreation guidelines with the goal of creating a sustainable park and recreation system that meets the needs of residents and visitors. The purpose of the element is to help manage the increasing demand on existing/remaining usable park and recreation resources/facilities, develop open space lands and resource-based parks for population-based recreational purposes, ensure the distribution and access to parks is achieved equally citywide recognizing the unique differences among communities, and achieve livable neighborhoods and communities. The Recreation Element also addresses alternative methods, or "equivalencies," to achieve citywide equity where constraints make meeting City guidelines for public parks infeasible, or to satisfy community-specific needs and demands.

4.10.2.7 Parks and Recreation Master Plan

The City adopted its most recent Parks Master Plan in August 2021. The Parks Master Plan transitions the City from a land based standard to a recreational value-based standard. The Recreational Value-Based Park Standard (Value Standard) establishes a point value to represent recreational opportunities within population-based parks. The Value Standard is intended to be applied to population-based parks and portions of regional parks which serve local populations. The Value Standard is not intended to be applied to portions of regional parks which serve the region, including trails, shorelines, and open space parks. Regional assets are intended to be evaluated during future community plan updates; the score assigned to these resources during the update process is not intended to represent their total inherent Citywide value, but instead recognizes that these assets provide additional recreational value to local residents.

The Value Standard is based on four communities that met the previous acreage standard of 2.8 acres per 1,000 residents in 2020. These communities were scored on their recreational amenities, yielding a recreation value of 100 points per 1,000 people that is now applied Citywide.

4.11 PUBLIC UTILITIES

4.11.1 FEDERAL

Federal regulations pertaining to stormwater can be found in Section 4.7 above.

4.11.1.1 Safe Drinking Water Act

The Safe Drinking Water Act, 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 for drinking water also resulted from the Safe Drinking Water Act. 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 Safe Drinking Water Act and the 1987 amendments to the CWA established the EPA as the primary authority for water programs throughout the country. The EPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems.

4.11.2 STATE

4.11.2.1 Senate Bills 221 and 610

SB 221 and SB 610 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 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 residential developments of more than 500 units, shopping centers or businesses employing more than 1,000 people, shopping centers or businesses having more than 500,000 square feet of floor space, commercial office buildings employing more than 1,000 people, and/or commercial buildings having more than 250,000 square feet of floor space or occupying more than 40 acres of land.

4.11.2.2 Assembly Bill 341

In 2011, the State enacted AB 341, which established a policy goal for California of 75% recycling, composting, or source reduction of solid waste by 2020 and annually thereafter. AB 341 requires that commercial enterprises that generate four cubic yards or more of solid waste weekly and multifamily complexes comprised of five units or more arrange for recycling services.

4.11.3 LOCAL

4.11.3.1 Metropolitan Water District 2020 Regional Urban Water Management Plan

The Metropolitan Water District (MWD) Urban Water Management Plan (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. The plan is updated every 5 years. 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.

4.11.3.2 Metropolitan Water District 2015 Integrated Water Resources Plan

MWD's Integrated Water Resources Plan is a blueprint for long-term water supply reliability in Southern California. The fundamental goal of the plan is for Southern California to continue to have a reliable water system, considering future challenges related to prolonged droughts and changing climate.

4.11.3.3 San Diego County Water Authority 2020 Urban Water Management Plan

The Water Authority developed its 2020 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.

4.11.3.4 City Council Policies

Council Policy 400-04 outlines the City's Emergency Water Storage Program. The policy mandates that the Public Utilities Department store sufficient water in active, available storage to meet 7.2 months (six-tenths of the annual requirement of the City) of normal City water demand requirements, excluding conservation. Active, available storage is defined as the portion of water that is above the lowest usable outlet of each reservoir.

Council Policy 400-13 identifies the need to provide maintenance access to all sewers in order to reduce the potential for spills. The policy requires that environmental impacts from access paths in environmentally sensitive areas should be minimized to the maximum extent possible through the use of sensitive access path design, canyon-proficient maintenance vehicles, and preparation of plans that dictate routine maintenance and emergency access procedures.

Council Policy 400-14 outlines a program to evaluate the potential to redirect sewage flow out of canyons and environmentally sensitive areas to an existing or proposed sewer facility located in City streets or other accessible locations. The policy includes an evaluation procedure that requires both a physical evaluation and a cost-benefit analysis. Based on the analysis, if redirection of flow outside the canyon is found infeasible, a Long-Term Maintenance and Emergency Access Plan is required. The plan would be specific to the canyon evaluated, and would prescribe long-term access locations for routine maintenance and emergency repairs along with standard operating procedures identifying cleaning methods and inspection frequency.

Council Policy 600-43 established a set of comprehensive guidelines for the review and processing of applications for the placement and design of Wireless Communication Facilities in accordance with the City's land use regulations. These guidelines are intended to prescribe clear, reasonable, and predictable criteria to assess and process applications in a consistent and expeditious manner, while reducing visual and land use impacts associated with Wireless Communication Facilities. For applicants seeking placement of a Wireless Communication Facility on City-owned land, this policy should be used in conjunction with applicable Council policies and LDC Section 141.0420.

Per Council Policy 800-04, private landowners/developers are responsible for providing adequate stormwater drainage facilities, which are subject to review and approval by the City. Council Policy 800-04 states that it is the basic responsibility of any owner or holder of land to accept and provide a suitable conveyance of stormwater runoff, and that the cost of construction will be borne by the property owner or permittee. All continuing maintenance of such facilities becomes the responsibility of the property owner on whose land the facilities are located. The City's Stormwater Department is only responsible for maintaining and upgrading public stormwater drainage facilities that occur on City-owned land, and areas where easements have been granted to and accepted by the City.

4.11.3.5 City of San Diego Drainage Design Manual

The City's Drainage Design Manual provides policies and produces to attain reasonable standardization of drainage design throughout the City. The Drainage Design Manual establishes design standards and procedures for stormwater conveyance that provide guidance to design engineers, developers, contractors, and others in the selection, design, construction, and maintenance of stormwater conveyance facilities.

4.11.3.6 City of San Diego Sewer Design Guidelines

The City's Sewer Design Guide sets forth criteria to be used for the design of sewer systems, which may consist of pump stations, gravity sewers, force mains, and related appurtenances. It includes criteria for determining the capacity and sizing of pump stations, gravity sewers and force mains, the alignment of gravity sewers and force mains, for estimating wastewater flow rates, for the design of bridge crossings, and for corrosion control requirements.

4.11.3.7 City of San Diego Water Facility Design Guidelines

The City's Water Facility Design Guidelines identify general planning, predesign, and design details and approaches to be used for water infrastructure. The guidelines provide uniformity in key concepts, equipment types, and construction materials on facilities built under the water capital improvement plan. These design guidelines assist in providing professionally sound, efficient,

uniform, and workable facilities, whether pipelines, pressure control facilities, pumping stations, or storage facilities.

4.11.3.8 City of San Diego Urban Water Management Plan

The City of San Diego's UWMP, adopted by the City Council in June 2021, is the planning document used by water suppliers to meet the standards set forth in SB 610 and SB 221. The UWMP addresses the City's water system and includes a description of the water supply sources, magnitudes of historical and projected water use, and a comparison of water supply to water demands during normal, single-dry, and multiple-dry years. The UWMP serves as a long-range planning document for the City's water supply.

4.11.3.9 Climate Action Plan

The City's CAP aims to reduce landfill waste by promoting the 82% waste diversion by 2030 goal and a 90% waste diversion by 2040 goal. To accomplish these goals, the CAP includes measures to implement the Zero Waste Plan and Polystyrene Foam and Single Use Plastics Ordinance, update the Citywide Recycling Ordinance, and develop a marketing plan for compost and mulch in the City. The CAP also calls for water conservation and includes actions to develop the local water supply, such as investigating opportunities to capture and reuse rainwater.

4.11.3.10 Waste Management Plans

Pursuant to the City's CEQA Significance Determination Thresholds, land development projects more than 40,000 square feet that may generate approximately 60 tons of waste or more during construction and/or operation are required to prepare a project-specific Waste Management Plan to address the disposal of waste generated during short-term project construction and long-term post-construction operation. The Waste Management Plan is required to identify how the project would reduce waste and achieve target reduction goals.

4.11.3.11 Zero Waste Plan

The City's Zero Waste Plan was approved in June 2015 by the Environmental Services Department. The Zero Waste Plan serves as a guide for waste reduction strategies to be implemented by the City to reach the goals of 75% waste diversion by 2020, 90% diversion by 2035, and "zero" by 2040. Waste diversion calls for diverting solid waste from landfill disposal and instead utilizing prevention, recycling, and composting strategies instead. The Zero Waste Plan offers potential strategies that could be implemented by consideration and approval by the City Council. Some provisions of the Zero Waste Plan have been adopted as ordinances, amending the San Diego Municipal Code. Article 6, Collection, Transportation and Disposal of Refuse and Solid Waste, of the San Diego Municipal

Code was most recently amended in 2022, expanding the City's recycling requirements and aligning the City's solid waste collection franchise provisions with state requirements.

4.12 TRANSPORTATION

4.12.1 STATE

4.12.1.1 California Public Utilities Commission

The California Public Utilities Commission regulates privately owned railroad and rail transit. The California Public Utilities Commission staff ensure that rail crossings are safely designed, constructed, and maintained. The Rail Crossings and Engineering Branch engineers investigate and evaluate requests to construct new rail crossings or modify existing crossings.

4.12.1.2 California Department of Transportation

The California Department of Transportation (Caltrans) is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for street traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects. In addition, Caltrans must review proposals to signalize any freeway ramp interchanges through their Intersection Control Evaluation process (Caltrans Traffic Operations Policy Directive #13-01).

4.12.1.3 California Transportation Commission

The California Transportation Commission consists of nine members appointed by the California Governor. The California Transportation Commission is responsible for programming and allocating funds for the construction of highway, passenger rail, and transit improvements throughout the state. The California Transportation Commission is responsible for adopting the State Transportation Improvement Program and the State Highway Operation and Protection Program.

4.12.1.4 Assembly Bill 1358–California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (AB 1358) requires circulation elements as of January 1, 2011, to accommodate the transportation system from a multimodal perspective, including public transit, walking, and biking.

4.12.1.5 Senate Bill 743

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

The City of San Diego prepared its own guidelines for VMT analysis in compliance with SB 743—these guidelines are contained in the City's Transportation Study Manual. The City's Transportation Study Manual was approved by the City Council on November 9, 2020, and became final in January 2021. The City's guidelines are consistent with the OPR Technical Advisory.

In addition, the City of San Diego has developed regulations requiring land development projects to incorporate VMT reducing measures into projects or pay an in-lieu fee depending upon their location within the City. The Mobility Choices Regulations (SDMC Chapter 14, Article 3, Division 11) are intended to reduce Citywide VMT to address the environmental impacts of development related to noise, air pollution, and greenhouse gas emissions, and to promote public health and enjoyment, by investing in active transportation infrastructure and amenities that will result in the greatest reductions to Citywide VMT. Compliance with the regulations can be used as mitigation for project impacts.

4.12.2 LOCAL

4.12.2.1 San Diego Forward: The Regional Plan

See Section 4.4.3.1 for a discussion of the Regional Plan.

4.12.2.2 SANDAG Regional Bike Plan

SANDAG's Riding to 2050, San Diego Regional Bike Plan supports implementation of the Regional Plan and provides a regional strategy to make bicycling a useful form of transportation for everyday travel. The plan will help San Diego meet its goals to reduce GHG emissions and improve mobility. Goals of the Regional Bike Plan include increasing levels of bicycling, improving bicycling safety, encouraging complete streets, supporting reductions in emissions, and increasing community

support. In September 2013, the SANDAG Board of Directors approved funding to implement the Regional Bike Plan Early Action Program, which focuses on the region's highest-priority projects. Priority is chosen in part based on proximity to smart growth areas, taking into account that bikeways would be used more often if they connect high-density activity hubs within a short distance of each other, and on whether a project would fill key gaps in the regional bike networks.

4.12.2.3 General Plan Mobility Element

The Mobility Element (City of San Diego 2015b) of the City of San Diego General Plan defines policies regarding traffic flow and transportation facility design. The purpose of the Mobility Element is "to improve mobility through development of a balanced, multi-modal transportation network." The main goals of the Mobility Element pertain to walkable communities, transit first, street and freeway systems, intelligent transportation systems, transportation demand management, bicycling, parking management, airports, passenger rail, goods movement/freight, and regional transportation coordination and financing.

4.12.2.4 City of San Diego Bicycle Master Plan

The City's Bicycle Master Plan (City of San Diego 2013) provides a framework for making cycling a more practical and convenient transportation option for a wider variety of San Diegans with varying riding purposes and skill levels. The 2013 update to the City's Bicycle Master Plan presents a renewed vision closely aligned with the City's General Plan and includes a bicycle network with related bicycle projects, policies, and programs. There are approximately 511 miles of existing bikeway facilities with the majority comprised of bike lanes. The recommended bicycle network includes recommendations for an additional 595 miles of bicycle facilities, for a future network totaling almost 1,090 miles. The types of projects recommended in the Bicycle Master Plan include: bikeways (Class I–Bicycle Path, Class II–Bicycle Lane, Class III–Bicycle Route, Class IV–Cycle Tracks, and Bicycle Boulevards), bicycle parking such as bike racks and on-street bike corrals, end-of-trip facilities that may be identified as part of individual development project, maintenance activities such as road and sign repair, bicycle signal detection installation, signage, and striping for warnings and wayfinding, and multimodal connection improvements such as providing secure bicycle parking at transit stops.

4.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

4.13.1 STATE

4.13.1.1 California Scenic Highway Program

Recognizing the value of scenic areas and the value of views from roads in such areas, the California Legislature established the California Scenic Highway Program in 1963. This legislation sees scenic highways as "a vital part of the all-encompassing effort to protect and enhance California's beauty, amenity and quality of life." Under this program, a number of state highways have been designated as eligible for inclusion as scenic routes. No officially designated or eligible scenic highways are located within the CPU area.

4.13.2 LOCAL

4.13.2.1 City of San Diego General Plan

The General Plan includes a citywide urban design strategy, goals, and policies regarding the physical features that define the character of a neighborhood or community. These goals complement the goals for pedestrian-oriented and walkable villages articulated in the City of Villages strategy.

Urban Design Element

The Urban Design Element of the General Plan establishes a set of design principles on which its policies are based and on which future public and private development physical design decisions can be based.

In its introduction, the Urban Design Element of the General Plan states:

> As the availability of vacant land becomes more limited, designing infill development and redevelopment that builds upon our existing communities becomes increasingly important. A compact, efficient, and environmentally sensitive pattern of development becomes increasingly important as the City continues to grow. In addition, future development should accommodate and support existing and planned transit service (City of San Diego 2008b).
>
> The General Plan Urban Design Element policies relevant to planning at the Community Plan level involve architectural and landscape elements, as well as the design of transit and parking facilities, residential development, mixed-use villages and commercial areas, office and business park development, and public spaces and facilities. Policies call for respecting San Diego's natural topography and distinctive neighborhoods, providing public art, and encouraging the development of walkable, transit-oriented communities.

Conservation Element

The Conservation Element guides the sustainable management of the City's natural resources, with sections on open space and landform preservation, wetlands, and the urban forest. Policies call for the conservation of landforms, canyon lands, and open spaces that define the City's urban form, serve as core biological areas and wildlife linkages, or are wetland habitats. Policies related to wetlands require a watershed planning approach that preserves and enhances wetlands, and policies related to urban forestry call for the planting of large canopy shade trees where appropriate and with consideration of habitat and water conservation goals, as well as the retention of significant and mature trees.

4.13.2.2 City of San Diego Land Development Code

The City's LDC contains numerous provisions to guide the design of development throughout the City. Through zoning and development standards, such as specified maximum building heights, maximum lot coverage, floor area ratios, and front, rear, and side yard setbacks, the LDC provides restrictions on land development and design that affect visual quality.

The LDC also contains development restrictions and guidelines to protect and enhance environmentally sensitive lands. Steep hillsides are defined as those with natural gradients equal to or in excess of 25% with a minimum elevation differential of 50 feet, or a natural gradient of 200% with a minimum elevation differential of 10 feet. As discussed in the CPU, steep slopes constrain the majority of the land within the CPU area that would be developed for residential uses.

The LDC (Section 142.0101 et seq.) contains grading regulations to address (among other things) landform preservation and requires that all grading be designed and performed in conformance with applicable City Council policies and the standards established in the LDM.

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5.0 ENVIRONMENTAL ANALYSIS

Sections 5.1 through 5.13 analyze the potential environmental impacts that may occur as a result of implementation of the Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). The environmental issues analyzed in the following sections include those that were identified by the City as potentially significant during scoping. There are 13 environmental impact areas addressed in the following sections. A brief discussion of additional environmental topics that the City determined would not be significant is included in Section 7.2, Effects Found Not to be Significant, of this Program Environmental Impact Report (PEIR). The environmental topics addressed in individual sections of this chapter include the following:

- 5.1 Air Quality and Odor
- 5.2 Biological Resources
- 5.3 Geology and Soils
- 5.4 Greenhouse Gas Emissions
- 5.5 Historical, Archaeological, and Tribal Cultural Resources
- 5.6 Hazards and Hazardous Materials
- 5.7 Hydrology and Water Quality
- 5.8 Land Use
- 5.9 Noise
- 5.10 Public Services and Facilities
- 5.11 Public Utilities
- 5.12 Transportation
- 5.13 Visual Effects and Neighborhood Character

Programmatic impacts of implementing the proposed CPU are discussed throughout this chapter in broad, qualitative terms. Individual projects implemented under the proposed CPU would be assessed at the time they are proposed to determine whether additional environmental review is warranted in accordance with the California Environmental Quality Act (CEQA).

Each section is formatted to include a reference to the relevant sections in Chapter 2.0, Environmental Setting, and Chapter 4.0, Regulatory Framework, that address the existing conditions and regulatory context, a description of the methodology and assumptions used in the analysis, if applicable, the criteria for determining the significance for each impact, an evaluation of potential impacts, an assessment of the level of significance for each impact, a mitigation framework, if

applicable, and a conclusion of significance after mitigation for impacts identified as significant. The goals, policies, and implementation programs of the proposed project that are relevant to potential environmental impacts are documented.

5.1 AIR QUALITY AND ODOR

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to air quality and odor that could result from implementation of the Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Information in this section is based, in part, on the *Air Quality Existing Conditions and Impact Analysis Report*, prepared by Scout Environmental, which is included as Appendix B of this PEIR.

5.1.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed description of existing air quality conditions within the Mira Mesa Community Plan Update (CPU) area is contained in Section 2.2.1 of this PEIR. Section 4.1 of this PEIR includes a summary of the regulatory framework relative to air quality.

5.1.2 METHODOLOGY

The analysis presented in this section included consideration of air pollutant emissions resulting from construction activities and from longer-term sources during the operational phase of the proposed project. Air quality impacts from proposed construction activities would mainly be from combustion of diesel and gasoline construction equipment in both on-road and off-road trucks and equipment and dust from earth-moving activities. Construction emissions would be short-term and would primarily occur within the boundaries of the CPU area. Operational emissions would be primarily from the day-to-day operations of new development and traffic flow post-construction. The increase in emissions from the CPU over the existing emissions were calculated and compared against the thresholds discussed in Section 5.1.3 to determine if the CPU could result in a significant impact on air quality. Refer to Appendix B for a detailed discussion of methodology and assumptions.

Construction Emissions

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

- Fugitive dust from grading activities;
- Construction equipment exhaust;
- Construction-related trips by workers, delivery trucks, and material-hauling trucks; and
- Construction-related power consumption.

Air pollutants generated by the construction of projects within the CPU area would vary depending upon the number of projects occurring simultaneously and the size of each individual project. For the purposes of this air quality analysis modeling for construction emissions was assumed to begin in the year of 2030, and evaluated the list of land-use changes as one whole project that would take 20 years to complete in order to estimate total emissions from assumed buildout of the CPU in 2050. Refer to Section 5.1.4, Impacts, and Appendix B for additional details.

Construction criteria air pollutant emissions were modeled using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 software, a modeling platform recommended by the California Air Resources Board (CARB) and accepted by the San Diego Air Pollution Control District (SDAPCD). CalEEMod is created with city planning in mind and allows for a flexible approach and detailed interface into proposed projects. CalEEMod is supported with extensive manuals and documentation.

Operational Emissions

Operational emissions are long-term emissions and include mobile, area and stationary sources. Sources of operational emissions within the CPU area include, but are not limited to, the following:

- Traffic generated by employees, service providers, or residents in the CPU area;
- Area source emissions from the use of natural gas for heating, fireplaces, and cooking;
- Stationary sources from biosciences, microbreweries, and other light and heavy manufacturing; and
- Mobile sources from buses and trains utilized for public transit.
- Operation criteria air pollutant emissions were also modeled using the CalEEMod Version 2016.3.2 software.

Carbon Monoxide Hot Spot Analysis

A carbon monoxide (CO) hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hot spots have the potential to violate federal and state CO standards at intersections, even if the broader basin is in attainment for federal and state levels. Although the San Diego Air Basin (SDAB) is currently a maintenance area for CO, exhaust emissions can potentially cause a direct, localized hot spot impact at or near proposed development. Because increased CO concentrations are usually associated with roadways that are congested and with heavy traffic volumes, many agencies have established preliminary screening criteria to determine whether project-generated, long-term operational local mobile-source

emissions of CO would result in, or substantially contribute to, emissions concentrations that exceed the State's 1-hour ambient air quality standard of 20 parts per million (ppm) or the 8-hour standard of 9.0 ppm. The analysis of CO hot spots is based on the *Mira Mesa Community Plan Update Transportation Impact Study* prepared by Kimley Horn, which is included as Appendix L of this PEIR.

Toxic Air Contaminants

For SDAPCD permitted stationary projects, the SDAPCD does not identify a significant impact if the potential health risks from the project would not exceed the health risk public notification thresholds specified by SDAPCD Rule 1210.

For operational impacts, the analysis considers whether the proposed project would be consistent with the siting distances recommended by CARB's *Air Quality and Land Use Handbook: A Community Health Perspective,* which provides guidance on land use compatibility with sources of toxic air contaminants (TACs) (CARB 2005). The handbook is not a law or adopted policy, but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help protect sensitive members of the population.

5.1.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to air quality and odor are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant air quality and odor impact could occur if implementation of the proposed project would:

Issue 1: Conflict with or obstruct the implementation of the applicable air quality plan;

Issue 2: Result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;

Issue 3: Expose sensitive receptors to substantial pollutant concentrations, including toxins; or

Issue 4: Create objectionable odors affecting a substantial number of people.

Table 5.1-1 provides a list of numerical thresholds that encompasses multiple sources including SDAPCD regulatory thresholds, best management practices from other CEQA evaluations, and other air pollution control district thresholds. The thresholds are published in the City's *CEQA Significance Determination Thresholds* (City of San Diego 2020a), and are used as a screening tool to identify potentially significant air quality impacts associated with a project.

Table 5.1-1 includes specific sensitive receptor qualitative and quantitative thresholds for air toxics such as diesel particulates, which is expressed as particulate matter 2.5 micrometers or less ($PM_{2.5}$). This threshold is sourced from the South Coast Air Quality Management District's (SCAQMD'S) screening threshold of 55 pounds per day, as recommended by the *City's CEQA Significance Determination Thresholds*.

Table 5.1-1
Thresholds of Significance for Air Quality

Construction Emissions			
Pollutant	*Total Emissions (Pounds per Day)*		
PM_{10}	100		
$PM_{2.5}$	55[1]		
NO_x	250		
SO_x	250		
CO	550		
VOC	75		
Operational Emissions			
Pollutant	*Emissions – Pounds per Hour*	*Emissions – Pounds per Day*	*Emissions – Tons per Year*
PM_{10}	—	100	15
$PM_{2.5}$	--	55	10
NOx	25	250	40
SOx	25	250	40
CO	100	550	100
VOC	--	137	15
Lead and Lead Compounds	--	3.2	0.6
Toxic Air Contaminant Emissions			
Health Concern	*Threshold*		
Excess Cancer Risk	1 in 1 million (no control technologies) 10 in 1 million (if using best available control technologies for toxics that are approved by the SDAPCD)		
Non-Cancer Hazard	1.0		
Sensitive Receptors – Localized Concerns			
Pollutant	*Threshold*		
CO	31,600 vehicles per hour (after which additional CO "Hotspot" analyses required) based on recommendations from the Sacramento Metropolitan Air Quality Management District from 2011.		
PM	Project needs to be determined if it is a project of local air quality concern (by Caltrans) (Caltrans 2017).		
Criteria or TAC	If stationary emissions source is within ½ mile of sensitive receptor, additional analyses are possibly needed. Also see TAC Health Concerns.		

Source: Appendix B; City of San Diego 2020a; CARB 2005; Caltrans 2017; SCAQMD 2006
Notes: PM_{10} = Particulate Matter 10 micrometers or less in diameter; $PM_{2.5}$ = Particulate Matter 2.5 micrometers or less in diameter; NOx = Nitrogen Dioxide; SOx = Sulfur Oxide; CO = Carbon Monoxide; VOC = Volatile Organic Compound; SDAPCD = San Diego Air Pollution Control District; PM = particulate matter; TAC = toxic air contaminant

Another threshold evaluated for sensitive receptors is the localized carbon monoxide (CO) concentration, which primarily is a result of motor vehicle activity at signalized intersections. Specific atmospheric conditions (a calm stable day) and large numbers of vehicles sitting at idle can result in CO concentrations above safe levels.

If these thresholds are exceeded by the projected CPU buildout, SDAPCD requires an additional air quality analysis to determine if a significant air quality impact would occur. If the estimated emissions for the CPU buildout are under these thresholds, the project is considered to be consistent with regional air quality plans as long as all construction and operation follow all other air quality regulations (such as idling restrictions, state heavy equipment emissions standards, state motor vehicle emissions requirements, requirements for best available control technologies, and attainment of preconstruction permits). No further analysis would be required for projects under the thresholds for significance.

The proposed CPU and associated buildout estimated emissions were compared both quantitively and qualitatively to the SDAPCD Regional Air Quality Strategy (RAQS). Inconsistencies between the proposed CPU and the RAQS would be considered a potentially significant impact on regional air quality (i.e., if the CPU proposes greater density than what was evaluated in the RAQS).

5.1.4 IMPACTS

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

The SDAPCD develops and implements the RAQS, which outlines plans and control measures designed to move the region towards attainment of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for ozone (each of the other pollutant standards have been attained). The newest revision to this plan was completed by the SDAPCD in 2016. The SDAPCD also relies on the California State Implementation Plan (SIP) to work toward reaching attainment. The SIP includes SDAPCD plans and control measures, as well as measures from other regions. The California Environmental Protection Agency and CARB regulate mobile sources, such as cars and trucks. SDAPCD considers the regulated emissions and reduction strategies related to mobile sources in the development of the RAQS and SIP.

The plans and strategies also include projected growth across all source emission types due to population and industry growth. The SDAPCD uses information from CARB and the San Diego Association of Governments (SANDAG) to project future emissions and determine the RAQS necessary for the reduction of stationary emissions resulting from this projected growth to continue progress toward attainment of the CAAQS and NAAQS. The CARB's mobile source emissions projections and SANDAG's growth projections are based on population and vehicle trends and the

land use plans developed by the cities and the County of San Diego. Therefore, projects that propose development that is consistent with the growth anticipated by the applicable General Plan would be consistent with the RAQS because the General Plans form the input to the RAQS.

The RAQS anticipates growth based on the currently adopted Community Plan; therefore, implementation of the proposed CPU could result in an inconsistency with the RAQS. Relative to the adopted Community Plan (City of San Diego 2020b), the proposed CPU would do the following:

Increase the number of residential units by making housing denser in areas where it was previously less dense or by including housing in mixed-use areas previously designated as commercial or industrial only;

- Increase the amount of land designated for retail/commercial/mixed-use;
- Decrease mobile home parks, commercial only, industrial park only, extractive industry, and vacant lots to be replaced with open space, residential areas, and mixed-use urban and community village land use; and
- Increase transit and transit hubs.

Although the proposed CPU would introduce land uses and associated growth that is not consistent with the current 2016 RAQS, the proposed CPU would implement the General Plan's City of Villages strategy by proposing Urban Villages and a Community Plan Implementation Overlay Zone (CPIOZ) that focus on mixed-use development with enhanced pedestrian access that is linked to the regional transportation system. The proposed CPU's emphasis on Urban Village developments with public transit as opposed to lower-density housing would reduce pollutant emissions associated with vehicle trips. Additionally, the reduction of single-family and low-density housing and increase in multi-family housing would reduce the per housing unit emissions from landscaping and individual home heating and cooling (see Appendix B). The proposed CPU also includes improvements to pedestrian paths areas, bicycle paths, regional transportation corridors, enhanced vehicular networks, and street reclassifications. Therefore, while the land uses under the proposed CPU were not included in the emissions assumptions contained within the RAQS, the proposed CPU aims to reduce vehicle use and associated emissions by improving the jobs to houses balance within the community and develop compact, walkable, Urban Village communities close to transit connections and consistent with smart growth principles.

However, because the proposed CPU would result in growth within the CPU area exceeding projections incorporated into the RAQs, future emissions associated with buildout of the CPU area would be greater than future emissions associated with buildout of the adopted Community Plan land uses. Therefore, emissions of ozone precursors (volatile organic compound [VOC] and nitrogen

oxide [NOx]) (SDAB is currently in nonattainment) would be greater than what is accounted for in the RAQS and impacts would be significant.

Issue 2: Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

Future development proposed in the CPU area would generate criteria pollutants in both the short-term, during construction, and long-term, during operation. To determine if a given project would result in emissions that would contribute substantially to an existing or projected air quality violation, a given project's emissions are evaluated based on the quantitative emissions thresholds of significance, as shown in Table 5.1-1.

Construction

Construction activities associated with new or changing land uses under the proposed CPU were assumed to begin in the year 2030 for the purpose of this analysis (Appendix B) and would result in fugitive dust from demolition and site grading activities, pollutant emissions from heavy construction equipment exhaust, and vehicle trips associated with the construction, such as hauling and worker commutes. The exact timing and execution of the individual, future projects are not known, and project-level emissions cannot be determined at the program level. However, the overall changes in land usage were modeled for a planning-level programmatic view of potential emissions from various projects over the horizon of buildout from approximately 2030 to 2050.

The CalEEMod modeling for construction emissions evaluated the list of land-use changes as one project that would take 20 years to complete in order to estimate total emissions from completion of all of the buildouts within the 20 years. Emissions from each year were summed to arrive at a total for the entire buildout, which was then divided by 220 working days per year to arrive at an average pounds per day for the completion of the buildout overall. This estimate is based on high-level conservative assumptions for analysis purposes and in reality, the emissions per day will vary greatly based on project schedules, with some days resulting in higher emissions than the average and some days being much lower. The construction emissions were calculated using CalEEMod default equipment metrics and did not include any equipment emissions mitigations, such as using newer, cleaner engines exclusively, switching all small equipment, such as handheld equipment, to battery-powered equipment, and other general air quality best management practices for reducing emissions at work sites.

Table 5.1-2 shows the estimated unmitigated average daily construction emissions rate compared to thresholds of significance. As shown in Table 5.1-2, the average daily construction emissions during buildout of the proposed CPU would exceed thresholds for VOC, NO_x, and particulate matter 10 micrometers or less in diameter (PM_{10}). VOC occurs primarily from the construction of parking lots

and roads and application of architectural coatings. If coating usage is reduced, these average daily emissions would be reduced. Additionally, PM_{10} is frequently associated with unmitigated dust control. Implementing dust control on site at specific projects would likely reduce PM_{10} below the threshold. NO_x occurs primarily from the use of diesel-powered heavy construction equipment. Standard air quality best management practices could be utilized to reduce NO_x emissions below the thresholds.

Table 5.1-2
Estimated Average Daily Construction Emissions (pounds per day)

Source	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Average Daily Construction Emissions for Buildout	283	264	263	2	161	43
Threshold for Significant Impact	137	250	550	250	100	55
Average Daily Construction Emissions Exceed Threshold?	Yes	Yes	No	No	Yes	No

Notes: See Appendix B for more details on assumptions.
The modeling assumes 220 days of construction per year. The total tons for the entire buildout were divided by 20 years, 220 days per year, and 2,000 pounds per ton to calculate the average construction emissions in pounds per day. The average daily construction emissions are estimated to occur during workdays from 2030 to 2050.
VOC = Volatile Organic Compounds; NOx = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 micrometers or less in diameter; $PM_{2.5}$ = Particulate Matter 2.5 micrometers or less in diameter

The hypothetical scenario described above provides a general assessment of total construction for the proposed CPU; however, the exact number and timing of individual development projects that would occur as a result of implementing the proposed CPU are unknown at this time and therefore project-level emission estimates cannot conclusively be determined. Subsequent development projects would need to analyze project-specific construction-related criteria air pollutants compared to the SDAPCD thresholds. Therefore, at the program level, construction emissions would be potentially significant.

Operation

Operational source emissions would be the result of facility operations and traffic generated from future development pursuant to the proposed CPU. Some of these operational emissions are known as “area emissions” from the use of building heating units, lawn equipment, fireplace use, and consumer product use. Area emissions are from various small sources that can add up to significant emissions. Also included in the operational emissions are those associated with operating known significant industries such as paint shops, power plants, etc. Specific details on individual projects are not known at this time; therefore, operational emissions were modeled from a planning-level

programmatic view for the anticipated land uses. The planning window for the CPU has a horizon year of 2050.

Operational emissions include area emissions, energy emissions, and mobile emissions. These emissions are quantified based on annual estimates and are compared to annual thresholds to determine the impact from the operation of all of the additional facilities and features of the proposed CPU.

When estimating the area sources for buildout of the proposed CPU, the default CalEEMod settings for land usage type were used except for wood-burning stoves and fireplaces which were assumed to not be installed in any of the new homes or mixed-use properties, due to state and local trends supporting clean renewable energy and carbon neutrality. Other area emissions such as landscaping equipment were estimated to be 50% electric for future uses due to readily available electric consumer equipment, which was not assumed within the 2016 CalEEMod version software (Appendix B). Estimates for upkeep of architectural paints and coatings were maintained at the default of 250 grams of VOC per gallon.

When estimating the energy usage emissions for the buildout the proposed CPU, the default CalEEMod settings for the land usage type were used. CalEEMod estimates emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered into the land use module to obtain total projected energy use. This value was then multiplied by the natural gas air pollutant emission factors applicable to the project location and utility provider. The values and calculations used by CalEEMod reflect the 2013 Title 24 Building Energy Efficiency Standards for reduction in energy usage. CalEEMod is not updated to the newest 2022 or 2025 Title 24 Building Energy Efficiency Standards. Therefore, actual energy-related emissions may be lower than estimated in this analysis as new construction follows stricter energy efficiency standards.

Mobile sources are from vehicle usage within the CPU area by residents, workers, and visitors. The mix of vehicles and vehicle miles traveled used in estimating operational emissions for the proposed CPU used the CalEEMod default fleet mix of small and larger vehicles, mostly gasoline powered. The proposed CPU has guiding principles and policies to increase walkability within neighborhoods and improved public transit that would likely reduce the emissions from the modeled numbers. However, emissions associated with the proposed CPU would likely still contribute to exceedance of the significance thresholds because the proposed CPU would not eliminate all vehicle usage, especially for delivery and services.

Table 5.1-3 documents the estimated annual operational emissions, including the selected mitigations as detailed below, versus the thresholds of significance shown in Table 5.1-1.

Operational emissions estimated for the buildout of the proposed CPU exceed significant impact thresholds for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$.

Table 5.1-3
Estimated Annual Operational Emissions (tons per year)

Source	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	217	6	97	0.04	0.9	0.9
Energy	4	40	31	0.2	3	3
Mobile (Vehicles)	41	235	536	3	318	86
Total	**263**	**281**	**664**	**2.9**	**322**	**89**
Threshold for Significant Impact	15	40	100	40	15	10
Average Daily Operational Emissions Exceed Threshold?	Yes	Yes	Yes	No	Yes	Yes

Notes: See Appendix B for more details on assumptions.
The mitigated operational emission estimated are shown.
VOC = Volatile Organic Compounds; NOx = Nitrogen Oxides; CO = Carbon Monoxide; SO_2 = Sulfur Dioxide; PM_{10} = Particulate Matter 10 micrometers or less in diameter; $PM_{2.5}$ = Particulate Matter 2.5 micrometers or less in diameter

Regulations at the federal, state, and local levels provide a framework for developing project-level air quality protection measures for future projects. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA, as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan and associated Community Plan. However, it is possible that for certain future projects, adherence to the regulations may not adequately reduce air pollutant emissions, and such projects would require additional measures to avoid or reduce significant air quality impacts. Ministerial projects would not be subject to further CEQA review. Because operational emissions associated with buildout of the proposed CPU would exceed operational significance thresholds and the assumptions used to develop the RAQS (refer to Issue 1 above), and because there could be certain future projects that would not be able to reduce emissions below the significance thresholds, this impact would be potentially significant.

Issue 3: Would the project expose sensitive receptors to substantial pollutant concentrations, including toxins?

Impacts on sensitive receptors are typically analyzed by evaluating CO hot spots and exposure to Toxic Air Contaminants (TACs), including diesel particulate matter (DPM) (refer to Section 2.2.1, Air Quality).

The City's CEQA Significance Determination Thresholds define a sensitive receptor as a person in the population who is more particularly susceptible to health effects due to exposure to an air contaminant than the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, TACs, or odors are of particular concern. Analysis must consider sensitive receptors in locations such as day care centers, schools, retirement homes, and hospitals or medical patients in residential homes close to major roadways or stationary sources, which could be affected by air pollutants (City of San Diego 2020a).

Localized Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections during busy travel times. If implementation of a project increases the average delay at an intersection that is already congested to be more congested, this could cause an impact on localized air quality.

The SDAB is a CO maintenance area under the federal Clean Air Act. This means that the SDAB was previously a nonattainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially and all air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District (BAAQMD) developed in 2010 a screening threshold, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. This analysis conservatively assesses potential CO hot spots using the lower SMAQMD screening threshold of 31,600 vehicles per hour. Additionally, Sacramento and San Diego have the same federal and state CO attainment designations and, experience similar CO concentrations; thus, these screening volumes are appropriate for evaluating CO impacts in the SDAB. This screening volume has also been utilized by the South Coast Air Quality Management District (SCAQMD), which also has the same CO designation.

Peak hour turning volumes for the intersections within the CPU area were obtained from the Transportation Impact Study (see Appendix L of this PEIR) and compared to the SMAQMD screening threshold of 31,600 vehicles per hour. The intersection with the greatest peak hour volume under the proposed CPU would be Westview Parkway at Mira Mesa Boulevard which would have an AM peak hour volume of 8,010 vehicles. Peak hour traffic volume at all intersections would be less than 31,600 vehicles under the proposed CPU per hour and thus, would not exceed the screening

threshold. Therefore, the proposed CPU is not anticipated to result in a CO hot spot and impacts would be less than significant.

Toxic Air Contaminants and Diesel Particulate Matter

Construction

Construction of future projects and infrastructure implemented under the proposed CPU would result in increased short-term diesel exhaust emissions from on-site, heavy-duty construction equipment used during construction and demolition. The diesel exhaust is a source of DPM, a TAC.

Construction emissions under the proposed CPU were estimated as part of this analysis and were compared to the thresholds listed in Table 5.1-1 (i.e. 100 pounds per day of PM_{10} or 55 pounds per day of $PM_{2.5}$ to determine if the proposed CPU would result in impacts associated with DPM. As shown in Table 5.1-2, the modeling of the buildout indicates that average daily emissions of PM_{10} may exceed the thresholds in an unmitigated construction scenario, but $PM_{2.5}$ would likely be below the threshold for an average day during construction. The exceedance of the PM_{10} threshold could be mitigated with dust control activities during demolition and site grading as discussed at Issue 2 above. This mitigation strategy is not reflected in the CalEEMod results but would be required by SDAPCD Rule 55.

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 the Office of Environmental Health Hazard Assessment) 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. DPM generated by construction activities would be intermittent and dispersed throughout the CPU area at various locations. Therefore, DPM generated by construction is not expected to create conditions where the probability of developing cancer for a receptor exceeds 10 in 1 million or to create an environment where the TACs exceed a Hazard Index of 1 for a receptor. This is due both to the nature of the construction projects dispersed over time and space, as well as increased improvements in cleaner fuels, emissions limits on engines, retrofits or retirement of old equipment and new low-emission diesel engines that will likely be in use in 2030. Thus, it is anticipated that impacts related to the exposure of sensitive receptors to TACs during construction would be less than significant.

Stationary Sources

The proposed CPU includes land uses that may generate air pollutants affecting adjacent sensitive receptors, which include land uses such as schools, day cares and medical facilities. In air quality terms, individual land uses that emit air pollutants in sufficient quantities are known as stationary sources. The primary concern with stationary sources is local; however, they also contribute to air pollution in the SDAB. Stationary sources include freeways and high-traffic roads, gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources are regulated by the local air pollution control or management district through the issuance of permits; in this case, the agency is the SDAPCD. CARB's *Air Quality and Land Use Handbook: a Community Health Perspective* provides recommendations regarding the siting of new sensitive land uses, near various known sources of TACs. These siting recommendations have been reproduced in Table 5.1-4, CARB Land Use Siting Recommendations.

Table 5.1-4
CARB Land Use Siting Recommendations

Source Category	Recommended Buffer Distance (feet)
Freeways and High-Traffic Roads (freeways, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day)	500
Distribution Centers (that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week)	1,000
Chrome Platers	1,000
Dry Cleaners using Perchloroethylene (1 machine)	300
Dry Cleaners using Perchloroethylene (2 machines)	500
Dry Cleaners using Perchloroethylene (3 or more machines)	Requires consultation with SDAPCD
Large Gas Station (3.6 million gallons or more per year)	300
Other Gas Stations	50

Source: CARB 2005

In accordance with Assembly Bill 2588, any new facility that would have the potential to emit TACs would be required to assess air toxic problems that would result from their facility's emissions. If air emissions from a specific facility include toxic substances or exceed identified limits, the facility is required by the SDAPCD to provide information regarding emission inventories and health risk assessments. If adverse health impacts exceeding public notification levels are identified, the facility would provide public notice, and if the facility poses a potentially significant public health risk, the

facility must submit a risk reduction audit and plan to demonstrate how the facility would reduce health risks. Thus, with this regulatory framework, at the program level, impacts associated with stationary sources in the CPU area would be less than significant.

The proposed CPU would include the development of residential and commercial land uses. Residential land uses do not typically generate substantial TAC emissions. Commercial land uses may potentially include stationary sources of TACs, such as dry-cleaning establishments, gas stations, and diesel-fueled backup generators. As discussed above, these types of stationary sources, in addition to any other stationary sources that may emit TACs, would be subject to SDAPCD rules and regulations. Land uses that are more likely to generate substantial TAC emissions include industrial land uses that involve stationary sources and manufacturing processes.

Individual development projects involving sensitive land uses could be located within the siting distances recommended by the CARB as identified above in Table 5.1-4, thereby potentially exposing sensitive receptors to elevated levels of TACs. Most notably, proposed development could be sited within 500 feet of Interstate (I-) 15 and I-805. However, CARB recommendations are advisory and should not be interpreted as defined "buffer zones." Local agencies must balance other considerations such as transportation needs, the benefits of urban infill, community economic development priorities, and other quality-of-life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk, where necessary, CARB's position is that infill development, mixed-use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level. Additionally, measures can be incorporated into future project design that would reduce the level of exposure for future residents. CAPCOA published a guidance document, Health Risk Assessments for Proposed Land Use Projects, which provides recommended measures that reduce concentrations of DPM (CAPCOA, 2009). These include planting vegetation between the receptor and the freeway, constructing barriers between the receptor and the freeway, and installing newer electrostatic filters in adjacent receptor buildings.

Consistent with the goals of CARB's handbook, the proposed CPU's policies and Supplemental Design Regulations support infill, mixed-use, higher density, and transit-oriented development that is anticipated to benefit regional air quality by reducing the amount of vehicular emissions. Proposed CPU policy 2.21 calls for development to consider air quality and air pollution sources in the siting, design, and construction of residential units and other uses with sensitive receptors. Additionally, the proposed CPU policy 2.22 encourages building design features that minimize the effects of air pollution for residential and other sensitive-receptors land uses located within 500 feet of a freeway. These building features include ventilation systems with HEPA filters, locating HVAC intake vents away from pollution sources, and fixed windows facing freeways (see Chapter 4 Section D, Safety, of the proposed CPU). By promoting this type of project-specific site planning and building

design, implementation of the proposed CPU is anticipated to minimize exposure of sensitive receptors to stationary source emissions. Implementation of the proposed CPU, including the Supplemental Design Regulations, would be consistent with the goals of CARB and would not expose sensitive receptors to substantial pollutant concentrations, and impacts related to the exposure of sensitive receptors to stationary source emissions would be less than significant.

Issue 4: Would the project create objectionable odors affecting a substantial number of people?

Emissions from construction equipment, such as diesel exhaust, and VOC from architectural coatings and paving activities may generate odors; however, these odors would be temporary, intermittent. Additionally, noxious odors would be confined to the immediate vicinity of construction equipment. Furthermore, short-term construction-related odors are expected to cease upon the drying or hardening of the odor-producing materials. Therefore, impacts associated with construction-generated odors would be less than significant.

Common facilities that may generate objectionable odors during operation include wastewater treatment plants, landfills, and painting/coating operations (e.g., auto body shops), among others. The CPU proposes multi-family residential, commercial/retail, office, institutional, industrial, park, and open space land uses. The project would not introduce land uses that would generate substantial odors adjacent to sensitive receptors. While specific, future developments within the CPU area are not known at this program level of analysis, planned land uses would not encourage or support uses that would be associated with significant odor generation. Odors associated with restaurants or other commercial uses would be similar to existing residential and food service uses throughout the CPU area. Additionally, auto body shops would be required to comply with SDAPCD Rule 51 (Public Nuisance), which prohibits the discharge of air contaminants or other materials that would be a nuisance or annoyance to the public. Odor generation is also generally confined to the immediate vicinity of the source and any proposed land uses that would generate odor would not be located in the vicinity of sensitive receptors. Thus, implementation of the proposed project would not create operational-related objectionable odors affecting a substantial number of people within the City, and impacts related to objectionable odors would be less than significant.

5.1.5 SIGNIFICANCE OF IMPACT

Issue 1: Conflict with or Obstructs Air Quality Plans

The proposed CPU would result in greater density; therefore, future emissions associated with buildout of the CPU area would be greater than future emissions associated with buildout of the

adopted Community Plan land uses. Thus, emissions of ozone precursors (VOC and NOx) would be greater than what is accounted for in the RAQs and impacts would be significant.

Issue 2: Air Quality Standards

At the program-level, the proposed CPU would exceed air quality standards during both construction and operation. Impacts would be significant.

Issue 3: Expose Sensitive Receptors to Substantial Pollutants

Implementation of the proposed CPU would not result in a localized CO hotspot and would not expose sensitive receptors to elevated levels of TACs during construction or operation. Impacts would be less than significant.

Issue 4: Creation of Objectionable Odors

Potential construction-generated odors would be localized, temporary, intermittent, and are not expected to affect a substantial number of people. The proposed project would not introduce land uses that would generate substantial odors during operations. Therefore, impacts associated with odors would be less than significant.

5.1.6 MITIGATION, MONITORING, AND REPORTING

MM-AQ-1 Within 6 months of the certification of the Final PEIR, the City of San Diego (City) shall provide a revised land use map and housing and employment forecast for the CPU area to SANDAG to ensure that any revisions to the population and employment projections used by the SDAPCD in updating the RAQS and SIP will accurately reflect anticipated growth due to the proposed project.

MM-AQ-2 **Project-specific Construction Air Quality Impact Analysis.** Proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available CalEEMod model, or other analytical method determined in conjunction with the City. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. If such analyses identify potentially significant regional or local air quality impacts based on the City's CEQA Significance Determination Thresholds, the City shall require the incorporation of appropriate mitigation to reduce such impacts. Examples of potential mitigation measures are provided in MM-AQ-3.

MM-AQ-3 **Construction Emissions Reduction Measures.** For individual construction projects that exceed the daily emissions thresholds established by the City, best available control measures/technology shall be incorporated to reduce construction emissions to the extent feasible. Best available control measures/technology shall include, but not be limited to, the following:

- Equipment shall meet USEPA Tier IV emission standards, as feasibly available.
- Use of alternative fueled construction equipment such as battery-powered instead of gas-powered, as feasible.
- Dust control measures for construction sites to minimize fugitive dust such as:
- Contractor(s) shall implement paving, chip sealing, or chemical stabilization of internal roadways after completion of grading;
- Dirt storage piles shall be stabilized by chemical binders, tarps, fencing, or other erosion control;
- A 15 mph speed limit shall be enforced on unpaved surfaces;
- Dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather;
- Haul trucks hauling dirt, sand, soil, or other loose materials shall be covered or 2 feet of freeboard shall be maintained;
- Grading shall be terminated if winds exceed 25 mph;
- Any blasting areas shall be wetted down prior to initiating the blast.

5.1.7 SIGNIFICANCE AFTER MITIGATION

Issue 1: Conflict with or Obstructs Air Quality Plans

The proposed CPU would not be consistent with the RAQS and SIP and would result in a significant and unavoidable impact. Mitigation Measure MM-AQ-1 requires that the City provide a revised land use map and housing and employment forecast to SANDAG to ensure that any revisions to the population and employment projects are considered in the update of the RAQS and the SIP. The

provision of housing information would assist SANDAG in revising the population forecasts; however, until the anticipated growth is included in the emission estimates of the RAQS and the SIP, the direct and cumulative impacts would remain significant and unavoidable.

Issue 2: Air Quality Standards

Construction

Federal, State, and local regulations would provide a framework for developing project-level air quality protection measures for future projects and implementation of mitigation measures MM-AQ-2 and MM-AQ-3 would reduce construction-related air quality impacts for future projects constructed in the CPU area. Nevertheless, the ability of future development to successfully implement mitigation measures MM-AQ-2 and MM-AQ-3 cannot be guaranteed due to lack of project specific information and analysis at this time. In addition, even if the mitigation measures were fully satisfied by a future development, it is possible that the development could still result in a significant impact related to construction air quality impacts. Thus, impacts to air quality standards are considered to be significant and unavoidable.

Operation

The regulations at the federal, State, and local levels provide a framework for developing project level air quality protection measures for future projects. The City's process for evaluating discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan and associated Community Plan. However, it is possible that for certain projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. Because operational emissions associated with buildout of the proposed CPU would be greater for all pollutants when compared to adopted land uses and the assumptions used to develop the RAQS, and because it is unknowable whether certain projects would be able to reduce emissions below the significance thresholds, this impact would be significant and unavoidable. No feasible mitigation measures are available at this time.

Issue 3: Expose Sensitive Receptors to Substantial Pollutants

Impacts associated with the exposure of sensitive receptors to substantial pollutants would be less than significant. No mitigation measures are required.

Issue 4: Creation of Objectionable Odors

Impacts associated with the exposure of sensitive receptors to substantial odors would be less than significant. No mitigation measures are required.

5.2 BIOLOGICAL RESOURCES

This section of the Program Environmental Impact Report (PEIR) provides analysis of potential impacts related to biological resources associated with implementation of the proposed Mira Mesa Community Plan Update ("proposed project or "proposed CPU"). Information in this section is based, in part, on the *Mira Mesa Community Plan Update Biological Resources Report* prepared by Busby Biological Services, which is included as Appendix C of this PEIR.

5.2.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion and description of existing biological resources within the Mira Mesa Community Plan Update (CPU) area is contained in Section 2.2.2 of this PEIR. The entire CPU area is within the City of San Diego's (City's) Multiple Species Conservation Program (MSCP) and Vernal Pool Habitat Conservation Plan (VPHCP) areas and Multi-Habitat Planning Area (MHPA) lands are shown in Figure 2-4, Conserved Lands and Open Space. Section 4.2 of this PEIR includes a summary of the regulatory framework relative to biological resources. Additional relevant information is provided below.

5.2.2 METHODOLOGY AND ASSUMPTIONS

As this PEIR addresses a community plan at a programmatic level rather than a specific project, within the CPU area, the analysis of biological resources for the CPU area was performed at the plan level, using existing databases and literature. No fieldwork was conducted as part of the analysis of biological resources for the CPU. Sources reviewed for this analysis include the following:

- San Diego Geographic Information Source (SanGIS) Vegetation Information in the San Diego Region (SanGIS 2022)
- California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDB) (CDFW 2020a)
- California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2020)
- Calflora: information on wild California plants (Calflora 2020)
- U.S. Fish and Wildlife Service (USFWS) historical species database (USFWS 2022a)
- USFWS Critical Habitat Database (USFWS 2022b)
- County of San Diego Multiple Species Conservation Program (MSCP) (County of San Diego 1992)
- City of San Diego MSCP Subarea Plan (City of San Diego 1997)
- City of San Diego MHPA Interactive Map (City of San Diego 2022a)

- U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic Database (USDA 2022)
- USFWS National Wetlands Inventory (USFWS 2022c)
- San Diego County Plant Atlas (SDNHM 2022)
- San Diego County Bird Atlas (Unitt 2004)
- San Diego County Mammal Atlas (Tremor et. al 2017)
- City of San Diego Vernal Pool Habitat Conservation Plan (City of San Diego 2017)
- City of San Diego VPHCP Interactive Map (City of San Diego 2022b)
- 3Roots San Diego Project Biological Technical Report (Helix 2019)
- Stone Creek Master Plan Biological Technical Report (RECON 2015)

5.2.2.1 Sensitive Plants

Sensitive plant species are those that are listed as threatened or endangered under the federal Endangered Species Act and California Endangered Species Act and those that are listed as rare by the CNPS, including MSCP Covered Species and MSCP Narrow Endemic species (see Appendix C). Recorded locations of sensitive plant species observations were obtained from database queries of the sources listed above, including USFWS sensitive species database, CNDDB (CDFW 2022a), and SanBIOS database (SanGIS 2022). In addition, data obtained from the CNPS online rare plant inventory (CNPS 2022), Calflora website (Calflora 2022), and the San Diego County Plant Atlas (SDNHM 2022) were used to provide additional data on the locations of sensitive plant species within the CPU area.

Common and scientific names for plant species are those presented in the CDFW CNDDB State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2020b). See Section 2.2.2.3 in Chapter 2.0, Environmental Setting, and Appendix C for a discussion of sensitive plant species within or with the potential to occur within the CPU area.

5.2.2.2 Sensitive Wildlife

Sensitive animal species are those that are listed as threatened or endangered under the federal Endangered Species Act and California Endangered Species Act, including MSCP Covered Species or MSCP Narrow Endemic species (see Appendix C). Recorded locations of sensitive wildlife species observations were obtained from database queries of the sources listed above, including the USFWS sensitive species database, CNDDB (CDFW 2020a), and SanBIOS database (SanGIS 2022). In addition, the San Diego County Bird Atlas (Unitt 2004) and the San Diego County Mammal Atlas (Tremor et al. 2017) were used to provide additional data on the locations of sensitive plant species within the CPU area.

Common and scientific names for wildlife species are those presented in the CDFW CNDDB State and Federally Listed Endangered and Threatened Animals of California (CDFW 2020c). The sensitivity status for wildlife species is based on federal and state endangered, threatened, and sensitive status lists, as well as local sensitivity designated by the MSCP covered species lists, the CDFW Special Animals List, and species mentioned in the City's Biology Guidelines. See Section 2.2.2.4 in Chapter 2.0, Environmental Setting, and Appendix C for a discussion of the sensitive wildlife species within or with the potential to occur within the CPU area.

5.2.2.3 Vegetation Communities and Land Cover Types

Sensitive vegetation communities are vegetation assemblages, associations, or sub-associations that have cumulative losses throughout the region, have relatively limited distribution, support or potentially support sensitive species, or have particular value to other wildlife (see Appendix C). Typically, sensitive vegetation communities are considered sensitive whether or not they have been disturbed. Within the CPU area, there are both sensitive upland vegetation communities and sensitive wetland communities (see Appendix C).

Vegetation communities and land cover types considered for this analysis are mostly based on mapping obtained from the SanGIS database (SanGIS 2022), as well as the City's most recent MHPA vegetation layer. In addition, other documents that provide more detailed vegetation/land cover mapping (City of San Diego 2019; Helix 2019; RECON 2015) were used to refine the mapping where applicable (see Figure 2-2, Vegetation Communities and Land Cover Types, of this PEIR).

Refer to Appendix C for additional details regarding vegetation communities.

5.2.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to biological resources are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant biological resources impact could occur if implementation of the proposed project would:

Issue 1: Cause a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or USFWS;

Issue 2: Cause a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land

Development Manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

Issue 3: Cause a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means;

Issue 4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Subarea Plan, or impede the use of native wildlife nursery sites; or

Issue 5: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP Subarea Plan area or in the surrounding region.

5.2.4 IMPACTS

Impacts on biological resources due to growth and development may be both direct and indirect, as defined by the City's CEQA Significance Determination Thresholds (City of San Diego 2022) and detailed below.

Direct Impacts: A direct impact is a physical change in the environment which is caused by and immediately related to the project. An example of a direct physical change in the environment is the removal of vegetation.

Indirect Impacts: An indirect impact is a physical change in the environment, which is not immediately related to the project, but which is caused indirectly by the project. If a direct impact in turn causes another physical change in the environment, then the secondary change is an indirect impact. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact that may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable. Potential indirect impacts may include the following:

- *Noise*: Elevated ambient noise levels that could result from construction or development associated with the proposed CPU's implementation could impact species that rely on sound to communicate (e.g., birds). Elevated ambient noise levels have the potential to disturb species and/or cause direct habitat avoidance. The impact of noise on wildlife differs from species to species and is dependent on the source of the noise (e.g., vehicle traffic versus blasting) and the decibel level, duration, and timing.

- *Changes in Hydrology and Drainage*: Changes in surface or ground hydrology such as those related to runoff, salinity levels, and sedimentation resulting from the implementation of the proposed CPU could have indirect impacts on species and habitats.
- *Invasive Exotic and Predator Species*: Introduction of exotic or invasive plant and animal species to areas in or adjacent to MHPA and other biologically sensitive areas in the CPU area could be considered an indirect impact. Non-native species may have fewer natural predators, reduce habitat quality through reduced support of native species, and may aggressively outcompete native species.
- *Lighting*: Artificial night lighting associated with implementation of the proposed CPU could impact habitat value for some species, particularly for nocturnal species, through potential modification of predation rates, obscuring of lunar cycles, and/or causing direct habitat avoidance. Nighttime lighting could also disturb diurnal species roosting in adjacent habitat.
- *Toxins and Fugitive Dust*: Increased use of chemical products including pesticides, herbicides, and machinery fluids along with fugitive dust generated during construction and urban buildout (i.e., from aerosolized soil, tire wear, and car exhaust) associated with implementation of the proposed CPU could adversely impact plants and animals by coating the plant surfaces and disrupting various plant and animal lifecycle functions such as reproduction, photosynthesis, and respiration.
- *Unauthorized Access*: Development associated with implementation of the proposed CPU could create or increase use of habitats that otherwise were not easily accessible to humans. Disturbance from human activities (i.e., trampling of species from recreational activity) and trash left by human activities can adversely impact species and degrade habitat.

Permanent Impacts: Impacts that result in the irreversible removal or loss of biological resources are considered permanent.

Temporary Impacts: Temporary disruptions of habitat and temporary staging areas that do not alter landform and that will be revegetated are generally not considered to be permanent habitat loss. Biological survey reports would determine if any sensitive wildlife species are located onsite and would include measures to avoid the species or relocate the species pursuant to the City's Biology Guidelines, and MSCP SAP area specific management directives for covered species. Staff would work with the applicant on a project level to ensure that appropriate revegetation and restoration as outlined in the MSCP Subarea Plan (SAP) and the Biology Guidelines' Attachment B, General Outline for Revegetation/Restoration Plans, will be completed as part of the development process.

Cumulative Impacts: Impacts that result from the combined effects of the project plus all past, present, and reasonably foreseeable future projects or activities within the project vicinity. Examples

include the cumulative changes associated with urban development that result in habitat fragmentation; increased traffic, runoff, and noise levels; alteration of natural landscapes; wildlife movement restrictions; and introduction of invasive species. Cumulative impacts are discussed in Chapter 6.0, Cumulative Impacts, of this PEIR.

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

Sensitive Plant Species

Based on the known ranges, species habitat preferences, and historical species occurrence records reviewed for the *Mira Mesa Community Plan Update Biological Resources Report* (Appendix C), there are 34 sensitive plant species known in the CPU area. Of the 34 species identified in the vicinity, implementation of the proposed CPU has the potential to have an impact on 22 sensitive plant species known to occur or determined to have a potential to occur in the CPU area (refer to Section 2.2.2.3 in this PEIR and Appendix C for additional details). Precise numbers and locations of sensitive plant species would be identified through project-level evaluations and surveys for future development/redevelopment in accordance with the proposed CPU, MSCP SAP, and Biology Guidelines. Potential sensitive plant species identified thus far that are present or have a potential to occur in the CPU area and could be affected by implementation of the proposed project include the following:

- San Diego thorn-mint (*Acanthomintha ilicifolia*; Federally Threatened, State Endangered, California Rare Plant Rank [CRPR] 1B.1, MSCP-covered Narrow Endemic)
- California adolphia (*Adolphia californica*; CRPR 2B.1)
- San Diego ambrosia (*Ambrosia pumila*; Federally Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*; Federally Endangered, CRPR 1B.1, MSCP-covered)
- San Diego goldenstar (*Bloomeria clevelandii*; CRPR 1B.1, MSCP-covered)
- Orcutt's brodiaea (*Brodiaea orcuttii*; CRPR 1B.1, MSCP-covered)
- Wart-stemmed ceanothus (*Ceanothus verrucosus*; CRPR 2B.2, MSCP-covered)
- Southern tarplant (*Centromadia parryi* ssp. *australis*; CRPR 1B.1)
- Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*; CRPR 1B.2)
- Summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*; CRPR 1B.2)

- San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*; CRPR 1B.1, MSCP-covered)
- Variegated dudleya (*Dudleya variegata*; CRPR 1B.2, MSCP-covered Narrow Endemic)
- Sessile-leaved yerba santa (*Eriodictyon sessilifolium*; CRPR 2B.1)
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- San Diego barrel cactus (*Ferocactus viridescens*; CRPR 2B.1, MSCP-covered)
- Campbell's liverwort (*Geothallus tuberosus*; CRPR 1B.1)
- Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*; CRPR 1B.2)
- San Diego marsh-elder (*Iva hayesiana*; CRPR 2B.2)
- Willowy monardella (*Monardella viminea*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- Spreading navarretia (*Navarretia fossalis*; Federally Threatened, CRPR 1B.1, MSCP-covered Narrow Endemic, VPHCP-covered)
- San Diego mesa mint (*Pogogyne abramsii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic, VPHCP-covered)
- Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1)

Of these 22 sensitive plant species, 14 have been recorded within the CPU area while 8 have a potential to occur. The sensitivity status, species information, and potential for occurrence for each of these 22 plant species are summarized in Table 2-4, in Chapter 2.0, Environmental Setting. Potentially occurring sensitive species would be conserved in accordance with the City's Environmentally Sensitive Lands (ESL) Regulations, Biology Guidelines, and the provisions of the MSCP SAP. Depending on the species present, adherence to the MSCP SAP Appendix A (i.e., Conditions of Coverage), the Vernal Pool Habitat Conservation Plan (VPHCP), and state and federal laws will provide mitigation for direct impacts to sensitive plant species. Further, sensitive plant species in the CPU area are concentrated in areas designated as Open Space under the CPU and are located within the MHPA, refer to Figure 2-4 of this PEIR. Approximately 90% of the MHPA within the CPU area is designated as Open Space under the proposed project (Appendix C). These areas would have limited development potential such as passive recreation and trails in conformance with the MSCP SAP. Conserved lands are shown on Figure 2-4. Proposed development under the CPU, including the Urban Villages, is primarily focused in areas that are already developed with commercial, industrial, residential, or employment uses, and do not support extensive sensitive plant species habitat that would be impacted by construction. Additionally, "Lands outside the MHPA containing narrow endemic species will be treated as if the land was inside the MHPA for purposes

of mitigation" (City of San Diego 2018). Therefore, implementation of the proposed CPU would result in less-than-significant impacts to sensitive plant species.

Sensitive Wildlife Species

Based on the known ranges, species habitat preferences, and historical species occurrence records reviewed for the *Mira Mesa Community Plan Update Biological Resources Report* (Appendix C), there are 37 sensitive wildlife species known in the CPU area vicinity. Of the 37 species identified in the vicinity, implementation of the proposed CPU has the potential to have an impact on 30 sensitive wildlife species known to occur or with the potential to occur in the CPU area (refer to Section 2.2.2.4 in this PEIR and Appendix C for additional details). Precise numbers and locations of sensitive wildlife species would be identified through project-level evaluations and surveys for future development/redevelopment in accordance with the proposed CPU, MSCP SAP, and Biology Guidelines. The sensitive wildlife species that could potentially be affected by implementation of the proposed CPU include, but are not limited to:

- San Diego fairy shrimp (*Branchinecta sandiegonensis*; Federally Endangered, MSCP-covered, VPHCP-covered)
- Riverside fairy shrimp (*Streptocephalus woottoni*; Federally Endangered, MSCP-covered, VPHCP-covered)
- Quino checkerspot butterfly (*Euphydryas editha quino*; Federally Endangered)
- Western spadefoot (*Spea hammondii*; California Species of Special Concern)
- Southwestern pond turtle (*Emys marmorata*; California Species of Special Concern, MSCP-covered)
- Southern California legless lizard (*Anniella stebbinsi*; California Species of Special Concern)
- Coast horned lizard (*Phrynosoma blainvillii*; California Species of Special Concern, MSCP-covered)
- Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*; CDFW Watch List Species, MSCP-covered)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*; California Species of Special Concern)
- Two-striped garter snake (*Thamnophis hammondii*; California Species of Special Concern)
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*; California Species of Special Concern)
- Red diamond rattlesnake (*Crotalus ruber*; California Species of Special Concern)
- White-tailed kite (*Elanus leucurus*; State Fully Protected [nesting])

- Northern harrier (*Circus cyaneus*; California Species of Special Concern [nesting], MSCP-covered)
- Cooper's hawk (*Accipiter cooperii*; CDFW Watch List Species [nesting], MSCP-covered)
- American peregrine falcon (*Falco peregrinus anatum*; State Fully Protected [nesting], MSCP-covered)
- Loggerhead shrike (*Lanius ludovicianus*; California Species of Special Concern [nesting])
- Least Bell's vireo (*Vireo bellii pusillus*; Federally Endangered [nesting], State Endangered [nesting], MSCP-covered)
- Coastal California gnatcatcher (*Polioptila californica*; Federally Threatened, California Species of Special Concern, MSCP-covered)
- Yellow warbler (*Dendroica petechia brewsteri*; California Species of Special Concern [nesting])
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List Species, MSCP-covered)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax*; California Species of Special Concern)
- San Diego desert woodrat (*Neotoma lepida intermedia*; California Species of Special Concern)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; California Species of Special Concern)
- Western mastiff bat (*Eumops perotis californicus*; California Species of Special Concern)
- Big free-tailed bat (*Nyctinomops macrotis*); California Species of Special Concern)
- Western red bat (*Lasiurus blossevillii*; California Species of Special Concern)
- Townsend's big-eared bat (*Corynorhinus townsendii*; California Species of Special Concern)
- Southern mule deer (*Odocoileus hemionus*; MSCP-covered)
- Mountain lion (*Felis concolor*; MSCP-covered)

Potential impacts to sensitive wildlife species would be mitigated in accordance with City's ESL Regulations, the Biology Guidelines, and the provisions of the MSCP SAP and VPHCP. Depending on the species present, adherence to the MSCP SAP, VPHCP, and state and federal laws would provide mitigation for direct impacts to sensitive species. For example, Appendix A of the MSCP provides conditions of coverage for species evaluated under the MSCP and directives that protect the resources in the MHPA, including management actions that are necessary to ensure that the covered species are adequately protected (City of San Diego 1997). Mitigation for sensitive biological resources involves "compensating" for impacts through off-site acquisition, on-site preservation, habitat restoration, or in

limited cases, monetary compensation. Refer to Chapter 4.0, Regulatory Framework, for a complete discussion of the applicable plans and regulations related to biological resources.

Furthermore, the Migratory Bird Treaty Act, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. Thus, there is an existing regulatory framework in place to prevent adverse impacts to migratory birds. Additionally, future development occurring within the CPU area that has the potential to impact migratory birds would be required to conduct preconstruction surveys if construction occurs during the typical bird breeding season to determine the presence or absence of breeding birds and to ensure that no impacts occur to any nesting birds or their eggs, chicks, or nests. Additionally, future development would be required to comply with the MSCP Subarea Plan and would require letter reports or surveys for future projects occurring within or adjacent to the MHPA or for sites that contain sensitive habitat as defined by the Biology Guidelines. Projects within or adjacent to the MHPA are required to comply with MHPA Land Use Adjacency Guidelines and these guidelines and preconstruction surveys for bird species are included as conditions of project approval and are provided on construction and grading plans. In addition future projects located in areas within close proximity to areas with known vernal pool resources, implementation of the VPHCP Section 5.2.1 Minimization and Avoidance Measures are required and would be assured as conditions of project approval. Therefore, implementation of the proposed CPU within the existing regulatory framework would result in less than significant impacts to sensitive species.

Critical Habitat

Critical habitat for species regulated by the federal Endangered Species Act is designated by USFWS in areas deemed essential for the conservation and/or recovery of the species. Critical habitat areas often require special management and protection to assure they will remain suitable for the federally listed species for which they have been designated. Projects proposed within or adjacent to critical habitat must demonstrate that implementation of the project would not destroy or have a significant impact on the functions and values of the critical habitat. Mitigation for significant impacts to critical habitat involves "compensating" for impacts through off-site acquisition, on-site preservation, habitat restoration, or in limited cases, monetary compensation. Refer to Chapter 4.0, Regulatory Framework, for a complete discussion of the applicable plans and regulations related to biological resources.

Within the CPU area, USFWS has designated critical habitat for the following species: Cushenberry oxytheca (*Acanthoscyphus parishii* var. *goodmaniana*), San Diego thorn-mint (*Acanthomintha ilicifolia*), spreading navarretia, and San Diego fairy shrimp (refer to Figure 2-5). Future development under the proposed CPU that would potentially impact designated critical habitat would be subject to compliance

with the objectives and applicable avoidance, minimization, and mitigation measures of the VPHCP, as well as the regulatory requirements of the MSCP SAP, ESL Regulations, and Biology Guidelines. Further, proposed development under the CPU, including the Urban Villages, is primarily focused in developed and previously disturbed areas with existing commercial, industrial, residential, or employment uses. These areas are outside of the MHPA and do not support critical habitat that would be impacted by construction (see Figure 2-3 of this PEIR). The CPU designates all MHPA and critical habitat areas as open space and includes policies 6.7 through 6.21 to preserve natural habitat resources in the Chapter 6, Parks, Recreation, and Open Space. The CPU therefore does not propose future development that would occur in critical habitat area, and its impacts on critical habitat would be less than significant with implementation of the existing regulatory framework.

Urban Interface

The interface (edge) between native plant communities and human-modified areas is considered to be a source of impacts to many native species. Many wildlife species decrease along the edge of habitat due to detrimental conditions, such as increased parasitism, increased nest predation, and increased competition for nesting areas (City of San Diego 2018). Other factors such as increased noise and night-time lighting may also contribute to the adverse conditions, collectively called "edge effects." The MSCP SAP indicated that edge effects can range from 200 to 600 feet from a natural habitat depending on adjacent land uses. Future development under the proposed CPU that would potentially impact species in the urban interface would be subject to compliance with the objectives and applicable avoidance, minimization, and mitigation measures of the VPHCP, as well as regulatory requirements of the MSCP SAP, ESL Regulations, and Biology Guidelines. Per the City's Biology Guidelines, mitigation for impacts to species in the urban interface may include the on-site preservation of lands outside the MHPA, provided they have long-term biological value. Long-term biological value should be assessed in terms of connectivity to larger areas of planned open space, and any potential current or future indirect impacts associated with the urban interface (City of San Diego 2018). Further, the proposed CPU contains policies to ensure provision of "buffer zones" to protect environmentally sensitive habitat areas from new development (policy 6.18) and encourages the use of landscaping and barriers to protect sensitive plants and wildlife from human activities (policies 6.19 and 6.21). Implementation of the CPU policies and existing regulatory framework would therefore ensure that impacts to the urban interface would be less than significant.

Issue 2: Would the project cause a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

The City's Biology Guidelines define sensitive vegetation communities. Upland vegetation communities are divided into four tiers of sensitivity (the first being the most sensitive; the fourth, the least sensitive) based on rarity and ecological importance (City of San Diego 2018). Tier I includes rare uplands, Tier II includes uncommon uplands, Tiers IIIA and IIIB include common uplands, and Tier IV includes other uplands. Wetlands and waters of the United States are also considered sensitive habitats/communities, but are not assigned tier values. Additionally, vegetation or land cover types may be deemed sensitive in certain areas if they support a sensitive species such as a burrowing owl or rare/narrow endemic plant species.

The CPU area is currently known to support the following 16 sensitive vegetation communities, including 9 wetland communities and 7 upland sensitive communities:

- *Wetlands*: forest and woodland, riparian scrub, freshwater marsh, open water, natural flood channel, disturbed wetland, vernal pools, wetland/riparian enhancement/restoration, and concrete channel
- *Upland Tier I Habitats*: native grassland and oak woodland
- *Upland Tier II Habitats*: coastal sage scrub and coastal sage scrub/chapparal
- *Upland Tier IIIA Habitats*: chamise chaparral and mixed chaparral
- *Upland Tier IIIB Habitats:* non-native grassland
- *Upland Tier IV Habitat:* Disturbed land, agriculture, ornamental plantings, eucalyptus woodland

Refer to Table 2-3 in Chapter 2.0, Environmental Setting, for acreages of each sensitive vegetation community and Figure 2-3 in this PEIR for general locations within the CPU area.

Implementation of the proposed CPU could potentially have a significant impact on Tier I, Tier II, Tier IIIA, and Tier IIIB sensitive biological resources (i.e., sensitive upland communities), as well as wetlands. Lands designated as Tier IV are not considered to have significant habitat value and impacts would not be considered significant (City of San Diego 2018). While most of these sensitive vegetation communities are present within areas that would be designated as Open Space within the MHPA and preserved from future development, there are some areas where planned land uses could potentially result in direct or indirect impacts to these communities. Such impacts could occur directly through removal or indirectly by placing development adjacent to sensitive vegetation

communities. Future development under the proposed CPU would undergo environmental review to see if the project is adjacent or within the MHPA or contains Environmentally Sensitive Lands, if so, projects would need to demonstrate compliance with the City's ESL Regulations and MSCP Subarea Plan prior to disturbance of those lands or issuance of any permits (policy 6.21). For example, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values (San Diego Municipal Code [SDMC] Section 143.0101). Further, development under the CPU must address the MHPA Land Use Adjacency Guidelines during either the planning (new development) or management (new and existing development) stages to minimize land use impacts and maintain the function of the MHPA (City of San Diego 1997). Per the MHPA Land Use Adjacency Guidelines, management strategies related to site drainage, lighting, noise, barriers, invasives, brush management, and grading are required for adjacent development to avoid impacts to the MHPA. Mitigation for sensitive biological resources involves "compensating" for impacts through off-site acquisition, on-site preservation, habitat restoration, or in limited cases, monetary compensation. Refer to Chapter 4.0, Regulatory Framework, of this PEIR for a complete discussion of the applicable plans and regulations related to biological resources.

Compliance with the established development standards contained in the City's ESL Regulations, Biology Guidelines, MSCP SAP, and VPHCP would ensure that impacts on sensitive vegetation communities resulting from implementation of the proposed CPU would be less than significant.

Issue 3: Would the project cause a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

The CPU area contains nine wetland vegetation communities and land cover types, including riparian forest and woodland, riparian scrub, freshwater marsh, open water, natural flood channel, disturbed wetland, vernal pool, wetland/riparian enhancement/restoration, and concrete channel. While most of these communities/features occur within areas that would be designated as Open Space within the MHPA, there are some areas where planned land uses could potentially result in direct or indirect impacts on wetland communities or other jurisdictional areas. Jurisdictional areas refer to waters under federal and state agency jurisdiction (e.g., U.S. Army Corps of Engineers, USFWS, CDFW), which include wetlands and isolated waters in some cases. The ESL Regulations (SDMC Section 143.01419b0) require that a project's impacts on wetlands be avoided, and that a wetland buffer be established to maintain the wetland functions and values. Impacts on wetlands within the MHPA require a deviation to the ESL Regulations per SDMC Section 143.0141(a)(5)(c). A deviation to the ESL Regulations is not required for encroachments into wetlands and vernal pools outside of the MHPA (and Coastal Overlay Zone) where the development is consistent with the

Biology Guidelines of the Land Development Manual and the VPHCP. Future development that would have an impact on wetlands could require a deviation from the ESL Regulations under one of the following three options:

- Essential Public Project Option: a deviation may be requested for any public project identified in an adopted land use plan or implementing document and identified on the Essential Public Projects List adopted by Resolution No. R-307377 as Appendix III to the Biology Guidelines; linear infrastructure, including but not limited to major roads and land use plan circulation element roads and facilities including bike lanes, water and sewer pipelines including appurtenances, and storm water conveyance systems including appurtenances; maintenance of existing public infrastructure; or State and federally mandated projects. A deviation may only be requested for an Essential Public Project where no feasible alternative exists that would avoid impacts to wetlands.
- Economic Viability Option: A deviation may be requested to preserve economically viable use of a property that would otherwise be deprived by a strict application of the regulations. Such a deviation shall be the minimum necessary to achieve economically viable use of the property and shall avoid wetland resources to the maximum extent practicable.
- Biologically Superior Option: A deviation may be requested to achieve a superior biological result which would provide long-term biological benefit and a net increase in quality and viability (functions and value) relative to existing conditions.

The determination of exact impacts on wetlands cannot be made at the programmatic level, but will be made as future development/redevelopment occurs in accordance with the proposed CPU. If future impacts on wetlands or other jurisdictional areas would occur as a result of development, they would be regulated by the U.S. Army Corps of Engineers in accordance with Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board in accordance with Section 401 of the CWA, CDFW under Section 1600 of California Fish and Game Code, the City in accordance with the Biology Guidelines, ESL Regulations, VPHCP and MSCP SAP, and other agencies as applicable. For example, per the City's MSCP SAP, mitigation for sensitive biological resources involves "compensating" for impacts through off-site acquisition, on-site preservation, habitat restoration, or in limited cases, monetary compensation. Refer to Chapter 4.0, Regulatory Framework, of this PEIR for a complete discussion of the applicable plans and regulations related to biological resources. Implementation of the proposed CPU would result in less than significant impacts on wetlands with implementation of the existing regulatory framework.

Issue 4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Subarea Plan, or impede the use of native wildlife nursery sites?

The CPU area features both regional and local wildlife corridors that are important to maintain healthy plant and wildlife populations in the highly urbanized CPU area (see Figure 2-4, Conserved Lands and Open Space, of this PEIR). Los Peñasquitos Canyon serves as both a regional and local wildlife movement corridor, allowing movement not only within Los Peñasquitos Canyon itself, but also into the Del Mar Mesa Preserve to the north of the CPU area, Lopez Canyon (a local wildlife corridor) within the northwestern portion of the CPU area, and additional open space areas to the east of the CPU area. In addition, Carroll Canyon and Flanders Canyon, both located in the southwest portion of the CPU area, serve as additional local wildlife corridors allowing movement within the CPU area (see Figure 2-4 of this PEIR). All of these canyons provide critical resources to wildlife species and are important both locally and regionally, especially as urbanization within the CPU area and vicinity continues (see Appendix C).

Further, migratory wildlife corridors in the CPU area are concentrated in areas designated as Open Space and are located within the MHPA. These areas would have limited development potential such as passive recreation and trails in conformance with the MSCP SAP. Proposed development under the CPU, including the Urban Villages, is primarily focused in areas that are already developed with commercial, industrial, residential, or employment uses, and does not support wildlife corridors that would be impacted by future development. The Parks, Recreation, and Open Space chapter of the proposed CPU includes general goals and policies to preserve non-building areas to permit wildlife movement, particularly through areas such as Rattlesnake Canyon and Carroll Canyon Creek. For example, new development in the Carroll Canyon Area is required to restore canyon ecosystems and creek habitats (CPU policy 6.14). Further, the proposed CPU states that future development plans for El Camino Memorial Park would include preservation of non-building area to permit wildlife movement between Rattlesnake Canyon and Carroll Canyon Creek (see page 18 of the CPU for more details). For future development projects, any potential impacts to wildlife corridors would be determined during project-level environmental review and addressed through compliance with the City's ESL Regulations, Biology Guidelines, and MSCP SAP. Further, the proposed CPU contains policies in its Parks, Recreation, and Open Space chapter that require the preservation of identified wildlife corridors between canyons by requiring conformance with the MSCP MHPA Land Use Adjacency Guidelines regarding buffers, landscaping, and barriers (policy 6.18, 6.19, and policy 6.21). Implementation of the proposed CPU would result in less than significant impacts on wildlife movement or wildlife corridors with implementation of CPU policies.

Issue 5: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP Subarea Plan area or in the surrounding region?

Multiple Species Conservation Program Subarea Plan

The CPU area falls within the City's MSCP SAP (City 1997). Within the CPU area, the MHPA occurs in the undeveloped canyons and hillsides as well as several pockets of generally undeveloped land, as shown in Figure 2-4 of this PEIR. Most of these MHPA lands occur within areas proposed to be designated Open Space by the CPU. Development and/or redevelopment of properties within the MHPA is not currently proposed but direct or indirect impacts to the MHPA from adjacent development could occur in the future under the proposed CPU. Limited development is allowed in the MHPA subject to the requirements of the City's MSCP SAP and VPHCP. Compatible land uses within the MHPA are proposed under the CPU, such as passive recreation and public trails, but residential, commercial, industrial, and employment uses are primarily concentrated in developed and previously disturbed areas outside of the MHPA.

In general, pursuant to the MSCP SAP, a maximum 25% encroachment into the MHPA is allowed for development. If 25% or more of a proposed development site is outside the MHPA, development would be restricted to the area outside of the MHPA unless a deviation from the City's Environmentally Sensitive Lands Regulations is requested and approved pursuant to SDMC Section 143.0150. In addition, development is required to be located in the least biologically sensitive portion of the site by the ESL Regulations (SDMC Section 143.0101 et seq.). Should more than 25% encroachment be desired, an MHPA boundary line adjustment may be proposed. The City's MSCP SAP states that adjustments to the MHPA boundary line are permitted without the need to amend the City's MSCP SAP, provided the boundary line adjustment results in an area of equivalent or higher biological value. To meet this standard, the area(s) proposed for addition to the MHPA must meet the six functional equivalency criteria set forth in Section 5.4.2 of the City's MSCP SAP (City of San Diego 1997). All MHPA boundary line adjustments require City discretionary approval and Wildlife Agencies concurrence prior to release of the environmental document and issuance of grading or site development permits.

According to Section 1.4.1 of the City's MSCP SAP (Compatible Land Uses), the following land uses are considered conditionally compatible with the biological objectives of the MSCP SAP and, thus, are allowed within the MHPA: passive recreation, utility lines and roads (in compliance with policies in MSCP SAP Section 1.4.2), limited water facilities and other essential public facilities, limited low-density residential uses, brush management (zone 2), and limited agriculture. Section 1.4.2 of the MSCP SAP (General Planning Policies and Design Guidelines) lists general planning policies and

design guidelines that should be applied in the review and approval of development projects within or adjacent to the MHPA. Applicable guidelines and policies address roads and utilities, fencing, lighting, and signage, materials storage, and flood control. Additionally, Section 1.5.2 of the MSCP SAP lists general management directives that apply throughout the MSCP SAP area related to mitigation, restoration, public access, trails, and recreation, litter/trash and materials storage, adjacency management issues, invasive exotics control and removal, and flood control. Future development within the MHPA would be subject to these MSCP SAP directives.

When land is developed in or adjacent to the MHPA, there is a potential not only for direct impacts to sensitive species, but indirect impacts as well, which may further degrade habitat or alter animal behavior within the MHPA. These effects are referred to as edge effects in the MSCP SAP. These indirect effects may include impacts related to drainage, toxics, lighting, noise, human intrusion, barriers, brush management, and invasive species. These impacts could be short-term resulting from construction activities or long-term resulting from adjacent development. Short-term construction impacts from noise, for example, could result in disruption of foraging, breeding, and nesting, and could adversely affect a population of sensitive species. Long-term impacts from adjacent development could result from trampling and removal of native plant cover due to hiking, biking, and other human activities. To address these concerns, the MSCP SAP includes land use considerations including the MHPA Land Use Adjacency Guidelines that are to be evaluated and implemented at the project level. Future development in accordance with the proposed CPU would be subject to the MHPA Land Use Adjacency Guidelines. As described above, proposed development under the CPU, including the Urban Villages, is primarily focused in areas that are already developed with commercial, industrial, residential, or employment uses, and does not support MSCP species that would be impacted by construction. The proposed CPU identifies opportunities to expand on existing and proposed trails within the MHPA and construct new passive recreation uses with trails (policy 6.9), which provide public recreational resources as well as connect portions of the community. Proposed trail design and exact locations are to be determined and would be developed in compliance with MHPA requirements. Thus, implementation of the proposed CPU would be consistent with applicable guidelines as presented in Table 5.2-1, MHPA Land Use Adjacency Guidelines Consistency. Therefore, implementation of the proposed CPU would not conflict with the City's MSCP SAP and impacts would be less than significant.

Table 5.2-1
MHPA Land Use Adjacency Guidelines Consistency

MHPA Land Use Adjacency Guideline	Consistency Determination
Drainage. All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.	**Consistent.** Future development within the CPU area would be required to comply with City regulations including the City's drainage regulations and the City's Drainage Design Manual. Buildout of the proposed CPU would also be required to comply with the hydromodification management requirements described in the City's Stormwater Standards Manual. These requirements have been developed to comply with the Municipal Storm Water Permit, San Diego RWQCB Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015- 0100, NPDES Permit No. CAS0109266. Typical features employed on a project site to control the rate and volume of runoff could include retention/ infiltration basins, biofiltration basins, or detention basins.
Toxics– Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly-owned property as leases come up for renewal.	**Consistent.** Future development occurring within the CPU area located adjacent to the MHPA would require project-specific environmental review. This review would identify project design features and avoidance or mitigation measures necessary to ensure compliance with the MHPA Land Use Adjacency Guidelines, which would ensure drainage from development does not flow into the MHPA and may require the implementation of measures such as drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland type native vegetation to filter out toxic materials.
Lighting. Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other	**Consistent**. Future development that would occur adjacent to the City's MHPA lands would undergo environmental review to identify project design features and avoidance or mitigation measures necessary to ensure consistency with the City's MHPA Land Use

Table 5.2-1
MHPA Land Use Adjacency Guidelines Consistency

MHPA Land Use Adjacency Guideline	Consistency Determination
methods to protect the MHPA and sensitive species from night lighting.	Adjacency Guidelines including lighting requirements contained in the guidelines.
Barriers. New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.	**Consistent**. Where future development would occur adjacent to MHPA areas, future environmental review would identify project design features and avoidance or mitigation measures necessary to ensure consistency with the MHPA Land Use Adjacency Guidelines including barrier requirements adjacent to the MHPA.
Invasives. No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.	**Consistent**. Where future development would occur adjacent to MHPA areas, future environmental review would identify project design features and avoidance or mitigation measures necessary to ensure consistency with the MHPA Land Use Adjacency Guidelines including the prohibition of planting non-native invasive plant species in areas adjacent to the MHPA.
Brush Management. New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Zone 2 will be increased by 30 feet, except in areas with a low fire hazard severity rating where no Zone 2 would be required. Brush management zones will not be greater in size that is currently required by the City's regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done	**Consistent**. Where future development would occur adjacent to MHPA areas, future environmental review would identify project design features and avoidance or mitigation measures necessary to ensure consistency with the MHPA Land Use Adjacency Guidelines including brush management requirements adjacent to the MHPA.

Table 5.2-1
MHPA Land Use Adjacency Guidelines Consistency

MHPA Land Use Adjacency Guideline	Consistency Determination
consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a homeowner's association or other private party.	
Noise. Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.	**Consistent**. Where future development would occur adjacent to MHPA areas, future environmental review would identify project design features and avoidance or mitigation measures necessary to ensure consistency with the MHPA Land Use Adjacency Guidelines related to exposure of wildlife to noise. Subsequent environmental review would typically require as a project condition the requirement for preconstruction bird surveys to occur to determine the presence or absence of breeding birds, if construction is proposed during bird breeding seasons. Alternatively, species presence may be assumed by the City and project applicant for purposes of MSCP compliance. If birds are present or their presence is assumed, noise attenuation and biological monitoring would be required that would ensure no adverse noise impacts would occur in or adjacent to the MHPA.
Grading/Land Development. Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.	**Consistent**. Where future development would occur adjacent to MHPA areas, future environmental review would ensure consistency with the MHPA Land Use Adjacency Guidelines to ensure construction limits remain outside the MHPA.

Notes: CPU = Mira Mesa Community Plan Update; MHPA = Multi-Habitat Planning Area; NPDES = National Pollutant Discharge Elimination System; RWQCB = Regional Water Quality Control Board; MSCP = Multiple Species Conservation Plan.

Vernal Pool Habitat Conservation Plan

Within the CPU area, land designated for conservation under the VPHCP coincides with the MHPA, as shown in Figure 2-4 of this PEIR. Any future proposed development not included as one of the "covered" or "planned" VPHCP projects (as identified in Section 4.1 of the VPHCP), and/or actions not included in the list of VPHCP covered activities (as identified in Section 4.2 of the VPHCP; i.e. Covered Police and Fire Activities, Covered Solid Waste Activities, Public Utilities Covered Activities, Management Covered Activities), is required to undergo project-specific analyses to identify vernal pool resources and evaluate impacts and provide any required avoidance/mitigation relative to the provisions of the VPHCP. If a future proposed project is determined by the City to be consistent with the requirements of the VPHCP and fully mitigated in accordance with the City's Biology Guidelines, the project could be authorized to impact vernal pools and covered species through the City's VPHCP Incidental Take Permit and associated project discretionary permit. Future development in accordance with the proposed project would be subject to compliance with the City's VPHCP Sections 5.2.1 and 5.3.1. Section 5.2.1includes measures to avoid or minimize the impact of taking covered species. General avoidance and minimization measures include requirements to avoid runoff into vernal pools, construct temporary fencing with silt barriers, and minimize fugitive dust. Per the VPHCP, a City-approved biologist must be present to monitor construction activities and ensure that avoidance and minimization measures are effectively incorporated. Section 5.3.1 of the VCHCP sets forth compensatory mitigation measures required within and outside of the MHPA. Per the VPHCP, consistent with the ESL Regulations, the mitigation framework includes "compensatory measures that would result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved." As stated in the VPHCP (City of San Diego 2019), "the biologically superior mitigation shall include either:

1. Standard mitigation including wetland vernal pool restoration and enhancement (of the same type of wetland resource that is being impacted) that results in high-quality wetlands; AND a biologically superior project design whose avoided area(s) (i) is in a configuration or alignment that optimizes the potential long-term biological viability of the on-site sensitive biological resources, and/or (ii) conserves the rarest and highest quality on-site biological resources; or
2. For a project not consistent with (1) above, extraordinary mitigation is required."

Therefore, implementation of the proposed CPU would not conflict with the City's VPHCP and impacts would be less than significant.

5.2.5 SIGNIFICANCE OF IMPACT

Issue 1: Sensitive Species

Implementation of the proposed CPU has the potential to impact sensitive plant and wildlife species either directly through the loss of habitat (including critical habitat) and/or direct take, or indirectly by placing development in or adjacent to sensitive habitat. Potential impacts to federal- or state-listed species, MSCP Covered Species, Narrow Endemic Species, plant species with a CNPS Rare Plant Rank of 1 or 2, and wildlife species included on the CDFW's Special Animals List would be significant. Potential impacts to sensitive species and/or designated critical habitat of listed species would be mitigated in accordance with City's ESL Regulations, Biology Guidelines, and the provisions of the MSCP SAP and VPHCP. Potential impacts on birds covered by the Migratory Bird Treaty Act would be avoided by adherence to the requirements of this law. Further, sensitive species in the CPU area are concentrated in the MHPA, which is comprised of topography such as canyons, creeks, and steep hillsides. The proposed CPU designates these areas as Open Space to be preserved from intensive development consistent with the City's MSCP SAP. Through implementation of the existing regulatory framework, impacts to sensitive species would be less than significant.

Issue 2: Sensitive Habitat

Future projects implemented in accordance with the proposed CPU could potentially have an impact on sensitive upland (Tier I, Tier II, Tier IIIA, and Tier IIIB) and wetland habitat that is present within the CPU area. Future development under the proposed CPU would undergo environmental review, including compliance with the City's ESL Regulations prior to disturbance of those lands. Further, sensitive habitat in the CPU area is concentrated in the MHPA, which is comprised of topography such as canyons, creeks, and steep hillsides. The proposed CPU designates these areas as Open Space to be preserved from intensive development consistent with the City's MSCP SAP. Through compliance with the established development standards contained in the City's ESL Regulations, Biology Guidelines, VPHCP, MSCP SAP, and MHPA Land Use Adjacency Guidelines, impacts to sensitive vegetation communities would be less than significant.

Issue 3: Wetlands

Future projects implemented in accordance with the proposed CPU could potentially have an impact on wetlands or other jurisdictional areas that are present within the CPU area. If impacts on wetlands would occur, they would be regulated by the U.S. Army Corps of Engineers in accordance with Section 404 of the CWA, the RWQCB in accordance with Section 401 of the CWA, the CDFW under Section 1600 of the California Fish and Game Code, and the City in accordance with the City's Biology Guidelines, ESL Regulations, VPHCP, and MSCP SAP. Further, wetlands in the CPU area are

concentrated in the MHPA, including canyons, and creeks. The proposed CPU designates these areas as Open Space to be preserved such that development is sited on the least sensitive area consistent with the City's MSCP SAP. Per the City's ESL Regulations and Biology Guidelines, impacts to wetlands should be avoided and a wetland buffer is required around all wetlands as appropriate to protect the functions and values of the wetland (City of San Diego 2018). Through implementation of the existing regulatory framework, impacts to wetlands would be less than significant.

Issue 4: Wildlife Movement

Regional and local wildlife corridors that exist within the CPU area are surrounded by existing development and are within the Open Space land use designation which would not be changed by the proposed CPU. Future development within the CPU area would undergo environmental review to determine potential impacts on wildlife corridors, and impacts would be mitigated in accordance with the City's ESL Regulations, Biology Guidelines, and MSCP SAP. Therefore, the proposed CPU would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP SAP, or impede the use of native wildlife nursery sites. Impacts would therefore be less than significant.

Issue 5: Conservation Planning

Future development in accordance with the proposed CPU would be subject to compliance with applicable current and future local, state, and federal policies, guidelines, directives, and regulations, including but not limited to, the state and federal Endangered Species Act, the San Diego County MSCP, the City's ESL Regulations, Biology Guidelines, and the City's MSCP SAP and VPHCP. In addition, the proposed CPU includes policies aimed at resource protection and preservation of the MHPA. Future development within the CPU area would be evaluated for compliance with these requirements and necessary avoidance and mitigation measures would be determined at the project level. Adherence to the above policies, guidelines, directives, and regulations would avoid future significant impacts. Therefore, the proposed CPU would not result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP SAP area or in the surrounding region. Impacts would therefore be less than significant.

5.2.6 MITIGATION, MONITORING, AND REPORTING

Implementation of the proposed CPU would result in less than significant impacts to biological resources. No mitigation is required.

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5.3 GEOLOGY AND SOILS

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to geology and soil conditions that could result from implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Information in this section is based, in part, on the *Desktop Geotechnical and Geologic Hazard Evaluation – Mira Mesa Community Plan Update* report, prepared by the Bodhi Group which is included as Appendix D of this PEIR.

5.3.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed description of the existing geologic conditions within the Mira Mesa Community Plan Update (CPU) area is contained in Section 2.2.3 of this PEIR. Section 4.3 of this PEIR includes a summary of the regulatory framework relative to geology and soils.

5.3.2 METHODOLOGY

Potential impacts resulting from implementation of the proposed project were evaluated based on relevant information from the California Department of Conservation, the California Geological Survey, and the City of San Diego (City) Seismic Safety Study. Based on a review of relevant maps and geologic documentation, the analysis presents the potential for geological impacts to occur within the CPU area.

The information and conclusions presented in this section are based on current understanding of existing conditions. Because site conditions may change and additional geologic data may become available, the environmental review of future projects implemented in the CPU area could require further research and data collection to confirm the analysis is based on current conditions and information.

5.3.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to geology and soils are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant impact related to geology or soils could occur if implementation of the proposed project would:

Issue 1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides;

Issue 2: Result in substantial soil erosion or the loss of topsoil; or

Issue 3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

5.3.4 IMPACTS

Issue 1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure including liquefaction, or landslides?

Fault Rupture and Seismic Ground Shaking

Future development associated with implementation of the proposed project could result in the exposure of people, buildings, and infrastructure to seismic hazards. Ground shaking during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and the type of geologic material underlying the area. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill or unconsolidated alluvial fill.

While the CPU area is not underlain by active or potentially active earthquake faults, the CPU area could be subject to ground shaking in the event of an earthquake along any of the active faults in the region that are listed in Table 2-6 (see Chapter 2.0, Environmental Setting, of this PEIR) or other faults in the Southern California/Northern Baja California region. The nearest active fault capable of causing ground rupture and strong seismic shaking is the Rose Canyon fault zone located approximately 10 miles southwest of the center of the CPU area (Appendix D).

Future development projects within the CPU area would be required to conform to applicable regulations and industry and code standards related to geologic hazards, including pertinent elements of the Seismic Hazards Mapping Act, Alquist-Priolo Earthquake Fault Zoning Act, California Building Code (CBC), and related City standards. Structural design in accordance with current building codes would reduce the impact associated with seismic ground shaking on buildings to an acceptable level of risk.

Liquefaction and Seismically Induced Settlement

Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil. Soil liquefaction causes

ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Research and historical data indicate that loose granular soils and non-plastic silts that are saturated by a relatively shallow groundwater table are susceptible to liquefaction.

Among the potential hazards related to liquefaction are seismically induced settlements. While lateral spreads are also associated with these ground failures, the liquefaction prone soil in the CPU area is not situated near or adjacent to slopes. Seismically induced settlement is caused by the reduction of shear strength due to loss of grain-to-grain contact during liquefaction and may result in dynamic settlement on the order of several inches to several feet. Other factors, such as earthquake magnitude, distance from the earthquake epicenter, thickness of the liquefiable layers, and the fines content and particle sizes of the liquefiable layers will also affect the amount of settlement.

Liquefiable soil is located in the bottoms of the major canyons traversing the CPU area. These areas are mapped as Geologic Hazard Category 31 (liquefaction–high potential), as shown in Figure 2-7 in Chapter 2.0, Environmental Setting. These areas are currently in open space or in quarry areas that are either being actively mined or will be reclaimed and redeveloped in the future. Future development activities implemented in accordance with the proposed CPU in these areas may be subject to potentially significant impacts related to liquefaction and associated settlement. Such future development activities would be required to conform to applicable regulations and industry and code standards related to liquefaction and associated hazards, including pertinent elements of the CBC and related City standards. Implementation of appropriate measures in conformance with applicable regulatory/industry standards would be mandated through required efforts including completion of appropriate site-specific geotechnical investigations required under related City standards and codes. Engineering design can be accomplished by ground improvement or foundation design. Implementation of appropriate measures would reduce potential impacts related to seismic liquefaction and associated settlement to an acceptable level of risk.

Landslides

In general, landslides and other slope failures may occur in hillside areas due to a number of 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.

Slopes with potentially unstable characteristics in the CPU area are associated with the three major east-west trending canyons and their tributaries. The bases of these slopes are often underlain by the Scripps Formation, Ardath Shale, or Del Mar/Friars Formation undifferentiated, which are susceptible to landslides and other slope instabilities due to weak claystone. These areas are

mapped by the San Diego Seismic Safety Study as Geologic Hazard Category 23 (refer to Figure 2-7). The upper portions of the slopes are underlain by Stadium Conglomerate and very old paralic deposits which have high shear strengths and provide the stable cap that creates the mesa on which the Mira Mesa community was developed. Historic aerial photographs do not show evidence of large-scale landslides or shallow slope failures along the north-facing slopes of Los Peñasquitos Canyon and Lopez Canyon to the south (Appendix D). Human-made slopes resulting from grading associated with commercial and residential development have been engineered in accordance with applicable requirements. Future development implemented in accordance with the proposed project would be required to complete a site-specific geotechnical investigation and comply with the San Diego Municipal Code (SDMC) and CBC to mitigate potential landslide hazards.

Tsunamis, Seiches, and Dam Failures

A tsunami is a sea wave generated by a submarine earthquake, landslide, or volcanic action. Submarine earthquakes are common along the edge of the Pacific Ocean, thus exposing all Pacific coastal areas to the potential hazard of tsunamis. However, no portion of the CPU area lies within a mapped tsunami inundation zone (Appendix D).

A seiche is an earthquake-induced wave in a confined body of water, such as a lake, reservoir, or bay. Miramar Reservoir, the nearest confined body of water, is located outside of the CPU area and would not subject the CPU area to substantial seiche-related hazards (Appendix D).

An earthquake-induced dam failure can result in a severe flood event. If catastrophic dam failure occurs, a large quantity of water is suddenly released with a great potential to cause human casualties, economic loss, lifeline disruption, and environmental damage. Portions of the CPU area could be subject to inundation related to dam failure at Miramar Reservoir. These areas, shown on Figure 2-8 of this PEIR, are primarily associated with the developed areas immediately west of Miramar Reservoir, Carroll Canyon, and Los Peñasquitos Canyon (though most of this inundation zone is immediately north of the CPU area boundary). The areas subject to potential dam inundation include existing developed areas, open space areas, quarry areas that are either being actively mined or are being redeveloped (including the planned 3Roots San Diego Master Plan and proposed Stone Creek Master Plan developments), and a portion of the proposed Mira Mesa Gateway Urban Village. As of the September 2021 comprehensive list of dams within the jurisdiction of the state, the Miramar Reservoir dam has a condition rating of “satisfactory”, the highest possible condition rating (Division of Safety of Dams 2021). The City also participates in the countywide Multi-Jurisdictional Hazard Mitigation Plan, which includes a goal to reduce the possibility of damage and losses to people and critical facilities/infrastructure due to dam failure, and actively maintains and assesses the safety of the Miramar Reservoir dam (County of San Diego 2017). The proposed project would not result in any changes to the Miramar Reservoir dam or otherwise increase the potential for dam

failure. Catastrophic dam failure is considered a low probability event. All dams are inspected annually by the California Division of Safety of Dams to ensure they are in good operating condition and in compliance with state regulations. Thus, impacts associated with dam failures would be less than significant.

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

Potential hazards related to erosion within the CPU area are generally low in level areas and higher on steeper slopes. Even in level areas, however, erosion hazards can be increased through development-related activities, such as excavation/grading and removal of stabilizing structures and vegetation. Developed areas would be most susceptible to erosion between the beginning of grading/construction and the installation of pavement or establishment of permanent cover in landscaped areas. Erosion and sedimentation are not considered to be long-term concerns in the CPU area, as developed areas would be stabilized through the installation of structures/hardscape and landscaping.

Future development projects within the CPU area could involve grading activities that remove existing pavement and ground cover, thereby exposing soils to potential runoff and erosion during construction if protective measures are not taken. Compliance with City grading requirements would ensure that future construction operations would avoid significant soil erosion impacts. SDMC Section 142.0146 requires grading work to incorporate erosion and siltation control measures in accordance with Chapter 14, Article 2, Division 4 (Landscape Regulations) and the standards established in the Land Development Manual. The regulations prohibit sediment and pollutants from leaving the work site and require the implementation of erosion, sedimentation, and water pollution control measures. Controls shall include measures outlined in Chapter 14, Article 2, Division 2 (Stormwater Runoff Control and Drainage Regulations) that address the development's potential erosion and sedimentation impacts.

Future development projects within the CPU area that would disturb less than one acre of land would require implementation of a Water Pollution Control Plan, which would include (among other things) erosion and sedimentation control best management practices (BMPs). Similarly, future development within the CPU area involving clearing, grading, or excavation that would result in soil disturbance of one or more acres, or less than one acre but are part of a larger common plan of development, would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. This requires the implementation of a Stormwater Pollution Prevention Program (SWPPP) and associated BMPs, including appropriate measures to address erosion and sedimentation. Compliance with the NPDES Construction General Permit and City requirements would reduce the potential for substantial erosion or topsoil loss to occur in

conjunction with future development projects implemented within the CPU area. Impact would therefore be less than significant.

Issue 3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Landslides and Slope Instability

Landslides and potential slope instability are discussed under Issue 1, above. Future development implemented in accordance with the proposed project would be required to complete a site-specific geotechnical investigation and comply with the SDMC and CBC to mitigate potential landslide and slope instability hazards. Impact would be less than significant.

Liquefaction and Lateral Spreading

Potential liquefaction impacts are discussed under Issue 1, above. Lateral spreading occurs on slopes in areas characterized by liquefaction-prone soil. Liquefiable soil occurs in portions of the CPU area particularly within the bottoms of major canyons such as Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon (Appendix D). These areas are currently in open space or in quarry areas that are either being actively mined or will be reclaimed and redeveloped in the future. Future development activities, however, would be required to conform to applicable regulations and industry and code standards related to liquefaction and associated hazards, including preparation of a site-specific geotechnical investigation. Impacts would be less than significant.

Subsidence and Collapse

Subsidence typically occurs when extraction of fluids (water or oil) cause the rock to consolidate. Water extraction is minimal in the CPU area and the geologic materials are well consolidated. Therefore, subsidence is not a hazard in the CPU area.

Settlement prone soil within the CPU area consists of undocumented fills, fills placed on settlement prone soil (in the southeast corner of the CPU area), or soils within 25 feet of the tops of slopes 10 feet high or higher (Appendix D). Potential impacts related to settlement prone soils could occur when additions or new fills place new loads on settlement prone soil. Geotechnical investigations for the design of settlement-resistant structures associated with any future development within the CPU area would be conducted in accordance with City's *Guidelines for Geotechnical Reports* (City of San Diego 2018). Typical remediation measures include ground improvement and/or foundation design. Potential impacts associated with subsidence and collapse would be reduced through

implementation of measures included in site-specific geotechnical investigations associated with future development.

Expansive Soils

Expansion of the soil 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. The soils within the mesa portions of CPU area are predominantly clayey and are considered potentially expansive (Appendix D). Prior grading and development has mixed the natural soils with the granular formational materials and will affect the potential for expansive soil greatly and will be site dependent. Geotechnical investigations, as required by the City, will identify the effects of expansive soil on the planned development. Typical remediation measures include removal of unsuitable soil and replacement with non-expansive soil, chemical treatment of expansive clay, or specially designed and reinforced foundations. Potential impacts associated with expansive soils would be reduced through implementation of measures included in site-specific geotechnical investigations associated with future development.

Groundwater

The permanent groundwater table is expected to be too deep to affect future developments within the CPU area. Local shallow groundwater and perched groundwater may be present locally due to leaking storm drains, water lines, and irrigation. Excavations deeper than 5 feet may encounter groundwater conditions that will be addressed during construction through the use of standard construction techniques (i.e., temporary slope stability, shoring, dewatering and permanent drainage behind walls). The effects of potential construction to groundwater would be evaluated by geotechnical investigations in accordance with City of San Diego *Guidelines for Geotechnical Reports* on a site-specific project-by-project basis (City of San Diego, 2018). Potential impacts associated with groundwater would be reduced through implementation of measures included in site-specific geotechnical investigations associated with future development.

5.3.5 SIGNIFICANCE OF IMPACT

Issue 1: Seismic Hazards

Future development activities within the CPU area would be required to comply with applicable regulations and industry standards and codes, including the CBC and SDMC, to reduce potential seismic hazards to an acceptable level of risk. Thus, while the CPU area could be subject to seismic events, potential hazards associated with ground shaking and seismically induced hazards such as

ground failure, liquefaction, landslides, and dam failure would be reduced through implementation of site-specific geotechnical requirements and site design associated with future development within the CPU area. Additionally, the proposed project would not result in any changes to the Miramar Reservoir dam or otherwise increase the potential for dam failure to occur within the CPU area. Therefore, impacts related to seismic hazards would be less than significant.

Issue 2: Erosion and Sedimentation

Future development projects implemented within the CPU area would be required to comply with applicable regulations and industry standards and codes, including the SDMC (grading requirements), the City's Stormwater Standards Manual, and NPDES Construction General Permit requirements to reduce potential impacts related to erosion and sedimentation hazards to an acceptable level of risk. Therefore, impacts would be less than significant.

Issue 3: Geologic Instability

Future development projects implemented within the CPU area would be required to comply with applicable regulations and industry standards and codes, including the SDMC and CBC, to reduce potential impacts related to geologic instability to an acceptable level of risk. Potential hazards associated with instability would be addressed by the site-specific recommendations contained within geotechnical investigations as required by the SDMC. Therefore, impacts would be less than significant.

5.3.6 MITIGATION, MONITORING, AND REPORTING

Implementation of the proposed project would result in less than significant impacts to geology and soils. No mitigation is required.

5.3.7 SIGNIFICANCE AFTER MITIGATION

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

5.4 GREENHOUSE GAS EMISSIONS

This section of the Program Environmental Impact Report (PEIR) addresses the potential impacts related to greenhouse gas (GHG) emissions due to implementation of the Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). The analysis in this section is based on an evaluation of the City of San Diego's (City's) applicable regulations pertaining to GHG emissions and consistency of the proposed Mira Mesa Community Plan Update (CPU) with the City's Climate Action Plan (CAP) and GHG thresholds.

5.4.1 EXISTING CONDITIONS

The environmental setting, which includes a discussion of existing GHG emissions and inventories, is contained in Section 2.2.4 of this PEIR. Section 4.4 of this PEIR includes a summary of the regulatory framework relative to GHG emissions. Existing GHG sources and total estimated emissions in the City in 2019 are shown in Table 2-8 in Chapter 2.0, Environmental Setting, of this PEIR. The City's GHG emissions in 2019 totaled 9,646,000 metric tons carbon dioxide equivalent, with the largest sources including transportation (54.90% of total), electricity, (21.45% of total), and natural gas (19.81% of total) (City of San Diego 2020).

5.4.2 METHODOLOGY

Section 15183.5 of the State CEQA Guidelines allows discretionary projects under CEQA that are consistent with a CAP to tier off the GHG analysis set forth in the Environmental Impact Report (EIR) prepared for the CAP. The City's CAP and associated PEIR were adopted in 2015, and an update to the CAP was adopted in August 2022 (City of San Diego 2022a). The City also adopted an addendum to the Final PEIR for the 2015 CAP which assessed the potential environmental impacts of the 2022 CAP. The CAP and its associated implementing actions serve as a Qualified GHG Reduction Plan under CEQA Guidelines Section 15183.5. In accordance with Section 15183.5 of the State CEQA Guidelines, the GHG impact analysis presented in this PEIR directly tiers off of the CAP PEIR for cumulative GHG emissions, and consistency with the City's CAP is used to evaluate the significance of the proposed project's GHG impacts.

For plan- and policy-level environmental documents, as well as environmental documents for public infrastructure projects, the Planning Department has prepared a Memorandum, CAP Consistency for Plan- and Policy-Level Document and Public Infrastructure Projects, to provide guidance on significance determinations as it relates to consistency with the strategies in the CAP.

5.4.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to greenhouse gas emissions are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022b) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant impact related to greenhouse gas emissions could occur if implementation of the proposed project would:

Issue 1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

Issue 2: Conflict with the City's Climate Action Plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.4.4 IMPACTS

Issue 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impacts related to GHG emissions associated with the proposed CPU are analyzed herein through a qualitative analysis of anticipated GHG emissions and consistency with the City's CAP. In general, GHG emissions attributable to the proposed CPU at full build-out would be greater than GHG emissions under the existing conditions and the adopted Community Plan, due to the intensification of land uses and associated increase in population. However, an increase in GHG emissions associated with construction and operation of the proposed CPU were included in the CAP GHG emissions inventory and business-as-usual GHG emissions projections prepared for the 2022 CAP and analyzed in the Addendum to the Final EIR prepared for the CAP, and thus, were accounted for in the CAP since the CAP is a citywide document that considers citywide population and economic growth. One of the CAP's strategies is to implement strategic land use planning and development, which will result in increased GHG emissions in some areas of the City. The CAP focuses on convenient access to amenities through smart land use planning supported by balanced transportation networks with a greater emphasis on pedestrians, cyclists and transit.

While the proposed CPU would increase aggregated GHG emissions over those of the adopted Community Plan at buildout, this increase in GHG is a direct result of the implementation of the CAP's strategies and the General Plan's City of Villages strategy. Increasing residential and commercial density in transit corridors and villages within a Transit Priority Area (TPA) would support the City in achieving the GHG emissions reduction targets of the CAP. Under SB 743, local jurisdictions can potentially make use of streamlined environmental review for projects within TPAs,

defined as an area within a half-mile of a "major transit stop" that is existing or planned (SANDAG 2021). Furthermore, the CAP is a Qualified GHG Reduction Plan as it meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g., the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions (City of San Diego 2015).

The 2022 CAP replaced the CAP Consistency Checklist with the CAP Consistency Regulations, which are codified in the City's Land Development Code (Chapter 14, Article 3, Division 14). Most new discretionary and ministerial development, as specified in the CAP Consistency Regulations, would be required to comply with the CAP Consistency Regulations, which contain measures that are required to be implemented on a project-by-project basis to ensure that the GHG emissions reduction targets identified in the CAP are achieved. Therefore, compliance with CAP Consistency Regulations upon implementation of the proposed CPU would result in less than significant impacts associated with GHG emissions.

Issue 2: Would the project conflict with the City's Climate Action Plan or another applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The federal, state, and local regulatory plans and policies discussed in Section 4.4 of this PEIR aim to reduce GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding, and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use change and infrastructure investments.

For the energy sector, the reduction strategies aim to reduce energy demand, impose emission caps on energy providers, establish minimum building energy and green building standards, transition to renewable non-fossil fuels, incentivize homeowners and builders to install solar and develop according to CALGreen building standards and best practices, fully recover landfill gas for energy, expand research and development, and so forth.

The proposed CPU must be compliant with the strategies and measures to reduce energy demand and meet statewide and local GHG emission targets in order for impacts to be less than significant. Consistency of the CPU with the applicable state, regional, and local plans, policies, and regulations is discussed below.

Consistency with State Plans

Executive Order S-3-05 established GHG emission reduction targets for the State, and AB 32 launched the Climate Change Scoping Plan, developed by CARB, that outlined the reduction measures needed to reach these targets. The Scoping Plan and its implementing and complementary regulations are discussed in Section 4.4 of this PEIR. Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are applicable to the proposed project would be Actions E-1 and GB-1. CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. The new construction associated with implementation of the proposed project would be required to include all mandatory green building measures under the California Green Building (CALGreen) Code. Therefore, the proposed CPU would be consistent with the CARB Scoping Plan measures through incorporation of stricter building and appliance standards for future development.

Consistency with Regional Plans

San Diego Association of Government's San Diego Forward: The Regional Plan

The proposed project would be consistent with the goals of the San Diego Association of Governments (SANDAG) Regional Plan to develop compact, walkable communities close to transit connections and consistent with smart growth principles. The proposed project supports the multimodal strategy of SANDAG's Regional Plan through infrastructure improvements to increase bicycle, pedestrian, and transit access. Policies contained within the proposed CPU Land Use and Economic Prosperity and Mobility Chapters support the provision of transit amenities as well as support other forms of mobility, including walking and bicycling. While the proposed project would result in overall increases to both average daily trips and vehicle miles traveled due to the increased projected population, both the average trip length and the vehicle miles traveled per capita would be reduced (see Appendix L of this PEIR). Furthermore, many of the CPU's proposed Urban Village areas are located within or near designated TPAs along Mira Mesa Boulevard, Camino Santa Fe, Camino Ruiz, and Black Mountain Road. The transit-oriented development proposed by the CPU would be consistent with the goals of the Regional Plan; thus, the proposed CPU would not conflict with the Regional Plan.

Consistency with Local Plans

City of San Diego General Plan

The proposed CPU focuses growth into pedestrian-oriented, residential, and commercial mixed-use areas that are served by transit, in contrast to past development of the area that typically

emphasized automobile travel. This shift in emphasis would increase the diversity of land uses within the CPU area by encouraging "village-like" development consistent with the City's General Plan. Policies within the Land Use and Economic Prosperity and the Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ) Chapters of the proposed CPU promote mixed-use "Urban Villages" along major transportation corridors in line with General Plan policies LU-A.7 and ME-B.9.

Consistent with General Plan Policy ME-B.9, the proposed CPU makes transit planning an integral part of the plan by planning for transit-supportive villages and other higher-intensity uses in areas that are served by existing or planned transit service, and by increasing walkability within the CPU area through increased pedestrian connections and urban design features that activate the pedestrian environment. Policies within the Mobility and Urban Design Chapters of the proposed CPU promote transit-oriented development, enhanced pedestrian and bicycle facilities, and access to transit amenities. The proposed CPU also includes policies within the Urban Design chapter which promote the use of sustainable energy (e.g., solar panels) (CPU Policy 7.25) and the preservation and planting of street trees (CPU Policy 7.4). Additionally, the proposed CPU includes a street tree palette which identifies recommended tree species for select corridors across the CPU area, and would implement General Plan policies CE-J.2 and CE-J.3 which call for the development of street tree master plans in community plans. All of these policies correspond with policies set out by the General Plan; thus, the proposed CPU would be consistent with the General Plan.

City of San Diego Climate Action Plan and Climate Action Plan Consistency Regulations

New land use designations and policies within the CPU have been designed to reflect and implement the GHG reduction strategies of the CAP. Specifically, the proposed CPU includes multiple policies aimed at reducing GHG emissions from target emission sources and adapting to climate change as discussed below.

The CAP establishes six primary strategies for achieving the citywide goals of the plan. Strategy 1 (Decarbonization of the Built Environment) includes goals, actions, and targets with the aim of removing carbon from the City's energy system and transitioning buildings to cleaner, zero emissions sources or technologies. This strategy includes measures to remove fossil fuels in new building construction and decarbonize existing buildings and City facilities. For existing buildings, the CAP calls for programs that support zero emissions technologies such as energy retrofits, new high-efficiency electrical appliance and heating systems paired with building efficiency policies, and financing solutions for residents. Energy reduction can be achieved through the continued use or adaptive reuse of the existing building stock along with any needed energy efficiency upgrades. The proposed CPU includes goals and policies in the Urban Design and

Public Services, Facilities, and Safety chapters for the creation of energy- and water-efficient buildings, as well as sustainable building design and incorporation of building features that would reduce water consumption. For example, the Urban Design chapter contains policies to incorporate sustainable design practices in accordance with CALGreen building standards and best practices, such as appropriate site orientation for solar and wind gains (CPU Policy 7.25). Further, new construction and redevelopment that would occur under the proposed project would be constructed in accordance with the current CALGreen water conservation requirements, which would reduce energy use. New construction would also be developed consistent with the City's Public Utilities Department's Capital Improvement Program Guidelines and Standards, which provide the framework for the design and construction of new water facilities and address water efficiency, conservation, and recycled and reclaimed water.

Strategy 2, Access to Clean and Renewable Energy, provides measures to transition the City's energy system away from fossil fuels and toward clean and renewable sources. Measures included under this strategy aim to increase customer adoption of 100% renewable energy supply through the San Diego Community Power program, increase municipal zero emissions vehicles, and support electric vehicle (EV) adoption. The proposed CPU Land Use and Economic Prosperity Chapter includes Policy 2.23, which encourages environmentally sound operations, infrastructure, and facility upgrades that contribute to energy use reduction and regional sustainability goals. Regarding EV adoption, the Mobility Chapter of the CPU includes policies to encourage EV use, such as requiring coordination with regional transportation agencies and property owners to provide dedicated parking for EV (CPU policy 3.18) and facilitating the implementation of EV charging stations (CPU policy 3.20). The Public Facilities, Services, and Safety Chapter also contains an overarching goal to provide solar or other renewable energy generation, electric vehicle charging, and storage capabilities for public facilities, when feasible (CPU pg. 75).

Strategy 3, Mobility and Land Use, of the CAP has a number of goals that relate to reducing air pollutants emitted from motor vehicles including cars, diesel-powered trucks, buses and other heavy-duty equipment. This strategy focuses on land use and planning to enhance mobility options with bicycle and pedestrian improvements and calls for increased safe, convenient, and enjoyable transit use. Measure 3.1 in Strategy 3 of the CAP calls for implementation of the General Plan's Mobility Element, the City's Bicycle Master Plan, and Pedestrian Master Plan to provide safe and enjoyable active transportation routes and infrastructure. This measure also calls for streetscape improvements such as trees and additional cooling features to provide shade, upgrades to pedestrian crossings, and improved street signals. The proposed CPU supports a multimodal strategy through improvements to increase bicycle, pedestrian, and transit access (CPU policy 3.4 and policy 3.9), consistent with Measure 3.2 of the CAP. Further, the proposed CPU contains specific Supplemental Development Regulations in the Community Plan

Implementation Overlay Zone (CPIOZ) to widen certain streets, such as Barnes Canyon Road, to accommodate additional capacity for transit and bicycle facilities. The Land Use and Economic Prosperity Chapter of the proposed CPU also contains policies to locate residential uses near job centers and pedestrian, bicycle and transit networks to reduce dependence on the automobile, vehicle miles traveled, and parking demand (CPU Policy 2.11). Furthermore, much of the CPU area (i.e. along Mira Mesa Boulevard, Camino Santa Fe, Camino Ruiz, and Black Mountain Road) is within a designated TPA, which will help facilitate access to existing and planned transit.

Consistent with Measures 3.3 and 3.4 of Strategy 3, the proposed CPU includes policies to support smart transportation systems to improve roadway and parking efficiency and improve air quality. The Mobility Chapter of the CPU contains policies to implement the City's Sustainable Mobility for Adaptable and Reliable Transportation (SMART) initiative by accommodating flexible lanes and SMART corridors that maximize roadway capacity and travel efficiency (CPU Policy 3.19) . Consistent with Measure 3.6 of Strategy 3 of the CAP, the CPU would implement climate-focused land use planning and transit-oriented development, particularly along Mira Mesa Boulevard, Camino Santa Fe, Camino Ruiz, and Black Mountain Road. Specific Mobility Chapter goals include, but are not limited to, providing an accessible multimodal transportation network with efficient and safe options for travel, developing an interconnected street network that provides multiple connections to schools, residences, commercial centers, employment hubs, and community amenities, establishing high-quality transit hubs, and developing smart infrastructure that facilitates mobility (CPU pg. 39). The proposed mixed-use "Urban Villages" under the CPU would implement this measure by reducing reliance on vehicle travel, as well as expand urban greenspace including park access and open space where appropriate.

The primary goal of CAP Strategy 4, Circular Economy and Clean Communities, is to divert solid waste and capture landfill methane gas emissions. This strategy is citywide in nature; however, the proposed CPU furthers this strategy by including policies in the Urban Design chapter that encourage sustainable building and landscapes (CPU Policy 7.26). Additionally, future development within the CPU area will be required to comply with the City's Construction and Demolition Debris Diversion Ordinance, as applicable.

Strategy 5, Resilient Infrastructure and Healthy Ecosystems, of the CAP calls for further analysis of the resiliency issues related to both the natural and build environments in the City. Measures under Strategy 5 include protection and enhancement of urban canyons to promote carbon sequestration, increased tree canopy in the City, and development of local water supply to reduce dependence on imported water. The citywide strategy is focused on the Pure Water San Diego phased, multi-year program that will use water purification to clean recycled water to ultimately provide one-third of San Diego's water supply locally by 2035. Resiliency is addressed throughout the proposed CPU as it pertains to water usage, energy efficiency, and sustainable development

practices as noted above. Also included within the Urban Design Chapter of the CPU are policies supporting and encouraging an increase in the tree canopy within the community to reduce summer heat temperatures, increase absorption of pollutants and carbon dioxide, and contribute to a more inviting atmosphere for pedestrians (CPU Policy 7.8 and Policy 7.4).

Strategy 6, Emerging Climate Action, of the CAP sets forth additional measures to eliminate the citywide emissions required to reach the net zero goal. Strategy 6 focuses on developing more effective partnerships with regional partners such as the Port of San Diego, SANDAG and the County of San Diego, collaborating on research and projects with the private sector, advancing energy resilience, furthering research on carbon sequestration opportunities, and developing pilot projects that use new techniques and technologies from all sectors. As described above, the proposed CPU includes policies and goals to reduce the dependency on non-renewable energy sources and reduce emissions by incorporating transportation demand management strategies. While this strategy is broad by design, the proposed CPU would be consistent by supporting a resilient carbon-neutral community, a healthy urban forest to promote carbon sequestration, and a clean, green, circular economy.

As discussed above, the analysis within this section directly tiers off of the CAP PEIR and Addendum for cumulative GHG emissions under CEQA Guidelines Section 15183.5. The proposed CPU is consistent with the adopted CAP and contains goals, policies, and objectives that implement the six CAP strategies. Furthermore, most future discretionary and ministerial development within the CPU area, as specified by the CAP Consistency Regulations, would be required to implement the measures in the CAP Consistency Regulations on a project-by-project basis to ensure that the GHG emissions reduction targets identified in the CAP are achieved. Therefore, the proposed project would not conflict with the City's CAP or any other applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHG, and impacts would be less than significant.

5.4.5 SIGNIFICANCE OF IMPACT

Issue 1: Greenhouse Gas Emissions

The proposed project would increase aggregate GHG emissions over those of the adopted Community Plan at buildout; however, this increase in GHG is a direct result of the implementation of the CAP's strategies and the General Plan's City of Villages strategy, which call for focusing growth into mixed-use activity centers that are pedestrian-friendly districts linked to an improved regional transit system. Increasing residential and commercial density in transit corridors and villages within designated TPAs would support the City in achieving the regional GHG emissions reduction targets of the CAP, and thus, impacts associated with GHG emissions would be less than significant.

Issue 2: Conflicts with Plans, Policies, or Regulations

The proposed project would develop compact, walkable Urban Villages close to transit connections and consistent with smart growth principles. The proposed CPU supports the multimodal strategy of the SANDAG Regional Plan through improvements to increase bicycle, pedestrian, and transit access. Policies and goals contained within the proposed CPU Land Use, Parks, Recreation, and Open Space and Economic Prosperity and Mobility Chapters would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. In addition to the smart growth strategies proposed by the CPU, the CPU includes policies that support and implement the General Plan and CAP by encouraging sustainable design, the development of energy and water-efficient buildings, the preservation of open spaces and natural resources, and the enhancement of the City's urban forest, among others. Thus, impacts associated with conflicts with plans, policies, or regulations would be less than significant.

5.4.6 MITIGATION, MONITORING, AND REPORTING

Implementation of the proposed project would result in less than significant impacts to GHG emissions. No mitigation is required.

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5.5 HISTORICAL, ARCHAEOLOGICAL, AND TRIBAL CULTURAL RESOURCES

This section of the Program Environmental Impact Report (PEIR) analyzes the potential impacts to historical, archaeological, and tribal cultural resources (TCRs) resulting from implementation of the proposed Mira Mesa Community Plan Update ("proposed CPU" or "proposed project"). It addresses historic buildings, structures, objects, or sites; prehistoric and historic archaeological resources, sacred sites, and human remains; and TCRs. The analysis in this section is based, in part, on the following technical reports:

- Cultural Resources Constraints & Sensitivity Analysis for the Mira Mesa Community Plan Update prepared by Red Tail Environmental (Appendix E);
- Mira Mesa Community Plan Area Historic Context Statement prepared by Dudek (Appendix F1); and
- Mira Mesa Community Plan Area Focused Reconnaissance Survey prepared by Dudek (Appendix F2).

5.5.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion of the historical and cultural background of the San Diego region and Mira Mesa, is contained in Section 2.2.5 of this PEIR. Section 4.5 of this PEIR includes a summary of the regulatory framework relative to historical, archaeological, and TCRs.

5.5.2 METHODOLOGY

A Cultural Resources Constraints & Sensitivity Analysis (Appendix E) and Historic Context Statement (Appendix F1), and Focused Reconnaissance Survey (Appendix F2) (addressing the built environment) were prepared for the proposed CPU. The Cultural Resources Constraints & Sensitivity Analysis describes the prehistory and ethnohistory of the Mira Mesa CPU area, identifies known existing archaeological resources (prehistoric and historic periods), assigns cultural resources sensitivity levels to various locales within the CPU area, and includes recommendations for the evaluation of resources for future project-specific development in accordance with the proposed CPU. The Historic Context Statement and Focused Reconnaissance Survey provide information regarding the important key historical themes in the development of the CPU area, the property types that convey those themes, and the location of potential historical resources within the CPU area, including individual resources, and districts. Refer to Appendices E and F for additional detail regarding the methodology of research and analysis of cultural resources.

5.5.3 THRESHOLDS OF SIGNIFICANCE

The City of San Diego's (City's) California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2020) and Appendix G of the CEQA Guidelines contain significance guidelines related to historical resources, archaeological resources, and TCRs. Based on the City's thresholds, which have been utilized to guide a programmatic assessment of the proposed CPU, a significant historical resource, archaeological resource, or TCR impact could occur if implementation of the proposed project would result in any of the following:

Issue 1: **An alteration, including the adverse physical or aesthetic effects and/or the destruction of an historic building (including an architecturally significant building), structure, or object or site;**

Issue 2: **A substantial adverse change in the significance of a prehistoric or historic archaeological resource, a religious or sacred use site, or the disturbance of any human remains, including those interred outside of formal cemeteries; or**

Issue 3: **A substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**

- **a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or**
- **b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe[1].**

Historical resources significance determinations, pursuant to the City of San Diego's CEQA Significance Determination Thresholds, consist first of determining the sensitivity or significance of identified historical resources and, second, determining direct and indirect impacts that would result from project implementation. The City of San Diego's CEQA Significance Determination Thresholds

[1] Pursuant to Public Resources Code Section 5024.1(c), a historical resource described in Section 21084.1, a unique archeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

define a significant historical resource as one eligible or potentially eligible for the National Register of Historic Places, one that qualifies for the California Register of Historical Resources (CRHR) or is listed in a local historic register or deemed significant in a historical resource survey, as provided under Section 5024.1(g) of the Public Resources Code (PRC). However, even a resource that is not listed in or determined eligible for listing in the CRHR, not included in a local register, or not deemed significant in a historical resource survey may nonetheless be historically significant for the purposes of CEQA. The City's Historical Resources Guidelines state the significance of a resource may be determined based on the potential for the resource to address important research questions as documented in a site-specific technical report prepared as part of the environmental review process.

Research priorities for the prehistoric, ethnohistoric, and historic periods of San Diego history are discussed in Appendix A to the City's Historical Resources Guidelines. As a baseline, the City of San Diego has established the following criteria to be used in the determination of significance under CEQA:

- An archaeological site must consist of at least three associated artifacts/ecofacts (within a 50-square meter area) or a single feature and must be at least 45 years of age. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site including site size, type and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostics, and datable material; artifact and ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance.
- The determination of significance for historic buildings, structures, objects, and landscapes is based on age, location, context, association with an important person or event, uniqueness, and integrity.
- A site will be considered to possess ethnic significance if it is associated with a burial or cemetery; religious, social, or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the mythology of a discrete ethnic population.

5.5.4 IMPACTS

Issue 1: Would the project result in an alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site?

The Cultural Resources Constraints & Sensitivity Analysis (Appendix E) and Historic Context Statement and Focused Reconnaissance Survey (Appendix F1 and Appendix F2) address archeological, tribal cultural and built environment historic resources at the community plan level. These technical studies conducted research and visual surveys for the purposes of providing historic context and identifying the potential for historic resources to occur in the CPU area consistent with the programmatic level of analysis of this PEIR.

No designated historical resources were identified by these studies within the CPU area. The CPU area does not contain resources listed on any historic register. There are two known potential historic resources identified in previous surveys, but these were evaluated and found ineligible for listing/designation by those surveys. The methodology of the Cultural Resources Constraints & Sensitivity Analysis conducted a records search through the South Coast Information Center (SCIC) for the CPU area plus a 0.25-mile buffer (used for the purposes of additional context when performing a records search) in October 2019 (Appendix E). The records search identified 159 previously recorded cultural resources within the records search area. Of those, 110 cultural resources are located within the CPU area. The 110 previously recorded cultural resources within the CPU area include 86 prehistoric-period resources, 19 historic-period resources, and 3 multicomponent resources, with 2 resources having incomplete information.. Refer to Appendix E for a complete list of previously recorded cultural resources. The records search identified seven historic addresses recorded within the record search area, two of which occur within the CPU area (Table 5.5-1).

Table 5.5-1
Previously Recorded Historic Addresses within 0.25 miles of the CPU Area

Number	Address	Name	Property Type	Recorder Date	Evaluation	Relation to CPU Area
P-37-017548	7501 Miramar Avenue	-	HP2 Single Family Property	R. Alter (1999)	6Z – Found Ineligible for NR, CR, or Local Designation through Survey Evaluation	Within
P-37-018908	Interstate 15	Old Peñasquitos Creek Bridge Bridge 57C-475 (57-106R)	HP19 Bridge	J. Hupp (2000)	6Z – Found Ineligible for NR, CR, or Local Designation through Survey Evaluation	Within

Source: Appendix E
Notes: CPU = Mira Mesa Community Plan Update; AKA = also known as; CR = California Register; NR = National Register.

The Historic Context Statement and Focused Reconnaissance Survey (Appendix F1 and Appendix F2) include "study lists" (Tables 5.5-2 and 5.5-3) under each development theme to aid in the identification and evaluation of properties and property types. Properties in these lists were identified during the course of research and survey work as a possible starting point for future inquiry. The historical significance of these properties as well as others that may be eligible for designation has not been evaluated by the Focused Reconnaissance Survey.

Table 5.5-2
Historic Context Statement – Non-Residential Properties Study List

Address	Assessor's Parcel Number	Building Name	Style	Associated Theme
8450 Mira Mesa Blvd	311-041-07-00	Mira Mesa Branch Library	Futurist-Googie	Civic and Institutional Development (1969-1979)
11023 Pegasus Avenue	318-563-49-00	Church of Jesus Christ of Latter-day Saints	Futurist-Googie	Civic and Institutional Development (1969-1979)
8200 Gold Coast Drive	3110410500	The Church of the Good Shepherd	Contemporary	Civic and Institutional Development (1969-1979)
10510 Marauder Way	311-041-02-00	Mira Mesa High School	Brutalist	Civic and Institutional Development (1969-1979)
11230 Avenida Del Gato	309-030-17-00	Sandburg Elementary School	Contemporary	Civic and Institutional Development (1969-1979)
8955 Mira Mesa Boulevard	318-090-69-00	Seafood City Supermarket	Neo-Mansard	Recreation and Commercial Development (1970-1979)
8110-8340 Camino Ruiz	311-320-68-00	Mira Mesa Mall	Neo-Mansard	Recreation and Commercial Development (1970-1979)
8423-8775 Production Avenue	343-111-13-00; 343-111-12-00; 343-111-11-00; 343-111-28-00; 343-111-37-00; 343-111-30-00; 343-111-31-00; and 343-111-06-00	Miramar-Dunn Business Park	Corporate Modern	Business Parks, Industrial Parks, and Research and Development Campuses (1970-1979)
12020 Black Mountain Road	315-030-10-00	Los Peñasquitos Canyon Preserve	N/A	Institutional and Recreational Development (1980-1990)
10225 Barnes Canyon Road	341-031-28-00	Lusk Business Park	Corporate Modern	Expansion of Office and Industrial Parks (1980-1990)

Source: Appendix F2

Table 5.5-3
Historic Context Statement – Residential Properties Study List

Master-Planned Community	Map ID #	Developer	Architect	Date of Construction	Associated Theme
Mesa Village	5	A.J. Hall Corporation	Daniel Nick Salerno and Associates	1972	Residential Development (1969-1979)
Concord Square	13	Pardee Home Builders	Lorimer-Case, AIA	1980	Residential Development (1980-1990)
Canyon County	15	Fieldstone Company	Hales-Langston, AIA	1982	Residential Development (1980-1990)

Source: Appendix F2

The list of properties discussed above represents those that are currently recorded in SCIC archives and noted in the Historic Context Statement and Focused Reconnaissance Survey. Additional properties in the CPU area may be identified as eligible for listing as historic resources upon site-specific evaluation, particularly given the passage of time as development occurs in accordance with the proposed CPU. Conversely, a property's presence on this list does not automatically make that property a historical resource for the purposes of CEQA. Site-specific evaluations of these properties, as well as other properties that meet eligibility evaluation criteria, would be performed at the project-level if future development identifies potential impacts to historical resources.

At the community plan level, the proposed CPU Historic Preservation Chapter 5.0 as well as the Historic Context Statement and Focused Reconnaissance Survey (Appendix F1 and F2) also provide a framework to guide the identification and evaluation of the community's historical resources for their potential historical significance and provide recommendations for their protection. The Focused Reconnaissance Survey evaluated the current built environment for its historical significance and focused on residential communities constructed within the 1969-1990 period representative of common tract style housing with repetitive house models duplicated throughout a development that dominated the architectural landscape throughout the United States in the second half of the twentieth century. The Focused Reconnaissance Survey evaluated 27 communities for their design and execution as master planned communities and used factors such as association with a notable architect, builder or developer; distinct versus ubiquitous housing forms; architectural merit and cohesion; and innovative building techniques, design principles or planning methods. The Focused Reconnaissance Survey also evaluated architectural integrity and throughout the course of the field work found multiple examples of incompatible and

unsympathetic material replacements, large additions, changes in fenestration, and porch alterations. Three communities (Tier 1) were found to merit future study with a future intensive-level survey and full evaluation for potential historical significance while the remaining 24 communities surveyed (Tier 2 and 3) were determined as unlikely to rise to the level of significance required for designation at the local, state, and national level even with additional study or survey work due to not meeting the factors listed above.

Based upon the methods and findings of the Focused Reconnaissance Survey, the 24 master planned communities identified as Tiers 2 and 3 do not appear to meet the criteria for listing on the local, state, or national registers.

The proposed CPU Chapter 5.0 contains policies to further historic preservation objectives in the CPU area consistent with the General Plan, the Historic Resources Regulations and the recommendations of the Focused Reconnaissance Survey. Several of these policies also recommend additional future surveys and context statements to expand upon some of the themes identified by the Historic Context Statement.

The San Diego Municipal Code (SDMC) provides processes for review of development applications for potential historical significance and to accept nominations of potential historic resources from property owners or the general public for review and possible designation by the Historical Resources Board for listing on the City's register (reference the Regulatory Setting in Section 4.5.3.1 of this PEIR). SDMC Section 143.0212 requires review of ministerial and discretionary permit applications for projects on parcels that contain buildings 45 years old or older to determine whether the project has the potential to significantly impact a historical resource that may be eligible for listing on the local register. When it is determined that a historical resource may exist and a project would result in a significant impact to that resource, a site-specific survey is required and any additional relevant information (such as staff reports, etc.) regarding the site may be forwarded to the City's Historical Resources Board to consider designation and listing of the property. If designated, a Site Development Permit with deviation findings and mitigation would be required for any substantial modification or alteration of the resource. The Historical Resources Guidelines of the Land Development Manual provide for the exemption of areas from the requirement for a site specific survey for the identification of potential historical buildings and structures, as identified by the Historical Resources Board. Areas exempted by the Historical Resources Board are added to the Historical Resources Guidelines. To date, no areas have been identified for exemption. As part of the proposed CPU, the Historical Resources Guidelines of the Land Development Manual are proposed to be amended to exempt the 24 residential master planned communities identified by the Focused Reconnaissance Survey (Appendix F2) as Tier 2 and Tier 3 from SDMC Section 143.0212 and the review process for potential historical resources. The Tier 2 and 3 communities are listed in Table 5.5-4 below. The "Map ID #" listed in Column 1 in Table 5.5-4 below corresponds to the map of Mira

Mesa Community Plan Area Master-Planned Communities Developed Between 1968-1990 provided in Figure 5.5-1. As discussed previously, this exemption is unlikely to result in the loss of potential historical resources given the level of analysis that has occurred as part of the Focused Reconnaissance Survey and the infrequency with which properties are found to have an association with a historic person or event (HRB Criterion B). Additionally, the SDMC allows any member of the public to submit a nomination to designate a property as a historic resource, including properties exempted from review under SDMC Section 143.0212, which would allow properties that may be eligible for designation under Criterion B to be evaluated and considered for designation.

Table 5.5-4
Tiers 2 and 3 Master Planned Residential Communities Proposed for Exemption from Review under SDMC Section 143.0212

Map ID #	Master Planned Community Name	Tier	Reason(s) for Ineligibility
1	Mira Mesa Homes	2	Lacks visual cohesion, heavily altered tract housing, no architect found.
2	Encore	2	No Awards or accolades, no architectural merit, ubiquitous single-family tract housing.
3	Trend	2	No awards or accolades, multiple alterations, no architectural merit.
4	Mira Mesa North	2	Lacks visual cohesion, heavily altered tract housing, no architect found.
6	Gateway Homes	3	Heavily altered tract housing with no notable developer.
7	ParkWest	2	Ubiquitous single-family tract, no architect found, heavily altered.
8	Three Seasons	3	Heavily altered tract housing with no notable developer.
9	Quest Condominiums	3	Ubiquitous multi-family tract housing with no notable developer.
10	Valley Crest	3	Ubiquitous single-family tract housing with no notable developer.
11	Mesa Woods	2	No awards or accolades identified, heavily altered.
12	Colony Homes	2	No architect found, ubiquitous multi-family housing tract.
14	Parkdale	2	No awards or accolades identified, heavily altered, lacks visual cohesion.
16	Casa New Salem I and II	2	Ubiquitous multi-family housing tract, no architect found.

Table 5.5-4
Tiers 2 and 3 Master Planned Residential Communities Proposed for Exemption from Review under SDMC Section 143.0212

Map ID #	Master Planned Community Name	Tier	Reason(s) for Ineligibility
17	Canyon Point	3	Ubiquitous multi-family tract housing with no notable developer.
18	Creekside	3	No notable developer.
19	The Villas	2	No awards or accolades, ubiquitous multi-family housing tract.
20	Mesa Ridge	2	No awards or accolades, lacks visual cohesion, no architectural merit.
21	Jade Coast Condominiums	3	Ubiquitous multi-family tract housing with no notable developer.
22	Barrett Homes	3	Ubiquitous single-family tract housing and unknown developer.
23	Summerset	3	Ubiquitous single-family tract housing with no notable developer.
24	Summerset Court	3	Ubiquitous single-family tract housing and unknown developer.
25	Concord Villas	2	No awards or accolades, ubiquitous multi-family housing tract.
26	Esplanade	3	Ubiquitous multi-family tract housing and unknown developer.
27	Canyon Mesa/Canyon Ridge	2	No architectural merit, no awards or accolades, heavily altered.

Source: Appendix F2

While the SDMC regulations and polices in the proposed CPU provide for the regulation and protection of designated and potential historical resources, it is not possible to ensure the successful preservation of all historic built environment resources within the proposed CPU at a programmatic level given the lack of site-specific information and detail regarding potential projects that may be proposed under the CPU. Although the CPU does not propose specific development, future development, redevelopment and related construction activities facilitated by the proposed CPU at the project level could result in the alteration of a historical resource such as a building, object, structure or site. Direct impacts of specific future projects may include substantial alteration,

relocation, or demolition of individual historic buildings, structures, objects, sites as well as impacts to districts. Indirect impacts may include the introduction of visual, audible, or atmospheric effects that are out of character with a historic property or alter its setting, when the setting contributes to the resource's significance. Thus, potential impacts to historic resources could occur where implementation of the proposed CPU would result in increased development potential, resulting in a significant impact to historic resources.

Issue 2: Would the project result in a substantial adverse change in the significance of a prehistoric archaeological resource, a religious or sacred use site, or the disturbance of any human remains, including those interred outside of formal cemeteries?

Records Search Results

The SCIC records search results conducted for the Cultural Resources Constraints & Sensitivity Analysis (Appendix E) indicated that a total of 326 cultural resources studies have been completed within the CPU area plus a 0.25-mile search radius. These include surveys, testing/evaluation programs, construction monitoring programs, overview studies, and environmental documents. Of the previously conducted studies, 206 have overlap with the CPU area, resulting in approximately 76% of the CPU area previously evaluated for cultural resources (Appendix E). A records search of the Sacred Lands File held by the Native American Heritage Commission (NAHC) was also requested in October 2019. The NAHC responded that the results of the search of their records were negative, but provided a list of 19 tribal organizations and individuals to contact for additional information. All correspondence pertaining to the NAHC is included in Appendix E. An additional records search for archaeological resources was conducted by the San Diego Museum of Man in October 2019. Refer to Appendix E for complete results of the records searches.

The SCIC records search identified 159 previously recorded cultural resources (consisting of 121 prehistoric resources, 29 historic resources, and five multicomponent resources) within the records search area. Of those, 110 cultural resources are located within the CPU area, and 49 cultural resources are outside the CPU boundaries but within the 0.25-mile records search radius. The 110 previously recorded resources within the CPU area include 86 prehistoric resources, 19 historic resources, and three multicomponent resources, with two resources having incomplete information. The 49 cultural resources identified within the 0.25-mile record search radius include 35 prehistoric resources, 10 historic resources, and two multicomponent resources, with two resources having incomplete information. Refer to Appendix E for a complete listing of the previously recorded resources.

Five canyons either border or intersect portions of the CPU area: Peñasquitos Canyon, Lopez Canyon, Soledad Canyon, Rattlesnake Canyon, and Carroll Canyon. When analyzed individually, each canyon contained higher amounts of prehistoric sites when compared to historic and multicomponent sites. Within the canyons, previously identified resources are typically located along either the edge of the canyon rim or within areas near the base elevation of the canyon. Resources were not typically present within sloped portions of canyon walls.

Of the 110 previously recorded resources within the CPU area, three have been previously evaluated for inclusion in the NRHP, CRHR, or City Register and were recommended eligible, and are historical resources for the purposes of CEQA. These resources are: P-37-004609/SDI-004609/W-654, P-37-005204/SDI-005204/W-1446, and P-37-024739/SDI-016385.

P-37-004609/SDI-004609/W-654 is a series of archaeological sites making up the ethnohistoric village of *Ystauga*. Portions of the site were listed on the City Register by the Historic Resources Board in 2009 (HRB Site #924), while other portions were previously listed on the NRHP in 1975. The site consists of a deep midden containing a wide range and high density of cultural material, including human remains. Dating of the site has revealed that prehistoric use of the site extended from the archaic period to the historic period. While much of the site has been impacted by modern development, intact portions of the site are present within undeveloped areas and buried beneath alluvial deposits.

P-37-005204/SDI-005204/W-1446 is a multicomponent site known as the Bovet Adobe site, which contains the remains of a historic adobe along with a prehistoric lithic scatter. The site has been recommended as eligible for the CRHR and NRHP .

P-37-024739/SDI-016385 is the alignment of the Atchison Topeka and Santa Fe Railroad, a segment of which intersects the CPU area. Segments of the Atchison Topeka and Santa Fe Railroad alignment have been recorded across San Diego County, many of which are still in use and have been upgraded during routine maintenance to modern railroad standards. The Atchison Topeka and Santa Fe Railroad has been recommended as eligible for the NRHP, CRHR, and the City Register.

Cultural Resources Sensitivity

The CPU area has been categorized into three cultural resource sensitivity levels rated low, moderate, or high based on the results of the archival research, the NAHC Sacred Lands File record search, regional environmental factors, and historic and modern development. These sensitivity areas are shown on Figure 5.5-2. A low sensitivity rating indicates areas featuring existing development or a high level of disturbance and featuring few or no previously recorded resources. Within these areas, the potential for additional cultural resources to be identified is low. A moderate sensitivity rating is assigned to developed or disturbed areas with some previously recorded

resources. A high sensitivity rating was assigned to areas where significant resources have been documented, and/or other areas deemed to have a high potential for the presence of resources. The resources in high sensitivity areas are generally complex in nature with unique and/or abundant artifact assemblages. In some cases, the resources in high sensitivity areas may have been determined to be significant under local, state, or federal guidelines.

The portion of the CPU area west of Camino Santa Fe has been identified as high sensitivity for cultural resources, as well as the five canyons located in or bordering the CPU area. The record search results have identified a high concentration of archaeological sites in these areas, including an ethnohistoric and prehistoric village site, or the high potential for sites. This excludes the eastern side of Carroll Canyon that has been entirely disturbed by modern uses.

The center portion of the CPU area, east of Camino Santa Fe, west of Camino Ruiz, south of Peñasquitos Canyon and north of Carroll Canyon, has been identified as moderate sensitivity. The record search results have identified a lower concentration of archaeological sites in these areas, including numerous prehistoric and historic isolates.

The remaining portion of the CPU area is identified as low sensitivity for cultural resources. Numerous cultural resources studies conducted in this area have not identified significant cultural resources. Much of the low sensitivity area prehistorically did not have reliable water sources and did not contain a high concentration of subsistence resources. Historically this area was not highly utilized until the post-war housing boom. This area with low sensitivity includes the eastern side of Carroll Canyon that has been greatly impacted by modern development. A portion of the low sensitivity area has not been previously evaluated for cultural resources, as the modern development took place prior to the implementation of CEQA. However, this area has been subjected to mass grading and is completely developed, likely previously destroying any cultural resources which may have been present.

Potential Impacts on Cultural Resources

Much of the CPU area has been extensively developed during the modern era and it is assumed that many of the cultural resources within the CPU area have been disturbed. However, it is possible that intact cultural resources are present in areas of the CPU area that have not been previously developed, or are buried in alluvial deposits located within canyons, and along its western boundary. As described previously, cultural sensitivity varies across the CPU area, and it supported Native American populations for possibly thousands of years, representing a prehistorically and historically active environment.

In order to minimize the potential to destroy important historic and prehistoric archaeological objects or sites that may be buried within the CPU area, the City implements the Historical

Resources Regulations (SDMC Section 143.0201 et. seq.) during ministerial review, which requires the City to review Historical Resources Sensitivity Maps to identify properties that have a likelihood of containing archaeological sites. Upon submittal of permit applications, a parcel is reviewed against the sensitivity of the area, specifically to determine whether there is potential to adversely impact an archaeological resource that may be eligible for individual listing in the local register (SDMC Section 143.0212). This review is supplemented with a project-specific records search of the California Historical Resources Information System data and NAHC Sacred Lands File by qualified staff, after which a site-specific archaeological survey may be required, when applicable, in accordance with the City's regulations and guidelines. Should the archaeological survey identify potentially significant archaeological resources, measures would be recommended to avoid or minimize adverse impacts to the resource consistent with the Historical Resources Guidelines. In the event site-specific surveys are required as part of the ministerial review process, adherence to the Historical Resources Regulations and Guidelines would ensure that appropriate measures are applied to the protection of historical resources consistent with City requirements. Such requirements may include archaeological and Native American monitoring, avoidance and preservation of resources, data recovery and repatriation or curation of artifacts, among other requirements detailed in the Historical Resources Guidelines.

Additionally, Section 7052 of the California Health and Safety Code requires that in the event human remains are discovered during construction or excavation, all activities must be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC. The California Health and Safety Code provides a process and requirements for the identification and repatriation of collections of human remains or cultural items.

Despite state and local protections in place supporting impact avoidance to religious or sacred places and to human remains, impacts may be unavoidable in certain circumstances when resources are discovered during construction. The potential exists for these site types to be encountered during future construction activities, particularly given the moderate to high cultural sensitivity identified in portions of the CPU area. Consistent with the City's Historical Resources Guidelines, Native American participation is required for all levels of future investigations in the CPU area, including those areas that have been previously developed, unless additional information can be provided to demonstrate that the property has been graded to a point where no resources could be impacted. Native American participation in future historical resources analysis conducted as part of the ministerial review process would help to ensure impacts to resources are avoided.

The proposed CPU is designed to support the historic preservation goals of the General Plan and contains policies requiring protection and preservation of significant archaeological resources, including project-specific investigations in accordance with all applicable laws (CPU policy 5.2). The

proposed CPU also includes policies which encourage Native American consultation early in the project review process to identify TCRs and to develop adequate treatment and mitigation for significant archaeological sites with cultural and religious significance to the Native American community in accordance with all applicable local, state, and federal regulations and guidelines (see CPU policies 5.1 and 5.3).

While existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of archaeological resources and human remains and avoid potential impacts, it is not possible to ensure the successful preservation of all archaeological resources where new development may occur. Therefore, potential impacts on prehistoric or historic archaeological resources, religious or sacred use sites, and human remains would be significant. Mitigation Measure MM-HIST-1 is provided to address potential impacts. However, impacts to prehistoric and historic archaeological resources, sacred sites, and human remains are considered to be significant.

Issue 3: Would the project result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe[1].

A Sacred Lands File Check was submitted to the NAHC by Red Tail Environmental on October 1, 2019 to determine if the NAHC had registered any cultural resources, tribal cultural resources, traditional cultural properties, or areas of heritage sensitivity within the CPU area. On October 17, 2019 the NAHC responded that results of the requested Sacred Lands File Check were negative. Although the Sacred Lands File Check resulted in a negative finding, the absence of specific resources information in the Sacred Lands File does not preclude the presence of Native American tribal cultural resources in the CPU area and an updated list of tribal contacts specific to the CPU area for that purpose was provided by the NAHC for consultation during the environmental review process.

On October 18, 2019 Red Tail Environmental sent letters to the 19 Native American tribal organizations and individuals requesting any information they may have on cultural resources in the Project area. On October 18, 2019, Ray Teran, Viejas Band of Kumeyaay Indians, responded that the project site has cultural significance or ties to Viejas and that the Viejas Band requests that a Kumeyaay Cultural Monitor be present during ground disturbing activities. On November 8, 2019, Ray Teran, Resource Management, Viejas Band of Kumeyaay Indians, responded that the Project may contain sacred sites to the Kumeyaay people and that the sacred sites be avoided with adequate buffer zones, that all NEPA/CEQA/NAGPRA laws be followed, and to immediately contact Viejas on any changes or inadvertent discoveries. On November 5, 2019, Angelina Gutierrez, Tribal Historic Preservation Office, Monitor Supervisor, San Pasqual Band of Mission Indians, responded that the Project is within the Tribe's Traditional Use Area and they request to be kept in the information loop as the project progresses, and recommend archaeological monitoring pending the results of site surveys and record searches.

Portions of the CPU area that were identified to have tribal cultural resource sensitivity by Native American Tribes were taken into account in the development of the cultural sensitivity map prepared for the CPU area (see Figure 5.5-2). Similar to the analysis provided under Issue 2 above in Section 5.5.4, the cultural sensitivity map would be reviewed to determine the potential for tribal cultural resources to be impacted during construction anticipated under the proposed project. Implementation of the Historical Resources Regulations and Historical Resources Guidelines would require site-specific cultural surveys where warranted and implementation of measures to avoid or minimize impacts to the extent feasible.

In July 2021, the City of San Diego sent the Notice of Preparation (NOP) for the PEIR to all culturally affiliated Native American tribes, organizations, and individuals and included notification to all tribal groups in San Diego County. In July 2022, in accordance with AB 52, project notification letters and the draft Cultural Resources Constraints & Sensitivity Analysis were sent to Ms. Lisa Cumper, Tribal Historic Preservation Officer (THPO) from the Jamul Indian Village; Mr. Clint Linton, Director of Cultural Resources from the Iipay Nation of Santa Ysabel; and Ms. Angelina Gutierrez, Tribal Historic Preservation Monitor from the San Pasqual Band of Mission Indians providing an opportunity to consult on the proposed CPU. Tribal consultation with Jamul Indian Village is on-going to date.

Tribal consultation in accordance with Senate Bill (SB) 18 was initiated by the City of San Diego in July 2022 for the proposed CPU; however, no requests for consultation have been received by any tribal group culturally affiliated with the CPU area to date. Additional notices will be sent concurrently with release of the Draft PEIR and 10 days prior to the City Council hearing on the project.

As stated, the Sacred Lands File Check from the NAHC indicated that no sacred lands have been identified within the CPU area. A key area that has been identified, however, that may be of high

interest to local Native American communities, is the village site of Ystagua, which was located along the western boundary of the CPU area. Portions of the site were listed on the City Register by the HRB in 2009 (HRB Site #924), while the Rimbach Site was previously listed on the NRHP in 1975. For any subsequent projects implemented in accordance with the proposed CPU where a recorded archaeological site or TCR (as defined in the Public Resources Code) is identified, the City would be required to initiate consultation with identified California Indian tribes pursuant to the provisions in Public Resources Code Sections 21080.3.1 and 21080.3.2, in accordance with AB 52. Results of the consultation process will determine the nature and extent of any additional archaeological evaluation or changes to the project and appropriate mitigation measures for direct impacts that cannot be avoided.

Proposed CPU policies 5.1 and 5.2 encourage project-specific Native American consultation early in the development review process to ensure culturally appropriate and adequate treatment and mitigation for significant archaeological sites with cultural or religious significance to the Native American community in accordance with all applicable local, state, and federal regulations and guidelines; and project-specific investigations in accordance with all applicable laws and regulations to identify potentially significant tribal cultural and archaeological resources. Additionally, proposed CPU policy 5.3 calls for ensuring adequate data recovery and mitigation for adverse impact to archaeological and Native American sites as part of development; including measures to monitor and recover buried deposits from the tribal cultural, archaeological and historic periods, under the supervision of a qualified archaeologist and a Native American Kumeyaay monitor.

While existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of tribal cultural resources, it is not possible to ensure the successful preservation of all tribal cultural resources. Implementation of mitigation measure MM-HIST-1 would address potential significant impacts to tribal cultural resources. However, even with application of the existing regulatory framework and mitigation framework, impacts to tribal cultural resources would be considered significant.

5.5.5 SIGNIFICANCE OF IMPACT

Issue 1: Historic Built Environment

Future development, redevelopment and related construction activities facilitated by the proposed CPU at the project level could result in the alteration of a historical resource where implementation of the proposed CPU would result in increased development potential including areas where an increase in density is proposed beyond the adopted Community Plan or current zoning. While the SDMC regulations provide for the regulation and protection of designated and potential historical resources, and the policies in the proposed CPU call for further evaluation of un-surveyed areas and

properties associated with life sciences and the Pan-Asian community, it is not possible to ensure the successful preservation of all historic built environment resources within the CPU at a programmatic level. Direct impacts of specific future projects within the CPU area may include substantial alteration of historic buildings, structures, objects, or sites as well as alterations to districts. Indirect impacts may include the introduction of visual, audible, or atmospheric effects that are out of character with a historic property or alter its setting, when the setting contributes to the resource's significance. Thus, potential impacts to historic resources from the built environment would be considered significant.

Issue 2: Archaeological Resources

Implementation of projects within the CPU area could adversely impact prehistoric or historic archaeological resources, including religious or sacred use sites and human remains. While existing regulations, the SDMC and proposed CPU policies would provide for the regulation and protection of archaeological resources and human remains and avoid potential impacts, it is not possible to ensure the successful preservation of all archaeological resources where new development may occur. Therefore, potential impacts to prehistoric or historic archaeological resources, religious or sacred use sites, and human remains from implementation of the proposed project are considered significant.

Issue 3: Tribal Cultural Resources

Implementation of projects within the CPU area could adversely tribal cultural resources. While existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of tribal cultural resources, it is not possible to ensure the successful preservation of all tribal cultural resources. Therefore, potential impacts to tribal cultural resources would be significant. Mitigation Measure MM-HIST-1 would address potential significant impacts. However, even with application of the existing regulatory framework and mitigation framework, impacts to tribal cultural resources would be considered potentially significant.

5.5.6 MITIGATION, MONITORING, AND REPORTING

The General Plan, combined with federal, State, and local regulations, provides a regulatory framework for project-level historical resources evaluation/analysis and, when applicable, mitigation measures for future discretionary projects. All development projects with the potential to affect historical resources, such as designated historical resources, historical buildings, districts, landscapes, objects, and structures, important archaeological sites, TCRs, and traditional cultural properties are subject to site-specific review in accordance with the City's Historical Resources Regulations and Historical Resources Guidelines through a subsequent project review process.

The City's Historical Resources Regulations (SDMC Chapter 14, Article 3, Division 2) include a number of requirements that would apply to future development evaluated under the proposed project that would ensure site-specific surveys are completed to verify the presence of historical resources. Pursuant to SDMC Section 143.0212(a), the City Manager shall determine the need for a site-specific survey for the purposes of obtaining a construction permit or development permit for development proposed for any parcel containing a structure that is 45 or more years old and not located within any area identified as exempt in the Historical Resources Guidelines of the Land Development Manual or for any parcel identified as sensitive on the Historical Resource Sensitivity Maps. A site-specific survey shall be required when it is determined that a historical resource may exist on the parcel where the development is located, and if the development proposes a substantial alteration according to SDMC Section 143.0250(a)(3) (SDMC Section 143.0212(c)). If a site-specific survey is required, it shall be conducted consistent with the Historical Resources Guidelines of the Land Development Manual (SDMC Section 143.0212(d)). Adherence to the Historical Resources Regulations and Guidelines would ensure that appropriate measures are applied to protect historical resources consistent with City requirements. Such requirements may include archaeological and Native American monitoring, avoidance and preservation of resources, data recovery and repatriation or curation of artifacts, among other requirements detailed in the Historical Resources Guidelines. The following mitigation measure address$_{es}$ impacts to archaeological and tribal cultural resources during discretionary project review:

MM-HIST-1 **Archaeological and Tribal Cultural Resources.** Prior to issuance of any permit for a future development project implemented in accordance with the proposed CPU that could directly affect an archaeological or tribal cultural resource, the City shall require the following steps be taken to determine (1) the presence of archaeological or tribal cultural resources and (2) the appropriate mitigation for any significant archaeological or tribal cultural resources that may be impacted by a development activity. Resource sites may include residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socioeconomic and ethnic backgrounds. Resource sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The environmental analyst shall determine the likelihood for the project site to contain archaeological or tribal cultural resources by reviewing site photographs and existing historic information (e.g., Archaeological Sensitivity Maps, the Archaeological Map Book, and the California Historical Resources Inventory Database, South Coastal Information Center (SCIC) records, and the City's "Historical Inventory of Important

Architects, Structures, and People in San Diego") and may conduct a site visit. A cultural resources sensitivity map was created from the record search data as a management tool to aid in the review of future projects within the CPU area which depicts three levels of sensitivity (Figure 5.5-2). Review of this map shall be done at the initial planning stage of a specific project to ensure that cultural resources are avoided and/or impacts are minimized in accordance with the Historical Resources Guidelines. These levels, which are described below, are not part of any federal or state law.

- **High Sensitivity:** These areas contain known significant cultural resources and have a potential to yield information to address a number of research questions. These areas may have buried deposits, good stratigraphic integrity, and preserved surface and subsurface features. If a project were to impact these areas, a survey and testing program is required to further define resource boundaries subsurface presence or absence, and determine level of significance. Mitigation measures such as a Research Design and Archaeological Data Recovery Program (ADRP) and construction monitoring shall also be required.

- **Moderate Sensitivity:** These areas contain recorded cultural resources or have a potential for resources consisting of more site structure, diversity of feature types, and diversity of artifact types, or have a potential for resources to be encountered. The significance of cultural resources within these areas may be unknown. If a project impacts these areas, a site-specific records search, survey and significance evaluation is required if cultural resources were identified during the survey. Mitigation measures may also be required.

- **Low Sensitivity:** These are described as areas where there is a high level of disturbance due to existing development, with few or no previously recorded resources documented within the area or considered during tribal consultation. Resources at this level would not be expected to be complex, with little to no site structure or artifact diversity. If a project impacts these areas, a records search may be required. Areas with steep hillsides generally do not leave an archaeological signature and would not require further evaluation.

If there is any evidence that the project area contains archaeological or tribal cultural resources, then an archaeological evaluation consistent with the City's Guidelines would be required. All individuals conducting any phase of the archaeological

evaluation program must meet professional qualifications in accordance with the City's Historical Resources Guidelines.

Step 1

Based on the results of the initial determination, if there is evidence that the project area contains archaeological resources, preparation of an evaluation report is required. The evaluation report shall generally include background research, field survey, archaeological testing, and analysis. Before actual field reconnaissance would occur, background research is required that includes a record search at the South Coastal Information Center (SCIC) at San Diego State University. A review of the Sacred Lands File maintained by the NAHC shall also be conducted at this time. Information about existing archaeological collections should also be obtained from the San Diego Archaeological Center and any tribal repositories or museums.

In addition to the records searches mentioned above, background information may include, but is not limited to, examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archaeological research in similar areas, models that predict site distribution, and archaeological, architectural, and historical site inventory files; and conducting informant interviews, including consultation with descendant communities. The results of the background information would be included in the evaluation report.

Once the background research is complete, a field reconnaissance shall be conducted by individuals whose qualifications meet City standards. Consultants shall employ innovative survey techniques when conducting enhanced reconnaissance including, but not limited to, remote sensing, ground penetrating radar, human remains detection canines, LiDAR, and other soil resistivity techniques as determined on a case-by-case basis by the tribal representative during the project-specific AB 52 consultation process. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or tribal cultural resources. If, through background research and field surveys, resources are identified, then an evaluation of significance, based on the City's Guidelines shall be performed by a qualified archaeologist.

Step 2

Where a recorded archaeological site or tribal cultural resource (as defined in Public Resources Code (PRC) section 21074) is identified, the City shall initiate consultation with identified California Native American tribes pursuant to PRC sections 21080.3.1 and 21080.3.2, in accordance with AB 52. It should be noted that during the consultation process, tribal representative(s) will be involved in making recommendations regarding the significance of a tribal cultural resource which also could be a prehistoric archaeological site. A testing program may be recommended which requires reevaluation of the proposed project in consultation with the Native American representative, which could result in a combination of project redesign to avoid and/or preserve significant resources, as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). The archaeological testing program, if required, shall include evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies including surface and subsurface investigations can be found in the City of San Diego's Historical Resources Guidelines. Results of the consultation process will determine the nature and extent of any additional archaeological evaluation or changes to the proposed project.

The results from the testing program shall be evaluated against the Significance Thresholds found in the Historical Resources Guidelines. If significant archaeological or tribal cultural resources are identified within the Area of Potential Effect, the site may be eligible for local designation. However, this process will not proceed until such time that the tribal consultation has been concluded and an agreement is reached (or not reached) regarding significance of the resource and appropriate mitigation measures are identified. The final testing report shall be submitted to Historical Resources Board (HRB) staff for designation. The final testing report and supporting documentation will be used by HRB staff in consultation with qualified City staff to ensure that adequate information is available to demonstrate eligibility for designation under the applicable criteria. This process shall be completed prior to distribution of a draft environmental document prepared for the proposed project.

An agreement with each consulting tribe on the appropriate form of mitigation is required prior to distribution of a draft environmental document prepared for the proposed project. If no significant resources are found and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate

Department of Parks and Recreation site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3

Per the City's Historical Resources Guidelines, preferred mitigation for archaeological resources is to avoid and preserve the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not feasible, a Research Design and Archaeological Data Recovery Program (ADRP) is required, which includes a Collections Management Plan for review and approval. When tribal cultural resources are present and also cannot be avoided, appropriate and feasible mitigation will be determined through the tribal consultation process and incorporated into the overall data recovery program, where applicable, or project-specific mitigation measures. The data recovery program shall be based on a written research design and is subject to the provisions outlined in PRC Section 21083.2(d) and 14 CCR 15126.4(b)(3)(c). The data recovery program shall be reviewed and approved by the City's Environmental Analyst prior to distribution of any draft environmental document and shall include the results of the tribal consultation process. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site but cannot be recovered prior to grading due to obstructions such as existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground disturbing activities whenever a tribal cultural resource or any archaeological site located on City property, or within the Area of Potential Effect of a City project, would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of California Public Resources Code Section 5097.98 shall be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in California Public Resources Code Section 5097.98, Health and Safety Code Section 7050.5, and in the federal, State, and local regulations described above shall be followed. These procedures shall be outlined in the Mitigation Monitoring and Reporting Program included in a subsequent project-specific environmental document. The Native American monitor

shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4

Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the Historical Resources Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation. Specific types of historical resource reports are required to document the methods (see Section III of the Historical Resources Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g., collected materials and the associated records); and in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the Historical Resources Guidelines), which will be used by Environmental staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover), along with historical resource reports for archaeological sites and tribal cultural resources, containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects that result in a substantial collection of artifacts, which must address the management and research goals of the project, and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City of San Diego. Appendix D (Historical

Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5

For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with State and federal standards unless otherwise determined during the tribal consultation process. In the event that a prehistoric and/or historical deposit is encountered during construction monitoring, a Collections Management Plan shall be required in accordance with the project's Mitigation Monitoring and Reporting Program. The disposition of human remains and burial- related artifacts that cannot be avoided or are inadvertently discovered is governed by State (i.e., AB 2641 [Coto] and California Native American Graves and Repatriation Act [NAGPRA] of 2001 [Health and Safety Code 8010et seq.]) and federal (i.e., federal NAGPRA [25 USC 3001-3013]) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation of all recovered artifacts must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance. When tribal cultural resources are present, or non-burial-related artifacts associated with tribal cultural resources are suspected to be recovered, the treatment and disposition of such resources will be determined during the tribal consultation process. This information must then be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collections (dated May 7, 1993) and, if federal funding is involved, Title 36 of the Code of Federal Regulations Part 79. Additional information regarding curation is provided in Section II of the Historical Resources Guidelines.

5.5.7 SIGNIFICANCE AFTER MITIGATION

Issue 1: Historical Resources

Future development, redevelopment and related construction activities facilitated by the proposed CPU at the project level could result in the alteration of a historical resource where implementation of the proposed CPU would result in increased development potential including areas where an increase in density is proposed beyond the adopted Community Plan or current zoning. While the SDMC regulations provide for the regulation and protection of designated and potential historical resources, and the policies in the proposed CPU call for further evaluation of un-surveyed areas and properties associated with life sciences and the Pan-Asian community, it is not possible to ensure the successful preservation of all historic built environment resources within the CPU at a programmatic level. Thus, potential impacts to historic resources from the built environment would remain significant and unavoidable.

Issue 2: Archaeological Resources

Development implemented in accordance with the project could potentially result in impacts to significant archaeological resources, and therefore would be required to implement Mitigation Measure MM-HIST-1, which addresses measures to minimize impacts to archaeological resources. This mitigation, combined with the policies of the General Plan and proposed CPU policies promoting the identification, protection, and preservation of archaeological resources, in addition to compliance with CEQA and PRC Section 21080.3.1 requiring tribal consultation early in the development review process, and the City's Historical Resources Regulations (SDMC Section 143.0212), which require review of ministerial and discretionary permit applications for any parcel identified as sensitive on the Historical Resources Sensitivity Maps, would reduce the program level impact related to prehistoric or historical archaeological resources. However, even with application of the existing regulatory framework and mitigation measure MM-HIST-1 which would reduce and/or minimize future project-level impacts, the feasibility and efficacy of mitigation measures cannot be determined at this program level of analysis. Thus, potential impacts to prehistoric and historic archaeological resources, sacred sites, and human remains would remain significant and unavoidable.

Issue 3: Tribal Cultural Resources

Development implemented in accordance with the proposed CPU would potentially result in impacts to significant tribal cultural resources, and therefore, would be required to implement Mitigation Measure MM-HIST-1, which addresses measures to minimize impacts to tribal cultural resources. This mitigation, combined with the policies of the General Plan and proposed CPU policies promoting the identification, protection, and preservation of archaeological resources, in addition to

compliance with CEQA and Public Resources Code Section 21080.3.1 requiring tribal consultation early in the development review process, and the City's Historical Resources Regulations (SDMC Section 143.0212), which require review of ministerial and discretionary permit applications for any parcel identified as sensitive on the Historical Resources Sensitivity Maps, would reduce the program-level impact related to tribal cultural resources. However, even with application of the existing regulatory framework and mitigation framework, impacts to tribal cultural resources would remain significant and unavoidable.

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Mira Mesa Community Plan Area Boundary

Notable Developer

- A.J. Hall Corporation
- Corky McMillins
- Pardee Home Builders
- Ponderosa Homes
- The Fieldstone Company
- The Larwin Company

Other Developer

- August Development Company
- Brehm Communities
- Hobbs Mira Mesa
- Long Beach Construction Company
- Playmor
- Southern California Properties Ltd.
- The Helmer Company
- The Lusk Company

Unknown Developer

Master-Planned Communities

1. Mira Mesa Homes (1969-1970)
2. Encore (1970)
3. Trend (1971)
4. Mira Mesa North (1971-1983)
5. Mesa Village (1972)
6. Gateway Homes (1972)
7. ParkWest (1972)
8. Three Seasons (1974)
9. Quest Condominiums (1975)
10. Valley Crest (1976-1977)
11. Mesa Woods (1977)
12. Colony Homes (1979)
13. Concord Square (1980)
14. Parkdale (1981)
15. Canyon Country (1982)
16. Casa New Salem I and II (1982)
17. Canyon Point (1983)
18. Creekside (1983)
19. The Villas (1983)
20. Mesa Ridge (1984)
21. Jade Coast Condominiums (1985)
22. Barrett Homes (1986)
23. Summerset (1987)
24. Summerset Court (1987)
25. Concord Villas (1987-1988)
26. Esplanade (1988)
27. Canyon Mesa/Canyon Ridge (1989)

SOURCE: Esri, HERE, Garmin; SANGIS 2019

SD Planning 0 1,000 2,000 Feet

FIGURE 5.5-1

Mira Mesa Community Planning Area Master-Planned Communities

Mira Mesa Community Plan Update PEIR

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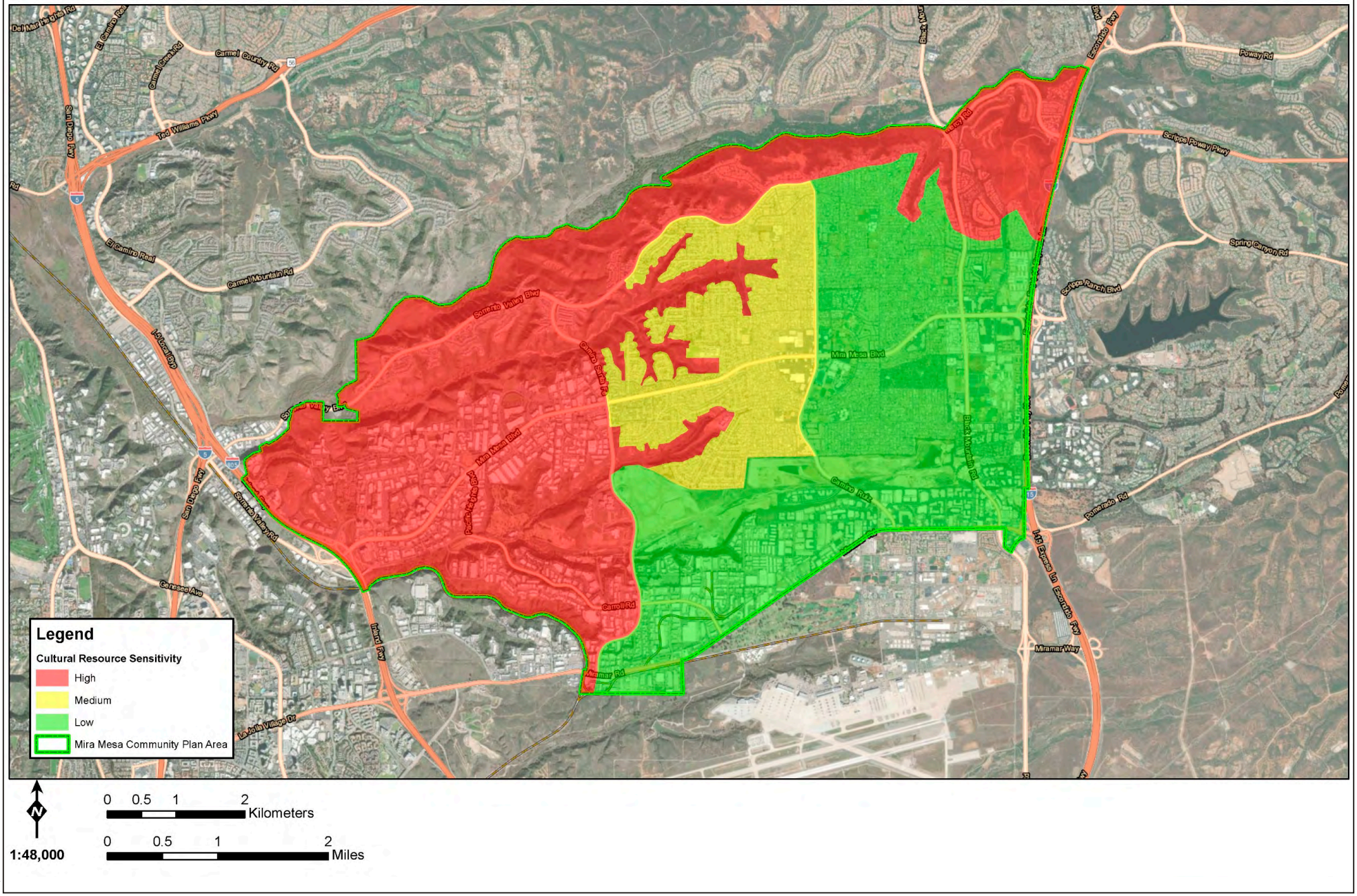

SOURCE: Red Tail Environmental

FIGURE 5.5-2

Cultural Resources Sensitivity of the Mira Mesa Community Planning Area

Mira Mesa Community Plan Update PEIR

SD Planning

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5.6 HAZARDS AND HAZARDOUS MATERIALS

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to hazards and hazardous materials, including human health and public safety, that could result from implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Portions of this section are based on information from the *Hazardous Materials Technical Study Mira Mesa Community Plan Update* report prepared by The Bodhi Group, Inc., which is included as Appendix H of this PEIR.

5.6.1 EXISTING CONDITIONS

A description of the existing conditions relative to hazardous materials sites, wildfire hazards, emergency preparedness, and aircraft hazards within the Mira Mesa Community Plan Update (CPU) area is contained in Section 2.2.6 of this PEIR. Section 4.6 of this PEIR includes a summary of the regulatory framework associated with human health, public safety, and hazardous materials.

5.6.2 METHODOLOGY

The analysis of wildfire risk is based on a review of California Department of Forestry and Fire Protection Very High Fire Hazard Severity Zone Maps. State law requires local jurisdictions to identify very high fire hazard severity zones within their areas of responsibility. Inclusion within these zones is based on vegetation density, slope severity and other relevant factors that contribute to fire severity. These maps, which were last updated in 2009, are maintained by the California Department of Forestry and Fire Protection and the City of San Diego (City) Fire-Rescue Department.

The hazardous materials study prepared for the proposed project (see Appendix H) includes a search of pertinent federal, state, and local regulatory agency database records, a search of regulatory records, and historical land use information from readily available public records. Although the search identified known sites and locations where hazardous materials have been stored, dispensed, conveyed, or spilled, only sites with documented hazardous material releases and oversight by a regulatory agency (local or State agency) are considered to have conditions that could present a risk to human health or the environment.

Potential impacts related to aircraft hazards are based on a review of the Airport Land Use Compatibility Plan (ALUCP) for Marine Corps Air Station (MCAS) Miramar.

5.6.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to hazards and hazardous emissions are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA)*

Significance Determination Thresholds (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant impact related to hazards and hazardous emission could occur if implementation of the proposed project would:

Issue 1: **Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands;**

Issue 2: **Result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school;**

Issue 3: **Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan;**

Issue 4: **Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment; or**

Issue 5: **Result in a safety hazard for people residing or working in a designated airport influence area.**

5.6.4 IMPACTS

Issue 1: **Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The potential for wildland fires represents a hazard, particularly on undeveloped properties or where development exists (or could potentially exist in the future) adjacent to open space areas or within proximity to wildland fuels. Much of the CPU area is urbanized, but includes areas mapped as Very High Fire Hazard Severity Zones, as shown on Figure 2-9 of this PEIR. The mapped Very High Fire Hazard Severity Zone exists primarily in undeveloped open space areas such as Los Peñasquitos Canyon, Lopez Canyon, Carroll Canyon, and Flanders Canyon (CAL FIRE 2009). Future development under the proposed CPU within or adjacent to these areas could potentially be subject to wildland fire hazards. Such development, however, would be subject to applicable state and City regulatory requirements related to fire hazards and prevention, as outlined in Section 4.6 of this PEIR. Specifically, these City regulatory requirements encompass standards associated with vegetative (brush) management, such as selective removal/thinning and planting of fire-resistant plantings to

create appropriate buffer zones around development, as well as incorporating applicable fire-related design elements, including fire-resistant building materials, fire/ember/smoke barriers, automatic alarm and sprinkler systems, and provision of adequate water flow for fire protection and emergency access. These requirements would be implemented as part of individual project design elements of future development projects under the proposed CPU and may entail the preparation of fire protection plans and/or other technical analyses. Therefore, impacts associated with wildfire hazards would be less than significant.

Issue 2: Would the project result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?

There are 13 public and charter schools, as well as San Diego Miramar College, within the CPU area; in addition, there are numerous existing schools/day care/educational facilities within and adjacent to the CPU area. The proposed CPU also identifies a potential future school site in the Westside Neighborhood of the proposed Stone Creek Master Plan area consistent with the draft Stone Creek Master Plan (see Figure 4-1 of the proposed CPU and Figure 2-18 of this PEIR), and includes policy 4.5 which direct the City to coordinate with San Diego Unified School District to explore options for the provision of educational facilities to serve future Mira Mesa students as needed.

Future development and redevelopment activities under the proposed CPU may emit hazardous emissions and/or use or transport hazardous materials within 0.25 miles of an existing or future school. All future development and redevelopment activities under the proposed CPU would be required to conform to all applicable regulations and industry and code standards related to hazardous emissions and the handling of hazardous materials. Specifically, this would involve compliance with pertinent federal, state, and local standards related to transporting and handling hazardous materials, as outlined in Section 4.6 of this PEIR, including discretionary approval from the County of San Diego Department of Environmental Health, Hazardous Materials Division (DEH/HMD) for all covered projects proposed within the CPU area. In accordance with City, State, and federal requirements, any new development that involves contaminated property would necessitate the cleanup and/or remediation of the property in accordance with applicable requirements and regulations. No construction would be permitted to occur at such locations until a "no further action" clearance letter from the County DEH/HMD as the local Certified Unified Program Agency, or a similar determination is issued by the City's Fire-Rescue Department (SDFD), Department of Toxic Substance Control (DTSC), Regional Water Quality Control Board (RWQCB), or other responsible agency. Documentation of such clearance would be provided on a project-by-project basis as part of the project-specific CEQA and/or building permit reviews and would be a requirement for all future project approvals.

For any new schools that could be constructed within 0.25 miles of a facility that emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste, the school district or private school entities would be responsible for planning, siting, building, and operating the schools. It would be the responsibility of the school district to perform an in-depth analysis of any potential hazards at the project level. Through implementation of existing regulations (refer to Section 4.6 of this PEIR), impacts to schools from hazardous emissions, materials, substances, or waste would be less than significant.

Issue 3: Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

The City is a participating entity in the Multi-Jurisdictional Hazard Mitigation Plan (MHMP; County of San Diego 2017), which is generally intended to provide compliance with regulatory requirements associated with emergency response efforts. The Emergency Operations Plan (EOP) (County of San Diego 2018) identifies a broad range of potential hazards and a response plan for public protection. The plan identifies major interstates and highways within San Diego County that could be used as primary routes for evacuation in the event of an emergency. As part of the emergency response efforts, the City Office of Emergency Services oversees emergency preparedness and response services for disaster-related measures, including administration of the City Emergency Operations Center and alternate Emergency Operations Center. For emergency evacuation, the EOP identifies Interstate (I-) 15 and I-805 as emergency evacuation routes in the vicinity of the CPU area. There are no goals or objectives in the proposed CPU that would interfere or diminish the capacity of these programs and facilities to provide effective emergency response or allow for sufficient emergency evacuation in the CPU area or other areas. The land-use changes identified in the proposed CPU would not physically interfere with any adopted emergency plans because they do not entail closing or otherwise obstructing existing roads used for emergency response or evacuation. Impacts related to emergency plan consistency would be less than significant.

Issue 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, create a significant hazard to the public or environment?

A review of hazardous materials databases and evaluation revealed 95 properties that were subject to further consideration in the CPU area, including five listed sites within or adjacent to the CPU area that are undergoing active remediation with regulatory oversight (refer to Appendix H); refer to Section 2.2.6.1 of this PEIR for additional detail regarding these five sites. The proposed CPU presents opportunities to convert existing industrial/commercial sites with a history of hazardous materials use to new uses, such as parks, plazas, or open space, and proposed urban village areas that would likely accommodate a higher density of people and sensitive receptors. Potential hazardous effects from

redevelopment of listed hazardous materials sites could result from both short- and long-term exposure to workers, residents, and visitors to the CPU area. Based on the locations of these listed sites and the proposed CPU land uses, future development in accordance with the proposed project could potentially expose people or sensitive receptors to hazardous materials.

All future development and redevelopment activities under the proposed CPU would be required to adhere to all applicable regulations and industry and code standards related to health hazards from hazardous materials. Specifically, this would involve compliance with pertinent federal, state, and local standards related to hazardous materials, as outlined in Section 4.6 of this PEIR, including discretionary approval from the County DEH/HMD for all covered projects proposed within the CPU area. In accordance with City, State, and federal requirements, any new development that involves contaminated property would necessitate the cleanup and/or remediation of the property in accordance with applicable requirements and regulations. No construction would be permitted to occur at such locations until a "no further action" clearance letter from the County DEH/HMD as the local Certified Unified Program Agency, or a similar determination is issued by the SDFD, DTSC, RWQCB, or other responsible agency. Documentation of such clearance would be provided as part of the project-specific CEQA and/or building permit reviews for individual projects and would be a requirement for all future project approvals. Therefore, although the CPU area includes listed hazardous materials sites, compliance with existing regulations would reduce potential impacts related to hazardous materials sites to a less than significant level.

Issue 5: Would the project result in a safety hazard for people residing or working in a designated airport influence area?

The CPU area is located within Airport Influence Area (AIA) Review Areas 1 and 2 of MCAS Miramar, which is located directly south of the CPU area (refer to Figure 2-10 of this PEIR). Portions of the eastern/southeastern CPU area are located within the Accidental Potential Zone 2 and Transition Zone for MCAS Miramar Safety Compatibility (refer to Figure 2-11 of this PEIR). These safety zones are established for the purpose of evaluating safety compatibility of land use development in the AIA, and the ALUCP contains specific criteria for development review in each zone. Refer to Section 2.2.6.4 of this PEIR for additional information regarding these zones.

Future development within the ALUCP Safety Compatibility Zones associated with MCAS Miramar would be required to comply with the standards established by the ALUCP, as well as associated Federal Aviation Administration, City, and Department of Defense requirements. Consistency with ALUCP requirements would be reviewed on a project-by-project basis and compliance with these requirements would avoid future significant safety impacts associated with ALUCP safety zones and airspace protection. Development under the proposed CPU would also be subject to San Diego Municipal Code (SDMC) regulations that reduce dust, vapor, smoke, and electromagnetic

interference through limits for glare, air contaminants, electrical/radio activity, and outdoor lighting (SDMC Chapter 14, Article 2, Division 7). In addition, the proposed CPU contains policies to ensure that future uses are compatible with the safety zones and airspace protection surfaces for the airport, and development would be reviewed for consistency with the adopted ALUCP policies. As such, implementation of the proposed CPU would not expose people or structures to a significant risk of loss, injury, or death, from off-airport aircraft operational accidents. Impacts would be less than significant.

5.6.5 SIGNIFICANCE OF IMPACT

Issue 1: Wildfire Risk

Future development implemented in accordance with the proposed CPU would be subject to regulatory requirements related to fire hazards and prevention including standards associated with vegetative (brush) management, such as selective removal/thinning and planting of fire-resistant plantings to create appropriate buffer zones around development, as well as incorporating applicable fire-related design elements, including fire-resistant building materials, fire/ember/smoke barriers, automatic alarm and sprinkler systems, and provision of adequate water flow for fire protection and emergency access. Therefore, impacts associated with wildfire hazards would be less than significant.

Issue 2: Hazardous Emissions or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste Near Schools

Future development implemented in accordance with the proposed CPU would be subject to applicable regulations and industry and code standards and requirements related to health hazards from hazardous materials, including as they relate to proximity to schools. For any new schools that could be constructed within 0.25 miles of a facility that emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste, the school district or private school entities would be responsible for planning, siting, building, and operating the schools. It would be the responsibility of the school district to perform an in-depth analysis of any potential hazards at the project level. Therefore, impacts to schools from hazardous materials, substances, or waste would be less than significant.

Issue 3: Emergency Plan Consistency

Implementation of the proposed CPU would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; therefore, impacts would be less than significant.

Issue 4: Hazardous Materials Sites

Future development implemented in accordance with the proposed CPU would be required to adhere to applicable regulations and industry and code standards related to health hazards from hazardous materials. In accordance with City, State, and federal requirements, any new development that involves contaminated property would necessitate the cleanup and/or remediation of the property in accordance with applicable requirements and regulations. This includes obtaining clearance from the applicable regulatory agencies for remediation efforts at applicable locations, including the five listed open cases within and adjacent to the CPU area. Therefore, impacts would be less than significant.

Issue 5: Aircraft Hazards

Future development projects within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP, including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. Through compliance with these requirements and implementation of the proposed CPU policies that require future projects to be reviewed for compatibility with the safety zones, noise contours, and airspace protection surfaces identified in the applicable ALUCP, potential hazards from airport operations would not expose people or structures to a significant risk of loss, injury, or death, from off-airport aircraft operational accidents. Therefore, impacts would be less than significant.

5.6.6 MITIGATION, MONITORING, AND REPORTING

Implementation of the proposed CPU would result in less than significant impacts to hazards and hazardous materials. No mitigation is required.

5.6.7 SIGNIFICANCE AFTER MITIGATION

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

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5.7 HYDROLOGY AND WATER QUALITY

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to hydrology and surface and groundwater quality that could result from implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). The information in this section is based, in part, on the *Hydrology and Water Quality Report Existing Conditions Analysis* prepared by River Focus Water Resource Consultants, which is included as Appendix I of this PEIR.

5.7.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion of the existing hydrologic and water quality conditions within the CPU area is contained in Section 2.2.7 of this PEIR. Section 4.7 of this PEIR includes a summary of the regulatory framework relative to hydrology and water quality.

5.7.2 METHODOLOGY

Potential hydrology and water quality impacts resulting from implementation of the proposed project were evaluated based on relevant information from Appendix I, as well as a review of relevant hydrology and water quality plans and maps.

5.7.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to hydrology and water quality are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant hydrology and water quality impact could occur if implementation of the proposed project would:

Issue 1: Result in flooding due to an increase in impervious surfaces, changes in absorption rates, drainage patterns, or the rate of surface runoff;

Issue 2: Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map which would impede or redirect flood flows;

Issue 3: Result in a substantial increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body; or

Issue 4: Deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge.

5.7.4 IMPACTS

Issue 1: Would the project result in flooding due to an increase in impervious surfaces, changes in absorption rates, drainage patterns, or the rate of surface runoff?

The CPU area is mostly developed with extensive impervious surfaces associated with existing buildings, roadways, and parking areas. The CPU area is located atop a mesa with canyon areas that provide pervious open space and natural drainage. Existing floodways are primarily limited to the canyon areas and include Los Peñasquitos Creek along the northern border of the CPU area, the upper tributaries of Carroll Canyon Creek, and the Lopez and Flanders Canyons. Stormwater runoff from Mira Mesa generally remains within the boundaries of the CPU area until it drains through storm drain pipes, streets, gutters, cross gutters, or open channels into the Los Peñasquitos Creek and from there into the Pacific Ocean. Most rainfall becomes runoff because there are minimal opportunities for infiltration in developed areas in the CPU area. This results in high peak flow rates for short durations with the potential for flooding from runoff. Future development in accordance with the proposed project may result in an increase in impervious surfaces (outside of the City's Multi-Habitat Planning Area [MHPA]) and has the potential to change runoff characteristics, including the volume of runoff, rate of runoff, and drainage patterns, which could result in flooding.

Future projects implemented within the CPU area would be required to adhere to the National Pollutant Discharge Elimination System (NPDES) requirements to control direct stormwater discharges, and to the City's Stormwater Standards Manual (City of San Diego 2021a). The Stormwater Standards Manual contains requirements that dictate design elements in development and redevelopment projects. Requirements pertaining to stormwater runoff include the implementation of Low Impact Development Best Management Practices (BMPs), such as bioretention basins, cisterns, and rain barrels, to retain stormwater on-site and limit runoff. The Stormwater Standards Manual also includes Hydromodification Management Plan requirements that include design elements to limit stormwater runoff discharge rates and durations, specifically in locations where downstream channels are susceptible to erosion.

All development in the City is subject to the drainage regulations contained in the San Diego Municipal Code (SDMC) Chapter 14, Article 2, Division 2, Stormwater Runoff and Drainage Regulations, which require that all development be conducted to prevent erosion and stop sediment and pollutants from leaving the property to the maximum extent practicable. Since future development under the proposed project would be required to adhere to applicable drainage

regulations, development would not result in alterations to existing drainage patterns in a manner that would result in flooding on- or off-site.

In addition, the majority of the City's open space areas, including canyons and natural slopes, are located within the MHPA, the City's planned habitat preserve within its Multiple Species Conservation Program (MSCP) Subarea Plan (SAP) (City of San Diego 1997). Development is limited within the MHPA to ensure the long-term viability and recovery of protected or special status species. The proposed CPU would preserve existing open space areas within the CPU area in accordance with the MSCP SAP and would not increase impervious surfaces, changes in absorption rates, drainage patterns, or the rate of surface runoff within the MHPA. Chapter 6, Parks, Recreation, and Open Space, of the proposed CPU contains policies that require preservation and/or restoration of existing hillsides, canyons, and vernal pools to promote natural biodiversity and improve drainage conditions and drainage capacity. Chapter 6 of the proposed CPU also includes policy 6.15 (Storm Drains) which calls for the repair and retrofit of storm drain discharge systems to prevent erosion and improve water quality by adequately controlling flow and providing filtration. Policy 6.15 further states that storm drain outfalls should limit the use of concrete in favor of more natural vegetated designs. Furthermore, Chapter 7, Urban Design, of the proposed CPU encourages "Urban Greening," which refers to the integration of stormwater management and the planting of trees and other vegetation along mobility corridors. Such design elements would help create "green streets" that incorporate vegetation, trees, soil, and engineered systems (such as permeable pavement, bioswales, etc.) to slow, filter, and cleanse stormwater runoff from impervious surfaces (such as concrete and asphalt). As such, implementation of the proposed project would not result in flooding due to an increase in impervious surfaces, changes in absorption rates, drainage patterns, or the rate of surface runoff. Impacts would be less than significant.

Issue 2: Would the project place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map which would impede or redirect flood flows?

Based on mapping from the Federal Emergency Management Agency (FEMA), almost all of the developed CPU area lies outside of mapped floodplains (FEMA 2012). Portions of the Los Peñasquitos Canyon Creek corridor, Lopez Canyon, and Carroll Canyon Creek are within the mapped 100-year floodplain with some areas designated as a regulatory floodway. As shown in Figure 2-13, Flood Zones, of this PEIR, the 100-year and 500-year floodways are primarily limited to the canyon areas. Portions of the mapped 100-year floodplain are also designated Special Flood Hazard Area (SFHAs), which are high risk areas defined as any land that would be inundated by the 100-year flood (the flood having a 1% chance of occurring in any given year).

Portions of the CPU area that are susceptible to the 100-year or 500-year flood are described in Appendix I. Floodplains in the CPU area are primarily confined to the major drainage channels and canyons, including Carroll Canyon Creek, Los Peñasquitos Creek, Soledad Canyon/Sorrento Valley Channel (though not technically a part of the CPU area), Lopez Canyon, and Flanders Canyon. The main riverine flooding source within the boundaries of the CPU area is Carroll Canyon Creek. There is some risk to property within the CPU areas adjacent to Carroll Canyon Creek, especially near the Carroll Canyon Road crossing and some commercial areas near Black Mountain Road. Some residential and commercial areas lie within the 100- and 500-year floodplain of the southernmost reach of Carroll Canyon Creek.

The Los Peñasquitos Creek floodplain near the CPU area is relatively narrow given that it is a steep and narrow canyon. There are only a few locations near the CPU area that are within the FEMA 100-year floodplain of Los Peñasquitos Creek where the creek meets the narrower Sorrento Valley/Soledad Valley channel, including commercial buildings upstream of Interstate (I-) 805, and Sorrento Valley Boulevard upstream of I-805. There are no locations in the CPU area that are within the 100-year floodplain of Lopez Canyon Creek, and the only locations in the CPU area that are within the FEMA 100-year floodplain of Flanders Canyon Creek are parts of El Camino Drive near the El Camino Memorial Campus (Appendix I).

While most of the floodplain areas are located within the MHPA and are proposed to be designated Open Space by the proposed CPU, some occur within land proposed for the Carroll Canyon Master Plan Area and light industrial areas. Thus, future development in accordance with the proposed project could potentially encroach into mapped floodplains, including SFHAs. However, future development proposed under the CPU would be subject to applicable City and federal requirements, including City requirements for protection from flooding which include elevating the lowest floor of a structure a minimum of 2 feet above the base flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are required to comply with FEMA requirements for flood proofing. Pursuant to SDMC Sections 143.0145 and 143.0146, future development projects must also undergo a project-level analysis to determine the effects to base flood elevations and ensure that no flooding, erosion, or sedimentation impacts occur on or off site. The SDMC also contains development regulations for properties within a SFHA. Future development under the proposed project would be required to adhere to applicable regulations regarding flood protection; thus, it is anticipated that the development or redevelopment of properties within a mapped 100-year floodplain would not impede or redirect flood flows. Impacts related to flood hazard areas would be less than significant.

Issue 3: Would the project result in a substantial increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body?

If proper pollutant controls are not implemented on individual projects, future development in accordance with the CPU could have the potential to change pollutant discharges either from an increase in the volume of stormwater runoff or from an addition of new sources of pollution. The major land use categories in the CPU area include open space and parks, residential, urban village, commercial, industrial, and institutional. Typical pollutants from these land uses include sediment, nutrients, heavy metals, organic compounds, trash and debris, oxygen-demanding substances, oil and grease, bacteria and viruses, and pesticides.

Construction and operation of future development would comply with applicable permits and incorporate required BMPs, which would limit runoff and associated potential pollutants, such as sediment, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. Development projects greater than 1 acre in size, or that are less than 1 acre but are part of a larger common plan of development, would be subject to the requirements of the General Construction Permit, which would require the implementation of a Stormwater Pollution Prevention Program (SWPPP) and associated BMPs to be used during and after construction to prevent the discharge of sediment and other pollutants in stormwater runoff from the project site. Similarly, projects less than 1 acre in size, and not part of a larger common plan of development, would be required to implement a Water Pollution Control Plan (WPCP) and its associated pollution prevention measures. During operation, industrial sites within the CPU area would be required to implement BMPs per the Industrial Stormwater General Permit.

Under the City's stormwater regulations, including the Stormwater Standards Manual, and the City's Jurisdictional Runoff Management Plan, all projects implemented under the proposed CPU would be subject to certain minimum stormwater requirements to protect water quality. Types of stormwater BMPs required for new developments include site design, source control, and treatment control BMPs. The proposed CPU also includes policies which encourage the incorporation of Low Impact Development practices and "green street" features to protect water quality. Implementation of required stormwater BMPs would reduce the amount of pollutants transported from a future development project to receiving waters. Compliance with the requirements set forth under the Stormwater Standards Manual and Jurisdictional Runoff Management Plan would also allow projects to be in compliance with the most current Municipal Separate Storm Sewer System (MS4) Permit, which implements a regional strategy for water quality and related concerns. Impacts related to water quality would be less than significant.

Issue 4: Would the project deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge?

All major drainage basins in the San Diego region contain groundwater basins. The basins are 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 San Diego region (RWQCB 2021). According to the Water Quality Control Plan for the San Diego Hydrologic Basin (RWQCB 2021), most of the groundwater in the region has been extensively developed and the availability of potential future uses of groundwater resources is limited. Further development of groundwater resources would most likely necessitate groundwater recharge programs to maintain adequate groundwater table elevations. Groundwater within the Miramar Reservoir Hydrologic Subarea of the Los Peñasquitos Hydrologic Unit has existing beneficial use for municipal and domestic supply, agricultural supply, and industrial service supply (RWQCB 2021).

While beneficial groundwater uses are identified in the Water Quality Control Plan for the San Diego Hydrologic Basin, groundwater in the Miramar Reservoir Hydrologic Subarea is not actively utilized as a water source. The CPU area does not lie within nor contribute to any major groundwater basin that provides beneficial uses. Water demands in the City are met by local rainfall capture, recycled wastewater for non-potable use, and water purchased from the San Diego County Water Authority (SDCWA) (Appendix I; City of San Diego 2021b). The San Diego County Water Authority's water supplies include desalinated seawater, water transfers from the Imperial Irrigation District, and imported water through the State Water Project and Conservation Reserve Program (City of San Diego 2021b). Therefore, the proposed CPU would not deplete groundwater supplies.

As discussed under Issues 1 and 2 above, current stormwater regulations encourage the infiltration of stormwater and the protection of water quality, which would allow for groundwater recharge of the shallow underlying aquifers and would protect the quality of groundwater. As described in Issue 1, existing natural drainage areas provided by canyons and open space areas would be protected from future development as part of the MHPA under the City's MSCP Subarea Plan. Therefore, it is not anticipated that the proposed CPU would deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge. Impacts related to groundwater would be less than significant.

5.7.5 SIGNIFICANCE OF IMPACT

Issue 1: Flooding and Drainage Patterns

Future development projects implemented within the CPU area would be subject to the requirements of the NPDES, the City's Stormwater Standards Manual, and the SDMC Stormwater Runoff and Drainage Regulations. In addition, the proposed CPU includes policies that encourage development with sustainable design elements to capture and infiltrate water on site. Through adherence to the regulatory

framework, augmented by the proposed CPU policies regarding sustainable design features, impacts related to flooding from surface runoff would be less than significant

Issue 2: Flood Hazard Areas

Future development in accordance with the proposed project would be subject to applicable SDMC and FEMA requirements to ensure protection from flooding. Future development projects located within the mapped 100-year floodplain would undergo project-level analysis to determine the effects to base flood elevations and ensure that no flooding, erosion, or sedimentation impacts occur on or off site. Thus, impacts related to flood hazard areas would be less than significant.

Issue 3: Water Quality

Future construction activities associated with the proposed project would be subject to applicable requirements in the General Construction Permit or a SWPPP/WPCP, which would address the potential for the transport of pollutants in runoff water during construction activities. Future projects would also be subject to the requirements in the City's stormwater regulations, Stormwater Standards Manual, Jurisdictional Runoff Management Plan, and MS4 Permit, which would require that all future projects meet minimum stormwater requirements to protect water quality. Thus, through compliance with the existing regulatory framework addressing protection of water quality, impacts related to water quality would be less than significant.

Issue 4: Groundwater

Current stormwater regulations, which encourage the infiltration of stormwater runoff and the protection of water quality, would allow for groundwater recharge and would protect the quality of groundwater resources. As such, it is not anticipated that the proposed CPU would deplete groundwater supplies, degrade groundwater quality, or interfere with groundwater recharge. Thus, impacts related to groundwater would be less than significant.

5.7.6 MITIGATION, MONITORING, AND REPORTING

Implementation of the proposed project would result in less than significant impacts to hydrology and water quality. No mitigation is required.

5.7.7 SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed project would result in less than significant impacts to hydrology and water quality. No mitigation is required.

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5.8 LAND USE

This section discusses potential land use conflicts and associated environmental impacts that may result from the implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). The analysis contained in this section assesses the potential that implementation of the proposed CPU would result in land use changes that could have either direct or indirect environmental impacts.

5.8.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion and description of existing land uses within the CPU area, is contained in Section 2.2.8 of this Program Environmental Impact Report (PEIR). The existing regulatory setting is summarized in Section 4.8 of this PEIR, including applicable land use plans, ordinances, and regulations.

5.8.2 METHODOLOGY

Potential impacts resulting from implementation of the proposed CPU were evaluated based on consistency of the proposed CPU with the following applicable land use plans:

- City San Diego General Plan
- City of San Diego Climate Action Plan
- City of San Diego Municipal Code
- City of San Diego Multiple Species Conservation Subarea Plan
- City of San Diego Vernal Pool Habitat Conservation Plan
- City of San Diego Parks Master Plan
- California Coastal Resources and Local Coastal Program
- 3Roots Master Plan
- Draft Stone Creek Master Plan
- Marine Corp Air Station Miramar Airport Land Use Consistency Plan
- Los Peñasquitos Canyon Preserve Master Plan
- San Diego Association of Governments (SANDAG) 2050 Regional Transportation Plan

5.8.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to land use are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant land use impact could occur if implementation of the proposed project would:

Issue 1: Be inconsistent or conflict with the environmental goals, objectives, or guidelines of a General Plan or Community Plan or other applicable land use plan or regulation and, as a result, cause an indirect or secondary environmental impact;

Issue 2: Be inconsistent or conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan;

Issue 3: Result in land uses which are not compatible with an adopted ALUCP; or

Issue 4: Physically divide an established community.

5.8.4 IMPACTS

Issue 1: Would the project be inconsistent or conflict with the environmental goals, objectives, or guidelines of a General Plan or Community Plan or other applicable land use plan or regulation and, as a result, cause an indirect or secondary environmental impact?

The following discussion analyzes the proposed CPU's consistency with each applicable land use plan or regulation listed in Section 5.8.2 and identifies any potential indirect or secondary environmental impacts.

General Plan

The General Plan is the guiding document for development in the City of San Diego. The General Plan's 10 elements contain the goals, visions, and policies that inform growth in the City. The City's Community Plans provide a mechanism to refine citywide goals, visions, and policies, designate land uses, and make additional site-specific recommendations to address the needs of each community.

The proposed CPU is intended to provide a vision to guide future growth and development within Mira Mesa, in concert with the framework of the General Plan. The proposed CPU provides policies that complement the General Plan goals and policies, while also addressing specific community

needs. The detailed policies and recommendations of the Mira Mesa Community Plan are used during the review and assessment of public and private development projects proposed in the CPU area. The proposed CPU includes chapters for issues important to Mira Mesa: Land Use & Economic Prosperity; Mobility; Public Services, Facilities, and Safety; Historic Preservation; Parks, Recreation, and Open Space; Urban Design; and Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ). Each chapter contains community-specific goals and policies that provide specific direction or guidance to help steer future actions by the City or other governmental agencies regarding future development in the CPU area. The following discussion addresses each General Plan Element and the corresponding goals, policies, and recommendations of the proposed CPU that complement or otherwise relate to the General Plan Elements.

Housing Element

The General Plan Housing Element 2021–2029 outlines strategies and policies to meet the critical housing needs in the City and the Regional Housing Needs Allocation (RHNA) requirements as identified by the State in coordination with SANDAG and local jurisdictions. The Housing Element includes an existing sites inventory (Adequate Sites Inventory) and identifies areas in the City that could support increased density or more development to increase housing supply. The Adequate Sites Inventory performed for the Housing Element determined there are enough sites zoned to meet the RHNA targets, including sites that have been identified in the Mira Mesa community. Each Community Plan must incorporate the inventory of land available for redevelopment to meet the RHNA goals. Housing Element policy HE-A.2 applies to the preparation and content of community plans to ensure consistency with RHNA goals:

> **HE-A.2** Update community plans regularly to provide certainty in the development process. Through these updates, the City – working with a broad coalition of community stakeholders – should:
>
> > Identify areas appropriate for increased infill, residential, and mixed-use development.
> >
> > Designate land for a variety of residential densities to meet housing needs for a variety of household sizes.
> >
> > Encourage location- and resource-efficient development whereby housing is located near employment, shopping, schools, recreation, transit, and walking/bicycling infrastructure.
> >
> > Allow for more floor area ratio (FAR).
> >
> > Adopt Programmatic Environmental Impact Reports (EIRs) to allow EIR tiering for individual projects consistent with the updated plan(s).

The proposed CPU would be consistent with and help fulfill the goals and policies of the Housing Element by identifying specific areas in the community for infill and redevelopment close to employment, recreation, and transit facilities. The proposed CPU has identified seven Urban Village areas where higher-density redevelopment could occur to provide housing and employment centers. These areas are dominated by existing commercial or employment uses and would be rezoned as part of the proposed CPU to allow for mixed-use development to support residential, commercial, and employment uses. In addition, policies 2.8 through 2.15 and 8.2 of the proposed CPU specifically address the community's housing needs and call for the provision of diverse, accessible, and affordable housing options. Implementation of the proposed CPU would support the City's goals associated with meeting RHNA targets. Therefore, the proposed CPU would not conflict with the Housing Element.

Land Use and Community Planning Element

The General Plan Land Use and Community Planning Element (Land Use Element) provides policies to guide growth and implement the "City of Villages" strategy, which is intended to focus growth in mixed-use village activity centers throughout the City connected by high-quality transit. Similar to the Housing Element, the Land Use Element contains citywide goals and policies, and the community plans are intended to facilitate the achievement of these goals. Specifically, policies LU-A.1 through LU-A.5 outline how the City intends to implement the "City of Villages" strategy through designated village types and locations, and through the implementation of community plans.

LU-A.1. Designate a hierarchy of village sites for citywide implementation.

> Encourage further intensification of employment uses throughout Subregional Employment Districts. Where appropriate, consider collocating medium- to high- density residential uses with employment uses (see also Economic Prosperity Element).
>
> Designate Neighborhood, Community, and Urban Village Centers, as appropriate, in community plans throughout the City, where consistent with public facilities adequacy and other goals of the General Plan.
>
> Revitalize transit corridors through the application of plan designations and zoning that permits a higher intensity of mixed-use development. Include some combination of: residential above commercial development, employment uses, commercial uses, and higher density-residential development.

LU-A.2. Identify sites suitable for mixed-use village development that will complement the existing community fabric or help achieve desired community character, with input from recognized community planning groups and the general public.

LU-A.3. Identify and evaluate potential village sites considering the following physical characteristics:

Shopping centers, districts, or corridors that could be enhanced or expanded;

Community or mixed-use centers that may have adjacent existing or planned residential neighborhoods;

Vacant or underutilized sites that are outside of open space or community plan designated single-family residential areas;

Areas that have significant remaining development capacity based upon the adopted community plan; and

Areas that are not subject to major development limitations due to topographic, environmental, or other physical constraints.

LU-A.4. Locate village sites where they can be served by existing or planned public facilities and services, including transit services.

LU-A.5. Conduct environmental review and focused study during the community plan update process, of potential village locations, with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design.

LU-B.1. Use the recommended Community Plan Designations identified on Table LU-4 so that over time, all community plans will use a common nomenclature to describe similar land uses and densities.

a. Use community plan text and graphics to provide greater specificity than is provided on Table LU-4, as needed.

    1. Identify the lower and upper ends of the allowable density ranges in community plans, with environmental review.

    2. Allow community plans to analyze and define a more narrow residential density range within the ranges established on Table LU-4.

    3. Use icons to identify various types of institutional uses.

    4. Establish standards for population density and building intensity for each land use designation as community plans are updated.

LU-B.2. Identify a more refined street system than is included in the General Plan Land Use and Streets Map through the community plan update and amendment process (see also Mobility Element, Section C).

LU-B.3. Plan for and develop mixed-use projects where a site or sites are developed in an integrated, compatible, and comprehensively planned manner involving two or more land uses.

The proposed CPU includes policies that support the "City of Villages" strategy by encouraging the development of housing and employment centers in mixed-use areas within 0.25 miles of transit facilities called Urban Villages. Specifically, proposed CPU policies 2.1 through 2.3 encourage mixed-use Urban Villages, locating homes near jobs, and a mix of employment-residential developments within Urban Villages. Chapter 8 of the proposed CPU outlines seven Urban Villages that are currently predominantly made up of employment and commercial uses that would be redeveloped as pedestrian-oriented, mixed-use developments. These Urban Villages would provide residents with housing, employment opportunities, commercial and retail spaces, and recreational spaces. The proposed CPU establishes land use designations and zoning that would allow for a mix of uses. The proposed CPU also identifies specific sites for improvements to the local streets and transit network, and community-specific urban design standards, as required by the Land Use Element policies. As described in Chapter 2, Land Use & Economic Prosperity, the proposed CPU identifies planned land uses (Figure 2-2) consistent with the land use categories in the General Plan Table LU – 4, General Plan and Community Plan Land Use Categories, and consistent with policies LU-B.1 through LU-B.3 which outline how to use the General Plan Land Use Categories at the community level. The proposed CPU would also be consistent with both the land uses and development goals presented by the General Plan, and preparation of the proposed CPU was undertaken in accordance with the General Plan Land Use policies LU C.1 through C.5, which outline the requirements for the preparation of community plans. Consistent with General Plan policy LU-A.5, the City has conducted outreach and stakeholder engagement on the proposed CPU. Therefore, the proposed CPU would not conflict with the Land Use Element.

Mobility Element

The General Plan Mobility Element contains goals and policies pertaining to an efficient transportation network, including pedestrian facilities, streets, public transit, regional connectivity, bicycle facilities, parking, and sustainable development. The goals of the Mobility Element address greater walkability and bike-ability, reduction of vehicle trips (especially less than 0.5 miles and single-occupancy vehicle trips), and increasing transit ridership. Specifically relevant to the development of community plans, the Mobility Element policies address the design and accessibility of pedestrian facilities (policies ME-A.1 through ME-A.5), the transit-first development strategy (policy

ME-B.9), transportation system planning (policy ME-C.1), street layout and design (ME-C.3), and bike facility implementation and connectivity (policies ME-F.1 and ME-F.2).

ME-A.1. Design and operate sidewalks, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions, including but not limited to those described in the Pedestrian Improvements Toolbox, Table ME-1.

ME-A.2. Design and implement safe pedestrian routes.

a. Collaborate with appropriate community groups, and other interested private and public sector groups or individuals to design and implement safe pedestrian routes to schools, transit, and other highly frequented destinations. Implement needed improvements and programs such as wider and noncontiguous sidewalks, more visible pedestrian crossings, traffic enforcement, traffic calming, street and pedestrian lighting, pedestrian trails, and educating children on traffic and bicycle safety.

b. Promote "Walking School Bus" efforts where parents or other responsible adults share the responsibility of escorting children to and from school by foot or bicycle.

c. When new schools are planned, work with school districts and affected communities to locate schools so that the number of students who can walk to school safely is maximized.

d. Implement Crime Prevention Through Environmental Design (CPTED) measures to reduce the threat and incidence of crime in the pedestrian environment (see also Urban Design Element, Policy UD-A.17).

e. Ensure that there are adequate law enforcement, code enforcement, and litter and graffiti control to maintain safe and attractive neighborhoods.

f. Provide adequate levels of lighting for pedestrian safety and comfort.

ME-A.3. Engage in a public education campaign to increase drivers' awareness of pedestrians and bicyclists, and to encourage more courteous driving.

ME-A.4. Make sidewalks and street crossings accessible to pedestrians of all abilities.

a. Meet or exceed all federal and state requirements.

b. Provide special attention to the needs of children, the elderly, and people with disabilities.

c. Maintain pedestrian facilities to be free of damage or trip hazards.

ME-A.5. Provide adequate sidewalk widths and clear path of travel as determined by street classification, adjoining land uses, and expected pedestrian usage.

a. Minimize obstructions and barriers that inhibit pedestrian circulation.

b. Consider pedestrian impacts when designing the width and number of driveways within a street segment.

ME-B.9. Make transit planning an integral component of long range planning documents and the development review process.

a. Identify recommended transit routes and stops/stations as a part of the preparation of community plans and community plan amendments, and through the development review process.

b. Plan for transit-supportive villages, transit corridors, and other higher intensity uses in areas that are served by existing or planned higher-quality transit services, in accordance with Land Use and Community Planning Element, Sections A and C.

c. Proactively seek reservations or dedications of right-of-way along transit routes and stations through the planning and development review process.

d. Locate new public facilities that generate large numbers of person trips, such as libraries, community service centers, and some recreational facilities in areas with existing or planned transit access.

e. Design for walkability in accordance with the Urban Design Element, as pedestrian supportive design also helps create a transit supportive environment.

f. Address rail corridor safety in the design of development adjacent to or near railroad rights-of-way.

ME-C.1. Identify the general location and extent of streets, sidewalks, trails, and other transportation facilities and services needed to enhance mobility in community plans.

a. Protect and seek dedication or reservation of right-of-way for planned transportation facilities through the planning and development review process.

b. Implement street improvements and multi-modal transportation improvements as needed with new development and as areas redevelop over time.

c. Identify streets or street segments where special design treatments are desired to achieve community goals.

d. Identify streets or street segments, if any, where higher levels of vehicle congestion are acceptable in order to achieve vibrant community centers, increase transit-orientation, preserve or create streetscape character, or support other community-specific objectives.

e. Increase public input in transportation decision-making, including seeking input from multiple communities where transportation issues cross community boundaries.

ME-C.3. Design an interconnected street network within and between communities, which includes pedestrian and bicycle access, while minimizing landform and community character impacts.

a. Identify locations where the connectivity of the street network could be improved through the community plan update and amendment process, the Regional Transportation Plan update process, and through discretionary project review (see also Urban Design Element, Policy UDB.5).

b. Use local and collector streets to form a network of connections to disperse traffic and give people a choice of routes to neighborhood destinations such as schools, parks, and village centers. This network should also be designed to control traffic volumes and speeds through residential neighborhoods.

    1. In newly developing areas or in large-scale redevelopment/infill projects, strive for blocks along local and collector streets to have a maximum perimeter of 1,800 feet.

    2. When designing modifications/improvements to an existing street system, enhance street or pedestrian connections where possible.

c. Provide direct and multiple street and sidewalk connections within development projects, to neighboring projects, and to the community at large.

d. Where possible, design or redesign the street network, so that wide arterial streets do not form barriers to pedestrian traffic and community cohesiveness.

ME-F.1. Implement the Bicycle Master Plan, which identifies existing and future needs, and provides specific recommendations for facilities and programs over the next 20 years.

a. Update the plan periodically as required by Caltrans, in a manner consistent with General Plan goals and policies.

b. Coordinate with other local jurisdictions, SANDAG, schools, and community organizations to review and comment on bicycle issues of mutual concern.

c. Reference and refine the plan, as needed, in conjunction with community plan updates.

d. Improve connectivity of the multi-use trail network, for use by bicyclists and others as appropriate.

ME-F.2. Identify and implement a network of bikeways that are feasible, fundable, and serve bicyclists' needs, especially for travel to employment centers, village centers, schools, commercial districts, transit stations, and institutions.

a. Develop a bikeway network that is continuous, closes gaps in the existing system, improves safety, and serves important destinations.

b. Implement bicycle facilities based on a priority program that considers existing deficiencies, safety, commuting needs, connectivity of routes, and community input.

c. Recognize that bicyclists use all City roadways.

    1. Design future roadways to accommodate bicycle travel; and

    2. Upgrade existing roadways to enhance bicycle travel, where feasible.

The General Plan's Mobility Element provides the citywide network and transit-oriented development strategy, while community plans provide the community specific goals and policies and planned transportation system including specific intersection and roadway improvements in finer detail. The proposed CPU would be consistent with the goals outlined in the Mobility Element by supporting specific, community-appropriate active transportation facilities and roadway improvements to provide an efficient, safe, and accessible transportation network that connects housing, employment, and commercial uses in the community. Chapter 3, Mobility, of the proposed

CPU outlines the vision for the community of more mobility options, and an efficient transportation system connecting schools, residences, commercial centers, employment hubs, community amenities, and the greater citywide transit system. Proposed CPU policies 3.1, 3.5, 3.6, 3.9, and 3.11 address the community's pedestrian network and provide policy support regarding the prioritization of enhanced improvements to provide and support a network of safe, comfortable, and accessible pedestrian facilities; the expansion of sidewalks and the provision of pedestrian walkways separate from automobiles; the creation of pedestrian walksheds through the installation of enhanced streetscape and pedestrian improvements within a half-mile walkshed of transit stations and mobility hubs; and the implementation of wayfinding and signage to guide pedestrians throughout the community. Proposed CPU policies 3.2, 3.3, 3.4, 3.6, and 3.7 call for the development of a safe, comfortable, and accessible bicycle network through the provision of new or improved bicycle facilities such as separated bicycle facilities, traffic calming features, and freeway crossings. Proposed CPU Policies 3.17 through 3.26 address transportation system planning and transit-oriented development through coordination with SANDAG, MTS, and property owners to support transit ridership; reconfigure roadways as SMART corridors with flexible lanes; development of mobility hubs; provision of first and last mile connections; evaluation of micro-transit opportunities; implementation of a skyway system; public education of the transit system; and development of complete streets. Proposed CPU Policies 3.27 through 3.36 address improving the existing street network to accommodate flexible lanes, SMART corridors, and other retrofits to improve circulation and break up "superblocks". Lastly Chapter 7, Urban Design, provides policies related to street layout and design (policies 7.1, 7.3, 7.13, and 7.14) to create an interconnected mobility network and improve walkability through site design, consistent with the policies of the Mobility Element. As such, the proposed CPU would be consistent with the overall intent and specific policies of the Mobility Element, and would serve to further the City's goals to provide an improved, balanced, multimodal transportation system. See Section 5.12, Transportation, of this PEIR for further discussion on this topic.

Urban Design Element

The General Plan Urban Design Element seeks to maintain and strengthen the City's aesthetic character and implement core values related to urban form, including honoring the natural environment and topography, and developing with a pattern that provides visual diversity, distinct neighborhoods and village centers, and protecting historic resources. Policies UD-A.1 through UD-A.3 address designing communities with open space and linkages between natural features. Policy UD-A.4 addresses sustainable building, while policies UD-A.5 and UB-A.6 outline architectural and design practices that should be utilized to protect and enhance community character such as relating architecture to San Diego's unique climate and topography and creating street frontages with architectural and landscape interest to provide visual appeal and enhance the pedestrian

experience. The Urban Design Element is also intended to be supported by site-specific community plan recommendations.

The proposed CPU supports and implements the Urban Design Element goals by developing safe and connected public spaces with the use of landscaping, lighting, seating, visibility, signage, and shade. The proposed CPU supports the design strategy of distinct neighborhoods and village centers by retrofitting the existing superblocks that are common in the community into smaller, more human-scale blocks that are pedestrian-oriented. In addition, the proposed Public Realm Policies (7.1 through 7.13) and Built Form Policies (7.14 through 7.28) would guide the future development of the community consistent with the Urban Design Element's goals, as well as the land use-specific design goals of the Urban Design Element. Specifically, policy 7.26 would address sustainable building practices; and policies 7.4, 7.12, 7.19, 7.20, 7.23, and 7.24 would address architectural and design principles to protect and enhance community character. Additionally, policy 7.6 addresses lighting, consistent with Urban Design Element policy UD-A.13, and policy 7.12 would support signage, consistent with Urban Design Element policy UD-A.14.

Economic Prosperity Element

The General Plan Economic Prosperity Element is intended to improve economic prosperity and employment opportunities of residents, and support a diverse, competitive, and sustainable local economy. The purpose is achieved through policies that focus on the distribution of employment land uses (industrial, commercial service, and commercial retail) and policies that support existing and new business and promote job creation. This element encourages the provision of industrial land uses and other land uses that can support quality job opportunities, as described in policies EP-A.1, EP-A.4, EP-A.12, EP-A.13, and EP-A.14, as applicable to community plans. Policies EP-A.7 and EP-A.8 address locating more employment-related land uses in Urban Village Centers to connect job centers to transit infrastructure. Policies EP-B.1 through EP-B.16 address commercial land uses, and guide commercial uses to Urban Village Centers and other development centers (specifically, policies EP-B.3 and EP-B.4). The Economic Prosperity Element also addresses workforce strengthening and educational opportunities, which are carried out at a citywide level.

The proposed CPU includes goals and policies focused on retaining key employment centers in the community and enhancing other areas to serve as mixed-use activity centers with opportunities for employment, residential, and commercial uses. The Land Use and Economic Prosperity chapter includes policies 2.13 through 2.20 which call for supporting and maintaining sufficient industrial land uses while allowing flexibility for other employment lands and supporting infrastructure and connectivity to support employees living and working in the community. Specifically, policies 2.14, 2.15, and 2.16 ensure sufficient industrial land uses are maintained in the community, while policies 2.17 through 2.20 encourage the development of commercial land uses and others to support the

job centers. These policies and land use designations would support the goals of Economic Prosperity Element related to maintaining industrial land uses while encouraging mixed-used Urban Village Centers to improve the citywide economy. As such, the proposed CPU would not conflict with the Economic Prosperity Element.

Public Facilities, Services and Safety

The purpose of the General Plan Public Facilities, Services and Safety Element is to provide the public facilities and services needed to serve the existing population and new growth in the City. This element addresses the funding of public facilities, services, utilities, and infrastructure; coordination with other utility providers for the City; and disaster preparedness. Policies within this element direct the City to address public facility and service needs for the future by maintaining a diverse funding strategy, and addressing this at a community level during the community plan process (policies PF-A.1 through PF-A.3). Additionally, policies in this element address how future development projects should ensure appropriate public facilities, infrastructure, and services are available (policies PF-C.1 and PF-C.3). This element addresses specifically the provision of fire services and related infrastructure, and establishes performance standards for fire services through policies PF-D.1 through PF-D.11. Similarly, this element addresses the provision of police protection services and establishes performance standards with policies PF-E.1 through PF-E.7. The Public Facilities, Services, and Safety Element addresses the needs and goals of the citywide infrastructure systems, including wastewater, stormwater, water, solid waste, libraries, schools, and utilities. Lastly, this element addresses hazard mitigation, seismic safety, and public safety. Refer also to Section 4.10 for additional information.

The proposed CPU Chapter 4, Public Services, Facilities, and Safety, contains policies that address the provision of additional police facilities (Policy 4.1 and 4.2), fire department services (Policy 4.3), and library services (Policy 4.4) in the CPU area, as well as coordination with the San Diego Unified School District and San Diego Gas & Electric to expand additional services and utilities that are not directly controlled by the City (Policies 4.5 and 4.6 respectively). Policy 4.6 addresses public utilities infrastructure. Chapter 4 also addresses the health and safety of residents related to air quality and fire safety. This chapter is consistent with Public Facilities, Services, and Safety Element policy PF-A.3.e. which directs the City to identify community-level priorities in community plans, as well as the policies throughout the Public Facilities, Services, and Safety Element intended to improve and maintain public services and utilities citywide. The proposed policies are consistent with, and would serve to implement, the Public Facilities, Services and Safety Element. Also refer to Section 5.10, Public Services and Facilities, of this PEIR for an expanded discussion of potential impacts related to public services.

Recreation Element

The General Plan Recreation Element is intended to preserve, protect, acquire, develop, operate, and enhance public recreation opportunities and facilities throughout the City for all users. The Recreation Element focuses on planning for diverse, equitable, and accessible parks, recreational facilities and open space provided throughout the city. Specifically relevant for the Community Plan process, policy RE-A.2 of the Recreation Element outlines how the City would refine recreational land uses and policies at the community level through Community Plan updates. Additionally, policies RE-A.8 through RE-A.21 outline standards and implementation strategies for future park and recreational facilities. Policy RE-B.2 requires consistency with the City's Parks Master Plan, which is discussed further in this chapter. In addition, this element seeks to preserve open space and natural features throughout the City while maintaining accessibility to these areas for residents.

Chapter 6, Parks, Recreation, and Open Space, of the proposed CPU contains goals to maintain sufficient park space as population grows through the acquisition of available land and collaboration with private development. The goals also focus on equity and accessibility of parks to all residents, and by all different modes of transportation. Lastly the proposed CPU seeks to preserve and protect natural areas and biological resources. Policies in Chapter 6 of the proposed CPU would prioritize acquisition of private land, public lands, and public rights-of-way for future parks, pocket parks, and open space sites (policies 6.2 and 6.3). Additionally, planned improvements to trails and trailhead pocket parks listed in Chapter 6 of the proposed CPU address expanding access to trails and open space (CPU policies 6.7 through 6.9). These policies are consistent with and would support and implement the policies of the Recreation Element.

Conservation Element

The General Plan Conservation Element provides for the conservation of the diverse natural resources that contribute to the City's identity and livability. This element focuses on the conservation of existing biological resources and future sustainable development in order to prepare for the future adverse effects of climate change. Conservation Element policies CE-B.1 through CE-B.6 address the preservation of open space and natural resources.

This element also outlines how the "City of Villages" development strategy will result in more dense growth areas which is intended to decrease automobile travel and in turn, reduce greenhouse gas (GHG) emissions and the effects of climate change on the City. This element includes a description of the City's Climate Action Plan (CAP), and explains the policies included in the element that support and promote the recommendations outlined in the City's CAP. Policies CE-A.1 through CE-A.14 address impacts of climate change and GHG emissions. The Conservation Element includes goals to

protect and expand the urban forest, consistent with CAP's goals to reduce the City's carbon footprint.

CPU Policies 6.7, 6.8, 6.10, 6.12, 6.13, 6.14, 6.18 and 6.19 within Chapter 6, Parks, Recreation, and Open Space, of the proposed CPU call for the preservation of existing biological resources such as sensitive vegetation communities like vernal pools.

Climate change is addressed in the proposed CPU in a manner consistent with the General Plan policies CE-A.1 through CE-A.14 and the City's CAP strategies. The proposed CPU implements the CAP's strategies by implementing the Urban Village development strategy which promotes transit-supportive dense village centers, and a multimodal transportation system. Chapter 7, Urban Design, addresses recommendations for preserving and enhancing the urban forest. CPU policies 7.3 and 7.7 direct the City to enhance the urban tree canopy and include recommendations for green streets to improve the urban forest, consistent with the goals of the CAP to improve the urban forest. Additionally, sustainable development is addressed in CPU policy 7.26. As such, the proposed CPU would be consistent with and would implement the goals and policies of the Conservation Element. See Section 5.4 Greenhouse Gas Emissions, of this PEIR for a detailed analysis of GHG emissions and climate change impacts. See Section 5.2, Biological Resources, of this PEIR for a detailed analysis of biological resources impacts.

Noise Element

The General Plan Noise Element provides goals and policies to guide compatible land uses and incorporate noise attenuation measures for new uses to protect people living and working in the City from an excessive noise environment. Policies NE-A.1 through NE-A.5 ensure future land use planning addresses potential noise compatibility issues. Policies NE-B.1 through NE-B.9 address land use-noise compatibility specifically related to traffic noise, while policies NE-D.1 through NE-D.7 reduce conflict with aircraft noise and noise-sensitive land uses by limiting future uses within airport influence areas and encourage airport operators to minimize excessive noise.

Land use compatibility as it relates to potential sources of noise is addressed in Chapter 2, Land Use & Economic Prosperity, of the proposed CPU. Specifically, policies 2.4 (Buffer Incompatible Uses) and 2.5 (Buffer Residential Uses) address land use compatibility with industrial or other land uses that could be sources of excessive noise. Additionally, policy 4.8 of Chapter 4, Public Services, Facilities, and Safety, supports coordination with California Department of Transportation to mitigate noise impacts from adjacent highways. The proposed CPU also includes policy 5.24 which directs the City to ensure that future development, land uses, building heights and intensities/densities are consistent with airport policies identified in the Airport Land Use Compatibility Overlay Zone for Marine Corps Air Station (MCAS) Miramar, such as safety zones, noise contours, and airspace

protection surfaces. As such, the proposed CPU would be consistent with and would implement the goals and policies of the Noise Element.

Historic Preservation Element

The purpose of the Historic Preservation Element is to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources throughout the City. The policies of the Historic Preservation Element ensure historic resources are considered during future city planning and project review processes. Policies HP-A.1 through HP-A.5 address the process to identify, integrate, and protect historic and cultural resources as part of future planning. Policy HP-A.2 applies specifically to addressing historic preservation in community plan development.

The goal of the Historic Preservation section of the proposed CPU is to provide historical context for existing and future development within the community and to identify and preserve the significant historical, archaeological, and tribal cultural resources in the Mira Mesa community planning area. The proposed CPU contains Historic Preservation policies to promote the identification, evaluation, and preservation of significant historical resources in the community (policies 5.1 through 5.10), consistent with the goals of the General Plan Historic Preservation Element. The CPU policies would help implement the goals and policies of the General Plan Historic Preservation Element related to identifying and preserving historic resources and Native American cultural sites, as well as continuing educational opportunities.

Summary

The proposed CPU provides community-specific goals and policies to guide development within the CPU area. These goals and policies would be consistent with and would support the goals and policies identified in the General Plan. Therefore, impacts associated with land use consistency with the General Plan would be less than significant.

Land Development Code Regulations

Implementation of the proposed CPU would include the adoption of amendments to San Diego Municipal Code (SDMC) Section 132.1402 (Community Plan Implementation Overlay Zone [CPIOZ]) to adopt a new CPIOZ for the CPU area. The existing land use designations and zoning in the CPU are identified on Figure 2-14 and Figure 2-15, respectively, of this PEIR. The proposed land use designations and zoning in the CPU area are identified in Table 3-2 of this PEIR and are shown on Figure 3-2 and Figure 3-9, respectively. The proposed zoning changes would allow for increased density, in particular areas to allow a balance of commercial, employment, and residential uses. Development areas in the western portion of the CPU area that are currently zoned as Industrial Park would be changed to EMX-1 and EMZ-2 zoning consistent with the Urban Employment Village

land use, which would allow for mixed-use development where employment sources are the primary use and commercial and residential uses are secondary allowable uses. These zoning changes would occur primarily along Mira Mesa Boulevard, a primary street, where current land uses include office buildings, light industrial, and research and development facilities. Another primary area that would experience zoning changes to allow for new uses would be in the southeastern corner of the CPU area. This area is currently zoned for light industrial or industrial park uses (see Figure 2-15), and would be upzoned to allow for community commercial, business park, or business park-residential uses (see Figure 3-9). The proposed zoning changes would allow for more community-serving commercial and employment land uses. Business park-residential land uses could include commercial or flex-space, retail, and residential uses to facilitate a mixed-development area. These zoning changes would reflect the General Plan goals associated with the City of Villages strategy, and goals associated with providing safe and accessible housing options near employment opportunities. Proposed policies in Chapter 2, Land Use and Economic Prosperity; Chapter 7, Urban Design; and Chapter 8, Urban Villages and CPIOZ would be implemented with the proposed zoning to facilitate cohesive neighborhoods between existing surrounding neighborhoods and new future development.

The CPU area overlaps with Very High Fire Hazard Severity (VHFHS) zones along much of the community border and along Los Peñasquitos Canyon and Carroll Canyon (see Figure 2-9 of this PEIR). Although residential land uses already exist within certain areas that are mapped as VHFHS zones, the majority of the proposed mixed-use land use designations that allow future residential use are outside the VHFHS zones. Proposed land use and zoning changes in portions of the Mira Mesa Gateway and Sorrento Mesa Rim Urban Villages would include mixed use that would allow residential development that may overlap with areas mapped as VHFHS zones. If these areas were to be redeveloped with residential uses consistent with the proposed zoning, the future development would be required to go through City review and approval, which would include a site-specific analysis for consistency with the requirements and restrictions related to development in a high fire risk area pursuant to City adoption of the CA 2019 Fire Code and SDMC. Future development would also be required to comply with the Brush Management Regulations of the Land Development Code (LDC).

Other proposed areas for upzoning would be changed from the existing RS to RM to allow mixed-use development along main travel corridors where the need for commercial development exists. Community Plan zoning changes are also proposed that reflect the approved zoning within the 3Roots Master Plan area.

Future development implemented under the proposed CPU would be required to comply with the applicable development regulations of the underlying zone classification. Future development within

the proposed Urban Village areas would also be required to comply with supplemental development regulations (SDRs) of the updated CPIOZ which is proposed as part of this project.

Environmentally Sensitive Lands Regulations

Environmentally sensitive lands (ESL) within the CPU area include areas with sensitive biological resources, steep hillsides, canyons, and open space. Any future development within the CPU area that is adjacent to ESL would be subject to the City's ESL Regulations (SDMC Chapter 14, Article 3, Division 1), which require that proposed development be sited and designed to prevent adverse impacts on any adjacent ESL. The proposed CPU does not include any policies or land use changes that would conflict with the ESL Regulations; therefore, impacts would be less than significant.

Historical Resources Regulations

The Historical Resources Regulations (Chapter 14, Article 3, Division 2)apply to development projects when historical resources are present. As defined by the Land Development Code, historical resources include designated historical resources, historical buildings, structures, objects, districts, or landscapes, important archaeological sites, and traditional cultural properties. The proposed CPU would result in future development or redevelopment that could potentially impact historic resources. Direct impacts may include alteration or demolition of historic buildings and impacts to archaeological sites from grading, excavation, or other ground-disturbing activities.

The Historical Resources Regulations require discretionary project approvals for projects that propose development that will result in substantial alteration, demolition, destruction, removal, relocation or encroachment into a traditional cultural property or important archaeological site; or that propose development that will result in significant alteration, relocation or demolition of designated historical resources (which can include historical buildings, structures, objects, districts, or landscapes, important archaeological sites, and traditional cultural properties). Impacts to the resource would be evaluated and mitigated at the project level through review of the discretionary permit application.

Additionally, Section 143.0212 of the Historical Resources Regulations requires review for impacts to potential historical resources for construction permits and demolition permits prior to approval of the project. This review must occur for all parcels containing a structure that is 45 or more years old and is not located within any area identified as exempt in the Historical Resources Guidelines of the Land Development Manual, or for a parcel identified as sensitive on the Historical Resource Sensitivity Maps, which indicate archaeological and tribal cultural resource sensitivity. The CPU includes an amendment to the Historical Resources Guidelines of the Land Development Manual to add areas identified as Tier 2 or Tier 3 in the Mira Mesa Community Plan Update Focused Reconnaissance Survey to the list of areas exempted from the review of structures 45 years old or

older under Section 143.0212(a). This amendment is supported by the analysis and conclusions in the Focused Reconnaissance Survey, which found that the Tier 2 and Tier 3 communities are unlikely to rise to the level of significance required for designation at the local, state, and national level even with additional study or survey work.

Development that implements the proposed CPU would be required to comply with the Historical Resources Regulations. Additionally, the proposed CPU contains policies in Chapter 5, Historic Preservation, that support the identification of potential historic and cultural resources early in the project development review process, consultation with appropriate Native American Tribes and compliance with all applicable laws and regulations related to archaeological and tribal cultural resources, and the preservation of historic resources (policies 5.1 through 5.10). The amendment to the Historical Resources Guidelines included with the CPU that will add Tier 2 and Tier 3 communities to the list of areas exempted from review of structures 45 years old or older is supported by the findings of the Focused Reconnaissance Survey and is permitted by Section 143.0212 of the Historical Resources Regulations and the Historical Resources Guidelines. Thus, implementation of the proposed project would not conflict with the City's Historical Resources Regulations, and impacts would be less than significant. See Section 5.5, Historical, Archaeological, and Tribal Cultural Resources, of this PEIR for a detailed analysis of historical, archaeological, and tribal cultural resources impacts.

Summary

The proposed CPU does not include any policies or land use changes that would conflict with the Land Development Code. Impacts would be less than significant.

Airport Land Use Compatibility Overlay Zone Regulations

The purpose of the Airport Land Use Compatibility Overlay Zone is to implement adopted ALUCPs as applicable to property within the City. The Airport Land Use Compatibility Overlay Zone is intended to ensure that new development located within an Airport Influence Area (AIA) is compatible with respect to airport-related noise, public safety, airspace protection, and aircraft overflight areas. This overlay zone applies to properties that are located within an AIA as identified in an adopted ALUCP. The entirety of the CPU area is located within either AIA Review Area 1 or 2 for the MCAS Miramar ALUCP. The proposed CPU contains a policy within Chapter 2, Land Use and Economic Prosperity, that addresses airport land use compatibility (Policy 2.24). Implementation of the policy would ensure that future development is compatible with the safety zones, noise contours, and airspace protection surface overlays and is consistent with the policies identified in the MCAS Miramar ALUCP. The proposed CPU does not propose residential or other non-compatible land uses within the restricted areas of AIA. As such, the proposed CPU would not contain policies or land use

changes that would conflict with the Airport Land Use Compatibility Overlay Zone regulations of the SDMC, and impacts would be less than significant.

Climate Action Plan

The CAP establishes a community-wide goal of net zero by 2035 and identifies GHG emissions reduction strategies focusing on decarbonization of the built environment, access to clean and renewable energy, mobility and land use, circular economy and clean communities, resilient infrastructure and healthy ecosystems, and emerging climate action. The proposed CPU would facilitate implementation of the CAP through localized recommendations and polices that address those actions and complement citywide policies that put the City on track to meet its GHG emission reduction goals. The CPU proposes a development strategy that focuses future residential and employment development in mixed-use growth centers in Transit Priority Areas with access to a well-connected transportation network, which is intended to reduce vehicle miles traveled and support the goals of the CAP. Additionally, the proposed CPU includes policies (7.3 and 7.7) intended to expand the urban forest, which would help to sequester carbon dioxide and support the CAP goal of increasing the urban tree canopy. As such, the proposed CPU does not include policies or land use changes that would conflict with the implementation of the CAP and would help support the achievement of the CAP's goals. Impacts would be less than significant. See Section 5.4, Greenhouse Gas Emissions, of this PEIR for further discussion on the proposed CPU's consistency with the CAP.

Parks Master Plan

The Parks Master Plan (PMP) provides the vision for providing parks and recreational opportunities to residents of the City. It outlines the standard for providing population-based parks, known as the Recreational Value-Based Park Standard, which establishes a point value to represent recreational opportunities within population-based parks to assess the need for upgrades and new park facilities. The PMP serves as a policy framework to guide future park development efforts.

To meet the standards established by the PMP, the proposed CPU would need a total of approximately 14,300 Recreational Value Points. Existing plus planned park facilities would reach a total of approximately 11,196 Recreational Value Points and would thus fall short of the goal for the community. To meet its Recreational Value Point target, the proposed CPU identifies existing and potential parks and recreational facilities in the CPU area (see Figure 6-2 of the proposed CPU) and includes SDRs 1 through 5 in Chapter 8, Urban Villages and CPIOZ, which would require the development of urban villages parks, urban pathways, ancillary pedestrian facilities, linear parks, and trails and trail amenities in Urban Village areas, thus ensuring that park space is considered as part of new development projects.

The proposed CPU also includes a robust policy framework which is consistent with and would implement the goals and policies of the PMP and the General Plan and would support the provision of and access to parks and recreational facilities in the CPU area. Specifically, the proposed CPU includes policies which support increasing parks and recreational opportunities by pursuing land acquisition of private and public lands on which to develop park sites, pursuing lease agreements with private entities to provide additional facilities, preserving and enhancing existing parks and recreational facilities, and incorporating innovative land use strategies and park spaces (i.e., pocket parks, linear parks, and trailhead parks) (see CPU policies 6.1 through 6.5). Therefore, the proposed CPU would be consistent with PMP policies which promote increasing recreational opportunities by investing in existing parks, acquiring new land for parks and other recreational facilities, improving existing underused sites and infrastructure, and providing flexible innovative park spaces (see PMP policies PP1, PP2 and PP4). Proposed CPU policies 6.9 and 6.10, which would support connecting adjacent communities to trails and trail-adjacent parks and retaining native, drought tolerant species would be consistent with the co-benefit policies established in the PMP that encourage investments in recreational trails that provide critical connections between communities and parks and support the planting of drought tolerant trees (PMP policies CO3 and CO5).

The proposed CPU also establishes an interconnected and cohesive pedestrian and bicycle network that will implement the PMP's goal to encourage a citywide network of safe, active recreational links that connect people with parks and public spaces. The proposed pedestrian and bicycle facilities (see Figures 3-1 and 3-2 of the proposed CPU) connect to parks and recreational facilities throughout the CPU area and also provide opportunities for recreation. Furthermore, policies in the Mobility Chapter of the proposed CPU would support the provision of a continuous and safe bicycle network that emphasizes connectivity with parks and the enhancement of pedestrian and bicycle access to open space lands and natural recreational areas, consistent with PMP policies MR1 and CO9. Additionally, the proposed CPU includes an Urban Forestry Plan (see Figure 7-2 of the proposed CPU) which would support implementation of the PMP equity policy of improving regional air quality by planting drought resilient and native trees to sequester carbon and reduce the urban heat island effect (PMP policy E8).

Therefore, the proposed CPU would not be inconsistent with or conflict with environmental goals or objectives of the PMP such that it would result in an indirect or secondary environmental impact. Impacts would be less than significant.

Local Coastal Program

Portions of the Mira Mesa community in the northwestern part of the CPU area (adjacent to Los Peñasquitos Canyon) are located within the Coastal Zone, and the Local Coastal Program (LCP) for these Coastal Zone areas is integrated into the proposed CPU. The proposed CPU includes a policy

and regulatory framework that addresses land use and public access and recreation within the Coastal Zone. The Land Use & Economic Prosperity Chapter of the proposed CPU provides a land use plan that retains key employment lands while creating flexibility in other areas for compatible live/work/play villages (see Figure 3-2). This development strategy, which focuses future development into compact, walkable Urban Villages that include housing, public parks, jobs, services, and amenities to reduce environmental impacts, is consistent with the goal of the Coastal Act to ensure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state (PRC Section 30001.5(b)).

The proposed CPU also identifies potential trails in Table 6-2 which would provide additional recreational opportunities in the City's open space areas located in the Coastal Zone, and includes policies which promote open space conservation, support the connection of adjacent communities to trails and trail-adjacent parks, and support the preservation of the scenic qualities of the surrounding coastal and canyon viewshed areas within scenic overlooks (policies 6.7, 6.9, and 6.17). The proposed improvements and policies would be consistent with the goal of the Coastal Act to maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners (PRC Section 30001.5(c)). The Mobility Chapter of the proposed CPU includes additional policies that would support this goal like policy 3.8, which supports enhanced pedestrian and bicycle access to open space lands, natural recreational areas, and parks. The proposed CPU also includes SDRs in its Urban Villages and CPIOZ Chapter which would facilitate the development of urban village parks, urban pathways, pedestrian pathways, linear parks, and trails and trail amenities in the proposed Urban Village areas. Thus, the proposed CPU would not result in an inconsistency or conflict with the environmental goals, objectives, or guidelines of the Local Coastal Program which, as a result, could cause an indirect or secondary environmental impact. Impacts would be less than significant.

3Roots San Diego Master Plan and Stone Creek Master Plan

The proposed CPU's land use framework would accommodate the development proposed in the CPU area's Master Plans. The planned 3Roots San Diego Master Plan and the proposed Stone Creek Master Plan are shown on Figure 3-3 of this PEIR and Figure 8-1 of the proposed CPU. The proposed CPU incorporates the zoning, parks, bicycle paths and trails approved by the City Council as part of the 3Roots San Diego Master Plan, providing continuity between the 3Roots San Diego Master Plan and the proposed CPU. Thus, the proposed CPU would be consistent with the 3Roots San Diego Master Plan.

The proposed CPU also includes policies that support the development proposed in the draft Stone Creek Master Plan, such as policy 4.5 which supports the future siting of a school within the Stone

Creek neighborhood, as identified in the proposed Stone Creek Master Plan, and policy 6.9 which directs the City to connect adjacent communities to trails and trail adjacent parks by extending existing trails or providing new ones, such as the planned Stone Creek Rim Trail. Table 6-2 of the proposed CPU identifies the future development of the Stone Creek Central Park and Stone Creek Westside Gardens as proposed in the draft Creek Master Plan, and also identifies the future Stone Creek Rim Trail which will loop through the Stone Creek neighborhood and connect with the Miramar Gateway Trail in the Miramar Gateway Urban Village. Therefore, the proposed CPU would accommodate the development proposed in the draft Stone Creek Master Plan. The proposed CPU would not result in an inconsistency or conflict with the environmental goals, objectives, or guidelines of the CPU area's Master Plans which, as a result, could cause an indirect or secondary environmental impact. Impacts would be less than significant.

Los Peñasquitos Canyon Preserve Master Plan

The Los Peñasquitos Canyon Preserve Master Plan was adopted by the City Council in 1998. The Los Peñasquitos Canyon Preserve Master Plan outlines recreational and educational opportunities and the preservation and management of unique natural and cultural resources. The Los Peñasquitos Canyon Preserve is jointly owned and administered by the City and County of San Diego. While not a part of the CPU area, the Los Peñasquitos Canyon borders the CPU area to the north and provides opportunities for passive recreation, such as the westerly entrance to the Los Peñasquitos Canyon Preserve that connects the Mira Mesa community to an existing network of trails. The proposed CPU includes planned trail connections to enhance access to the open space resources, including a new trailhead pocket park connection to Los Peñasquitos Canyon Preserve at Calle Cristobal (Figure 2-19). The proposed CPU seeks to maintain the existing open space while also providing community residents access to the natural resources the community offers. Thus, the proposed CPU would be consistent with the goals and recommendations of the Los Peñasquitos Canyon Preserve Master Plan. Impacts would be less than significant.

SANDAG 2050 Regional Transportation Plan

The planned land uses and zoning for the proposed CPU would be consistent with the goals of the 2050 Regional Transportation Plan (RTP), which emphasizes developing compact, walkable communities close to transit connections with a focus on smart growth and a deemphasis on vehicle travel. The RTP includes planned transportation improvements in the CPU area, including a Bus Rapid Transit line running along the center median of the proposed Carroll Canyon Road extension in the 3Roots Master Plan area. Consistent with the planned Bus Rapid Transit line, the proposed CPU includes policies in Chapter 3, Mobility, to develop SMART corridors and Flex Lanes to encourage accessible and efficient transit options (policies 3.19 and 3.30). The proposed CPU also proposes enhancing other multimodal facilities to connect residents to transit, places of

employment, and residential areas. The planned land use designations and development strategy proposed in the CPU is consistent with the Sustainable Communities Strategy that was adopted as part of the 2050 RTP that seeks to guide the San Diego region to develop in a more compact, transit-oriented pattern. As such, implementation of the proposed CPU would not conflict with or create inconsistencies with the 2050 RTP, and impacts would be less than significant.

Issue 2: Would the project be inconsistent or conflict with the provisions of the City's MSCP Subarea Plan or other approved local, regional, or state habitat conservation plan?

Multiple Species Conservation Plan Subarea Plan

The City's Multiple Species Conservation Plan (MSCP) Subarea Plan (SAP) covers core biological resource areas identified as the City's Multi-Habitat Planning Area (MHPA). The MHPA is the area within the City from which the permanent MSCP preserve is assembled and managed for its biological resources. The majority of the CPU area's open space is located within the MHPA (see Figure 2-4 of this PEIR). These open space areas contain various sensitive vegetation types, ranging from southern riparian scrub to Diegan coastal sage scrub and southern mixed chaparral. Within the MHPA, the MSCP SAP establishes restrictions limiting future development to protect and ensure the viability of covered species, as well as to preserve a network of open space and habitat in San Diego. Future development in the CPU area would be required to comply with the MSCP SAP. The MSCP SAP allows compatible public recreation were applicable. The proposed CPU includes trail improvements connecting developed areas to open space areas, planned in compliance with the MSCP's conservation guidelines.

The MSCP SAP also includes the MHPA Land Use Adjacency Guidelines, and consistency with these guidelines would be evaluated and implemented at the project level. Future development under the proposed project would be required to adhere to the MHPA Land Use Adjacency Guidelines as part of the planning and land use entitlement process. Therefore, the proposed CPU would not conflict with the provisions of the City's MSCP SAP and impacts would be less than significant. See Section 5.2, Biological Resources, of this PEIR for further discussion of the proposed CPU's consistency with the MSCP SAP.

Vernal Pool Habitat Conservation Plan

The City's Vernal Pool Habitat Conservation Plan (VPHCP) (City of San Diego 2017) was prepared to provide an effective framework to protect, enhance, and restore vernal pool resources in specific areas within the City's jurisdiction. The VPHCP expands upon the City's MHPA preserve area to enable future conservation of additional lands with vernal pool resources. The CPU area is located within the North Planning Unit of the VPHCP Area. Several vernal pools are located on isolated parcels on mesa-tops throughout the community that are protected by the VPHCP (see Section

2.2.2.1 of this PEIR for more detail about vernal pools within the CPU area). Policy 6.13 of Chapter 6, Parks, Recreation, and Open Space, states the City would work cooperatively with property owners to preserve and manage vernal pools in accordance with the VPHCP. Future development projects within the CPU area would be reviewed for consistency with the conservation goals outlined in the VPHCP. Therefore, the proposed CPU would not conflict with the provisions of the City's VPHCP and impacts would be less than significant. See Section 5.2, Biological Resources, of this PEIR for further discussion on the proposed CPU's consistency with the VPHCP.

Issue 3: Would the project result in land uses which are not compatible with an adopted ALUCP?

The proposed CPU's Land Use and Economic Prosperity policies directly address ensuring compatibility of future development with the Airport Land Use Compatibility Overlay Zone of the SDMC, which codifies the land use policies of the applicable ALUCP. Future development associated with the proposed project would be required to comply with all requirements of the Airport Land Use Compatibility Overlay Zone. The entirety of the CPU area is located within the MCAS Miramar ALUCP. The MCAS Miramar ALUCP does not allow residential use in noise contour 65 Community Noise Equivalent Level or higher, or in Accident Potential Zone (APZ) 1 or 2. The planned land uses and zones proposed in the CPU reflect this restriction and the proposed residential land uses are compatible with the overlay zone. Future development would be reviewed by the City and/or the ALUC for consistency with the MCAS Miramar ALUCP requirements on a project-by-project basis. Compliance with these requirements would avoid significant impacts associated with safety or noise overlay zone land use conflicts.

The City requires a Federal Aviation Administration determination of no hazard to navigation for both ministerial and discretionary projects that exceed the Part 77 Notification height or horizontal distances and surface limits prior to approving or recommending approval as addressed in *Development Services Department Information, Bulletin 520*. Additionally, future projects developed within the CPU area would be required to comply with MCAS Miramar ALUCP criteria related to airspace protection boundaries.

For portions of the CPU area within the overflight notification area for MCAS Miramar, an overflight notification agreement must be recorded with the Office of the County Recorder for any new dwelling unit. The recordation of an overflight notification agreement is not necessary where the dedication of an avigation easement is required. Alternative methods of providing overflight notification are acceptable if approved by the Airport Land Use Commission (ALUC). Future development within the CPU area would be subject to compliance with these requirements.

Implementation of the proposed CPU would be consistent with the requirements of the MCAS Miramar ALUCP as future development within the CPU area would be subject to the requirements of the ALUC, Federal Aviation Administration, and the City. Therefore, impacts related to conflicts or inconsistencies with an adopted ALUCP would be less than significant.

Issue 4: Would the project physically divide an established community?

Generally, the entire CPU area is built out with distinct residential and industrial/business park areas. Residential development is focused more in the northeastern portion of the CPU area, while industrial and office space is focused more in the southwestern portion. The development strategy has been historically based predominantly around superblocks and automobile transportation infrastructure.

The proposed CPU includes changes to land use designations and zones in certain existing development areas that already contain employment land uses or residences. By identifying specific development areas, the proposed CPU encourages mixed-use growth in areas that are already sources of jobs and existing infrastructure. Proposed industrial land uses are focused in the southwestern portion of the CPU area, while proposed residential land uses are located in the central and northern portions of the CPU area, consistent with the existing development pattern. Proposed roadway improvements included in the CPU would occur along existing roadways to implement complete streets and to improve efficient circulation for vehicles and transit (CPU policy 3.27). The proposed roadway extension of Carroll Canyon Road would provide access to the 3Roots Master Plan area, consistent with the approved 3Roots Master Planned Development Permit. The planned roadway would be a primary arterial road, providing key connection between the planned development of the 3Roots San Diego Master Plan area, proposed Stone Creek Master Plan area, and the existing Mira Mesa community. Therefore, the proposed roadway extension would not divide the existing community. The proposed CPU does not propose land use changes or policies that would conflict with the development of those communities.

The proposed growth pattern in the CPU would enhance the existing development pattern with mixed-use Urban Villages that provide job centers connected with pedestrian, bicycle, and transit facilities to residences, commercial development, and recreational facilities. The proposed CPU would encourage cohesive development as the Mira Mesa community grows. Future physical development would be reviewed for consistency with land use regulations on a project-by-project basis to prevent community division. As such, the proposed CPU would not divide an existing community, and impacts would be less than significant.

5.8.5 SIGNIFICANCE OF IMPACT

Issue 1: Conflicts with Applicable Plans

The proposed CPU would serve to implement General Plan policies at a community-specific level, and is generally consistent with the goals and policies of each element of the General Plan. Additionally, the proposed CPU would not conflict with the environmental goals of the Land Development Code and is consistent with the other applicable land use planning documents that address land use, resource management, and development in the Mira Mesa community. Development that implements the proposed CPU would be required to comply with the Historical Resources Regulations. The amendment to the Historical Resources Guidelines included with the CPU that will add Tier 2 and Tier 3 communities to the list of areas exempted from review of structures 45 years old or older is supported by the findings of the Focused Reconnaissance Survey and is permitted by Section 143.0212 of the Historical Resources Regulations and the Historical Resources Guidelines. Thus, implementation of the proposed project would not conflict with the City's Historical Resources Regulations. Thus, impacts related to conflicts with applicable planning documents would be less than significant.

Issue 2: Conflicts with the MSCP Subarea Plan and VPHCP

The majority of open space in the CPU area is within the MHPA. The proposed CPU would incorporate the resource protection goals and policies outlined in the MSCP SAP and VPHCP. Future development in the CPU area would also be required to comply with the MHPA Land Use Adjacency Guidelines to prevent conflict with preservation of the MHPA. Impacts would be less than significant.

Issue 3: Conflicts with an Adopted ALUCP

The entirety of the CPU area is within either AIA Review Area 1 or Review Area 2 of the MCAS Miramar ALUCP. Future development associated with the proposed CPU would be required to comply with all requirements of the Airport Land Use Compatibility Overlay Zone, and would be reviewed by the City and/or the ALUC for consistency with the ALUCP requirements on a project-by-project basis. Compliance with land use compatibility regulations would ensure the proposed project would not conflict with an adopted ALUCP, and impacts would be less than significant.

Issue 4: Community Division

The proposed CPU would encourage future physical development to occur in mixed-use urban villages centered around existing development areas. The proposed CPU would be consistent with the existing development pattern by maintaining residential neighborhoods and industrial areas, while facilitating connectivity of employment opportunities, commercial centers along major

thoroughfares, and residential or mixed-use neighborhoods. As such, the proposed CPU would not physically divide a community and impacts would be less than significant.

5.8.6 MITIGATION, MONITORING, AND REPORTING

Land use impacts associated with the proposed CPU would be less than significant. Thus, no mitigation is required.

5.9 NOISE

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to noise that could result from implementation of the Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Information in this section is based, in part, on the *Noise Existing Conditions and Impact Analysis Report*, prepared by Scout Environmental which is included as Appendix I of this PEIR.

5.9.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed description of existing noise conditions within the Mira Mesa Community Plan Update (CPU) area is contained in Section 2.2.9 of this PEIR. Section 4.9 of this PEIR includes a summary of the regulatory framework relative to noise.

5.9.2 METHODOLOGY

Future projects under the proposed CPU that involve facilities, such as recreation centers, fire stations, etc., would generate stationary noise potentially affecting residents and other receptors near the facilities. Generally, future development or improvements in the CPU area involving construction would generate noise during construction. At this time, there is not sufficient detail (e.g., specific site plans and project level design) to analyze specific noise impacts at individual project sites. Therefore, this analysis discusses noise impacts programmatically such that specific impacts can be identified during the design stage of a project based upon the project's proximity to the nearest noise receptor.

Stationary Noise

Stationary noises are the noises emanating from or within a facility or building. Examples of stationary noises would be heating, ventilation, and air conditioning (HVAC) units, industrial equipment, parking lot operations, emergency generators, and recreational activities. Stationary noises are generated from a fixed location and are considered "point sources" from a noise analysis perspective. Noise from point sources decrease as the distance between the source and the receptor increases. The rate of decrease, or attenuation, is typically 6 A-weighted decibels (dBA) for each doubling of the distance (i.e., a compressor that has a noise level of 78 dBA at 50 feet reduces to 72 dBA at 100 feet, 66 dBA at 200 feet, and 60 dBA at 400 feet), but this attenuation can be increased by topographic differences or by intervening structures or vegetation.

Construction Noise

Construction noise is generated by the operation of heavy equipment, use of power tools, and impact of tools on building materials. Construction noise is temporary and short-term in duration. During construction, use of heavy equipment typically occurs sporadically throughout the day. Table 5.9-1 provides a list of representative samples of construction equipment and associated noise levels, adjusted for the percentage of time the equipment would typically be operated at full power at a construction site. Construction noise levels vary greatly depending on the construction process, type and condition of equipment used, and layout of the construction site. Overall, a construction site's noise levels are governed primarily by the noisiest pieces of equipment, impact devices (i.e., jackhammers, pile drivers).

Table 5.9-1
Samples of Construction Noise Equipment

Equipment Description	Impact Device[1]	Acoustical Usage Factor[2] (%)	Actual Measured Lmax at 50 feet[3] (dBA)
All Other Equipment > 5 HP	No	50	N/A
Backhoe	No	40	78
Clam Shovel (dropping)	Yes	20	87
Compactor (ground)	No	20	83
Compressor (air)	No	40	78
Concrete Mixer Truck	No	40	79
Concrete Saw	No	20	90
Crane	No	16	81
Dozer	No	40	82
Dump Truck	No	40	76
Excavator	No	40	81
Front End Loader	No	40	79
Generator	No	50	81
Grader	No	40	N/A
Impact Pile Driver	Yes	20	101
Jackhammer	Yes	20	89
Pavement Scarifier	No	20	90
Paver	No	50	77
Roller	No	20	80
Scraper	No	40	84
Tractor	No	40	N/A
Vibratory Pile Driver	No	20	101

Source: Department of Transportation (DOT) 2006
Notes: HP = horsepower; N/A = not applicable; Lmax = maximum noise level; dBA = A-weighted decibel

[1] Indication of whether or not the equipment is an impact device.
[2] The acoustical usage factor refers to the percentage of time the equipment is running at full power on the job site and is assumed at a typical construction site for modeling purposes.
[3] The measured "Actual" noise level at 50 feet for each piece of equipment based on hundreds of noise measurements performed on Central Artery/Tunnel, Boston, Massachusetts work sites.

Vibration

Vibrations are movement of the ground or air caused by explosions, construction work, railway and road transport, or other forces causing the earth to move. These vibrational motions are measured in terms of peak particle velocity (PPV). Construction activities such as pile driving, demolition activities, blasting, and other earth-moving operations have the potential to cause ground vibrations that may cause structural damage to adjacent buildings. Unless there are extreme flaws in pavement surfaces, heavy truck traffic on busy highways rarely creates vibrations strong enough to cause damage, though occasionally can generate human annoyance. Table 5.9-2 shows various vibration levels and corresponding effects expressed in terms of PPVs.

Transient vibration impacts to buildings vary depending on the type and structural integrity of the buildings. According to the Swiss Association of Standardization Vibration Damage Criteria, transient vibration limits are a little more than double the continuous vibration limits (California Department of Transportation [Caltrans] 2013).

Table 5.9-2
Vibration Effects of Continuous and Transient Operations

Vibration Amplitude Levels (PPV - Peak Particle Velocity)				Human Reaction (Continuous and Transient)	Effect on Buildings
Continuous		*Transient*			
mm/s	*in/sec*	*mm/s*	*in/sec*		
0.15–0.30	0.006–0.019	0.90	0.035	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	6.10	0.24	Vibrations readily perceptible	Recommended upper amplitude of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	22.8	0.9	Amplitude at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	—	—	Vibrations annoying to people in buildings (this agrees with the amplitudes established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage.
10–15	0.4–0.6	50.8	2.0	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater amplitude than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

Source: Caltrans 2013.
Notes: mm/s = millimeters per second; in/sec = inches per second

5.9.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to noise are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's

CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant noise impact could occur if implementation of the proposed project would:

Issue 1: Result in or create a significant increase in the existing ambient noise levels;

Issue 2: Result in an exposure of people to current or future transportation noise levels which exceed guidelines established in the Noise Element of the General Plan;

Issue 3: Result in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP;

Issue 4: Result in the exposure of people to noise levels which exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code;

Issue 5: Result in the exposure of people to significant temporary construction noise; or

Issue 6: Result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.Thresholds used to determine the significance of noise impacts are based on standards in the General Plan Noise Element and the Noise Abatement and Control Ordinance (San Diego Municipal Code [SDMC] Section 59.5.0101 et seq.) as described in Section 4.9.2 of this PEIR.

While the City has not established vibration and groundborne noise standards, Federal Transit Administration and Caltrans publications provide guidance for the analysis of environmental impacts due to groundborne noise and vibration relating to transportation and construction projects. A significant vibration impact could occur where structures or human receivers would be exposed to the respective damage and annoyance thresholds, measured in PPV, listed in Table 5.9-3, Maximum Vibration Levels for Construction Equipment for Potential Damage and Annoyance.

Table 5.9-3
Maximum Vibration Levels for Construction Equipment for Potential Damage and Annoyance (PPV in/sec)

	Potential Damage Thresholds		**"Strongly Perceptible" Annoyance Criteria**	
Structure Type	*Transient Sources*	*Continuous/Frequent Intermittent Sources*	*Transient Sources*	*Continuous/Frequent Intermittent Sources*
Historic and some old buildings	0.5	0.25	0.9	0.1
Older residential structures	0.5	0.3		
New residential structures	1.0	0.5		

Table 5.9-3
Maximum Vibration Levels for Construction Equipment for Potential Damage and Annoyance (PPV in/sec)

Structure Type	Potential Damage Thresholds		"Strongly Perceptible" Annoyance Criteria	
	Transient Sources	*Continuous/Frequent Intermittent Sources*	*Transient Sources*	*Continuous/Frequent Intermittent Sources*
Modern industrial and commercial buildings	2.0	0.5		

Source: Caltrans 2013.
Notes: PPV = peak particle velocity ; in/sec = inches per second
Transient sources generate a single vibratory event, such as blasting. Continuous/frequent sources include pile driving equipment and other construction activities generating multiple vibration-intensive events across a given period.

5.9.4 IMPACTS

Issue 1: Would the project result in or create a significant increase in the existing ambient noise levels?

Issue 2: Would the project result in an exposure of people to current or future transportation noise levels which exceed guidelines established in the Noise Element of the General Plan?

The primary noise generator in the CPU area is vehicular traffic. Therefore, any permanent increase in ambient noise levels would be primarily associated with roadway traffic noise levels. Increases related to stationary or operational noise sources would be subject to City standards and are discussed below under Issue 4.

Existing noise levels were measured in areas proposed for future development intensification and are summarized in Section 2.2.9 of this PEIR. Future development implemented under the proposed CPU would increase traffic along local roadways due to increased density and intensity of uses, including residences.

A significant noise impact could occur if buildout of the project would result in ambient noise levels that exceed the City's significance threshold for traffic noise as described in Table 5.9-4 Significance Thresholds for Traffic Noise of this PEIR. If the existing noise conditions exceed the City's significance threshold for traffic noise, a significant noise impact could occur if development per the project more than doubles (increases by more than 3 Community Noise Equivalent Level [CNEL]) the existing noise level. Vehicular traffic and associated traffic noise in the CPU area would generally

increase with buildout under the proposed CPU (refer to Section 5.12, Transportation, for additional details regarding traffic generation of the proposed CPU).

Table 5.9-4 Significance Thresholds for Traffic Noise

Type of Use that would be Impacted by Traffic Noise	Interior Space (dBA CNEL)	Exterior Useable Space[1] (dBA CNEL)	General Indication of Potential Significance
Single-family detached	45 dB	65 dB	Structure or outdoor useable area[2] is less than 50 feet from the center of the closest (outside) lane on a street with existing or future ADTs greater than 7,500 vehicles
Multi-family, schools, libraries, hospitals, day care centers, hotels, motels, parks, convalescent homes	Development Services Department ensures 45 dB pursuant to Title 24	65 dB	
Offices, churches, businesses, professional uses	n/a	70 dB	Structure or outdoor useable area is less than 50 feet from the center of the closest lane on a street with existing or future ADTs greater than 20,000 vehicles
Commercial, retail, industrial, outdoor spectator sports uses	n/a	75 dB	Structure or outdoor useable area is less than 50 feet from the center of the closest lane on a street with existing or future ADTs greater than 40,000 vehicles

Source: City of San Diego 2022

Notes: ADT = average daily traffic; dBA CNEL = A-weighted decibels average sound level for community noise equivalent level

1 If a project is currently at or exceeds the significance thresholds for traffic noise described above and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.

2 Exterior usable areas do not include residential front yards or balconies unless the areas such as balconies are part of the required usable open space calculation for multi-family units.

Additionally, a significant noise impact could occur if a new development's exterior use areas or interior areas are exposed to noise levels in excess of the Land Use - Noise Compatibility Guidelines (Table 4-2) established in the City's General Plan Noise Element. The conditionally compatible noise levels are 65 CNEL for single-family residential, 70 CNEL for multifamily residential, and 75 CNEL for commercial-retail, industrial, and for active and passive recreation. For indoor uses at a conditionally compatible land use, exterior noise must be attenuated to 45 CNEL for single and multi-family residential and 50 CNEL for commercial-retail.

In general, the proposed CPU would result in the development of residential and other noise sensitive land use (NSLU) along major transit corridors that would result in the exposure of sensitive noise receptors to higher levels of traffic noise. In comparison with existing conditions, future traffic noise levels would likely increase by more than 3 CNEL along major roadway segments, such as Mira Mesa Boulevard, Miramar Road, Camino Santa Fe, and Camino Ruiz. Impacts of this increase on existing and future receptors would vary depending on the land use type. For instance, Miramar Road mostly features industrial land uses that are less sensitive to noise and are assigned a land use/noise compatibility level of 75 CNEL. Noise increases are not likely to exceed this compatibility threshold. The increase in traffic noise along other roads traversing residential uses and institutional uses (such as schools), including Mira Mesa Boulevard, Camino Santa Fe, and Camino Ruiz, may exceed the applicable lower threshold.

Although the General Plan Noise Element has an exterior noise compatibility level of 60 CNEL or less for residential uses, noise levels up to 65 CNEL for single-family residential and up to 70 CNEL for multi-family residential are considered conditionally compatible, since interior noise levels are required to be reduced to 45 CNEL through building attenuation measures pursuant to Title 24 of the California Building Code's (CBC's) building construction requirements. Proposed noise sensitive land uses (NSLUs) under the CPU would be primarily multi-family or mixed-use in nature. No new single-family residences are anticipated. Proposed CPU Policy 2.22 provides direction regarding site design strategies and noise reduction measures for new residential development within 500 feet of freeways. Proposed CPU Policy 2.24 also directs the City to ensure that future development in the CPU area is consistent with the policies in the Airport Land Use Compatibility Overlay Zone of the SDMC for Marine Corps Air Station (MCAS) Miramar, such as those relating to noise contours. Additionally, policies in the General Plan Noise Element (e.g. policies NE-A.2, NE-A.3 (PEIR Section 4.9.2.1), and NE-B.1) require the reduction of traffic noise exposure because these policies standards for the siting of sensitive land uses, while Title 24 of the CBC requires that multi-family residential development projects must demonstrate that interior noise levels would be reduced to acceptable levels (45 CNEL or less) through submission and approval of a Title 24 Compliance Report. General Plan Noise Element policy NE-A.4 requires an acoustical study consistent with the Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the City's Land Use – Noise Compatibility Guidelines.

Implementation of the proposed CPU would result in a substantial increase in ambient noise due to traffic and NSLUs could be exposed to vehicular traffic noise levels in excess of the City's Land Use – Noise Compatibility Guidelines (Table 4-2). Thus, impacts would be potentially significant.

Issue 3: Would the project result in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP?

A significant impact could occur if implementation of the proposed CPU would result in land uses that are not compatible with aircraft noise levels as defined by an adopted Airport Land Use Compatibility Plan (ALUCP). Generally, NSLUs are compatible with aircraft noise levels up to 60 CNEL. Aircraft noise is evaluated based on the noise contours developed by the San Diego County Regional Airport Authority and provided in the ALUCPs. Portions of the CPU area are located within the 60, 65, 70, and 75 CNEL contours of the MCAS Miramar ALUCP, as shown in Figure 2-17 of this PEIR.

New residential, as well as urban employment village and business park, land use designations that allow for residential uses are proposed within the 60 CNEL contours associated with MCAS Miramar. Although the General Plan Noise Element has an exterior noise compatibility level of 60 CNEL or less for residential uses, noise levels up to 70 CNEL for multi-family residential are considered conditionally compatible, as long as interior noise levels can be attenuated to 45 CNEL or less. Because new residential development may be exposed to exterior noise levels from aircrafts that exceed the Land Use – Noise Compatibility Guidelines, aircraft noise impacts would be potentially significant.

Issue 4: Would the project result in the exposure of people to noise levels which exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code?

A significant impact could occur if implementation of the proposed CPU would result in the exposure of people to noise levels that exceed the one-hour average sound level property line limits established in the Noise Abatement and Control Ordinance of the SDMC (Section 59.5.0401 et seq.). The 1-hour sound level limits are the maximum noise levels allowed at any point on or beyond the property boundaries from stationary sources located on the property.

Implementation of the proposed CPU would result in pedestrian-oriented mixed-use development where residential uses would be located in proximity to commercial, office, and technology-related uses that could expose sensitive receptors to elevated noise levels. Noise associated with these types of land uses is generally produced by mechanical equipment, such as heating, ventilation, and air conditioning (HVAC) units and emergency electrical generators, parking lot activities, public gathering spaces, and loading dock operations. Noise generated by residential and commercial uses is generally short-lived and intermittent, while noise generated by auto-oriented commercial and industrial uses is generally sporadic, highly variable, and spatially distributed.

The land uses proposed by the CPU would be similar to the land uses that currently exist in the CPU area, with a greater amount of residential uses and at higher densities. Residential uses typically do not generate substantial noise from stationary sources. Because noise levels in the CPU area are

dominated by vehicle traffic on freeways and heavily traveled roadways, noise levels from stationary sources throughout the CPU area would not be expected to substantially increase the hourly or daily average sound level with respect to current conditions. Although noise-sensitive residential uses would be exposed to noise associated with commercial, office, and industrial related land uses, future development under the proposed CPU would be required to demonstrate compliance with the Noise Abatement and Control Ordinance to ensure noise compatibility between various land uses. The City regulates specific noise level limits allowable between land uses including the requirement for noise studies (General Plan Noise Element Policy NE-A.4), limits on hours of operation for various noise-generating activities (SDMC Section 59.5.0401), and standards for the compatibility of various land uses with the existing and future noise environment (General Plan Noise Element Table NE-3). Through enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts would be less than significant.

Issue 5: Would the project result in the exposure of people to significant temporary construction noise?

A significant impact could occur if implementation of the proposed CPU would result in the exposure of people to substantial temporary construction noise. Although no specific construction or development is proposed at this time, construction noise impacts could occur as future development within the CPU area occurs. Due to the developed nature of the CPU area, there is a high likelihood that construction activities could take place adjacent to existing and future NSLUs, thereby exposing sensitive receptors to construction noise.

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction. Construction noise would be short-term and would primarily consist of noise from diesel-powered off-road equipment and haul trucks. Typical construction equipment noise levels are shown in Table 5.9-1 of this PEIR. Operation of construction equipment could have the potential to generate high noise levels for construction activities, depending on the type, duration, and location of the activity. Construction activities related to implementation of the proposed CPU would not take place all at once; however, future development under the proposed CPU could have the potential to temporarily generate construction noise resulting in short-term elevated noise levels to nearby NSLUs.

The City regulates construction noise through enforcement of SDMC Section 59.5.0404, which details standards related to permitted hours and days of construction activity. The City's Noise Ordinance prohibits construction noise levels greater than 75 dBA energy equivalent level (12-hour) at any residential property line during the 12-hour period from 7:00 a.m. to 7:00 p.m. Furthermore, the City imposes conditions for approval of building or grading permits; however, there is also a procedure in place that allows for a permit to deviate from the City's Noise Ordinance. Due to the highly developed nature of the CPU area and the proposed increase in residential uses, sensitive receptors could

potentially be located in proximity to construction sites. Therefore, future construction activities could expose sensitive receptors to substantial noise levels. Impacts would be potentially significant.

Issue 6: Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The proposed CPU does not include land uses or other improvements that would act as a long-term source of groundborne vibration. Some construction activities are known to generate excessive groundborne vibration. Construction activities related to implementation of the proposed CPU would not take place all at once; however, future construction activities would have the potential to temporarily generate vibration resulting in a short-term effect on nearby vibration-sensitive land uses. Sources of vibration during the construction activities include the potential use of pile driving equipment and smaller equipment such as a vibratory roller. According to Caltrans' *Transportation and Construction Vibration Guidance Manual*, "strongly perceptible" groundborne vibration is defined as equal to or exceeding 0.1 in/sec PPV. Construction activities within 200 feet and pile driving within 600 feet of a vibration-sensitive use, such as those that include machinery in manufacturing and processing or medical laboratory equipment, could be potentially disruptive to vibration-sensitive operations (Caltrans 2013). Proposed land use designations under the CPU could accommodate vibration-sensitive uses, which could be exposed to substantial vibration generated by vibratory construction equipment operations. Therefore, construction-related vibration impacts would be potentially significant.

5.9.5 SIGNIFICANCE OF IMPACT

Issue 1: Ambient Noise;

and

Issue 2: Land Use Compatibility

The primary source of noise in the CPU area is traffic. Implementation of the proposed CPU would introduce new land uses that would generate traffic that would result in substantial noise generation. Because implementation of the proposed CPU would result in a substantial increase in ambient noise due to traffic and NSLUs could be exposed to vehicular traffic noise levels in excess of the City's Land Use–Noise Compatibility Guidelines, impacts would be significant.

Issue 3: Airport Noise

Although the General Plan Noise Element has an exterior noise compatibility level of 60 CNEL or less for residential uses, noise levels up to 70 CNEL for multi-family residential are considered

conditionally compatible, as long as interior noise levels can be attenuated to 45 CNEL or less. Because new residential development may be exposed to exterior noise levels from aircrafts that exceed the Land Use – Noise Compatibility Guidelines, aircraft noise impacts would be significant.

Issue 4: On-site Generated Noise – San Diego Municipal Code

The City regulates specific noise level limits allowable between land uses including the requirement for noise studies, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. Through enforcement of the City's Noise Abatement and Control Ordinance, impacts would be less than significant.

Issue 5: Construction Noise

Construction noise attributed to future projects in the CPU area would be regulated by the SDMC, and construction noise impacts due to the implementation of the proposed project would be determined by a specific project's compliance with the limits specified in the SDMC. Future infill projects, such as those allowed under the proposed project, may be located in close proximity to existing and future NSLUs. Construction activities related to implementation of the proposed project could potentially generate short-term noise levels in excess of 75 dBA energy equivalent level (12-hour) at adjacent properties. The ability for future projects to conform to the City's Noise Ordinance cannot be determined at the programmatic level. Noise impacts from construction activities would be significant.

Issue 6: Vibration

New development in the CPU area could include future construction activities that could use vibratory construction equipment and could expose future sensitive receptors to substantial vibration levels. Impacts due to groundborne vibration would be significant.

5.9.6 MITIGATION, MONITORING, AND REPORTING

MM-NOI-1 **Construction Noise - Reduction Measures.** Construction contractors shall implement the following measures to minimize short-term noise levels caused by construction activities. Measures to reduce construction noise shall be included in contractor specifications and shall include, but not be limited to, the following:

Properly outfit and maintain construction equipment with manufacturer-recommended noise reduction devices to minimize construction-generated noise.

Operate all diesel equipment with closed engine doors and equip with factory recommended mufflers.

Use electrical power to operate air compressors and similar power tools.

Employ additional noise attenuation techniques, as needed, to reduce excessive noise levels such as, but not limited to, the construction of temporary sound barriers or sound blankets between construction sites and nearby noise-sensitive receptors.

Notify adjacent noise-sensitive receptors in writing no later than 2 weeks prior to the start of construction of any construction activity such as jackhammering, concrete sawing, asphalt removal, pile driving, and large scale grading operations that would occur within 100 feet of the property line of the nearest noise-sensitive receptor. The extent and duration of the construction activity shall be included in the notification.

Designate a "disturbance coordinator" who shall be responsible for receiving and responding to any complaints about construction noise or vibration. The disturbance coordinator shall determine the cause of the noise complaint and, if identified as a sound generated by construction area activities, shall require that reasonable measures be implemented to correct the problem. Potential measures to address the problem could include, but are not limited to, providing sound barriers or sound blankets between construction sites and the receiver location, locating noisy equipment as far from the receiver as possible, and reducing the duration of the noise-generating construction activity.

MM-NOI-2 **Vibration – Construction Activities.** Future construction activities under the project that are located near vibration-sensitive land uses and require the use of vibratory construction equipment shall implement the following vibration reduction measures to minimize construction-related vibration impacts. Measures to reduce vibration shall be included in contractor specifications and shall include, but not be limited to, the following:

1. Limit the use of vibration-intensive equipment in proximity to sensitive receptors.
2. Install low soil displacement piles (e.g., H-piles) instead of high soil displacement piles (e.g., concrete piles) for pile-driving.
3. Pre-drill for pile-driving.

5.9.7 SIGNIFICANCE AFTER MITIGATION

Issue 1: Ambient Noise;

and

Issue 2: Land Use Compatibility

Traffic noise levels under the proposed CPU are expected to exceed the land use – noise compatibility levels for NSLUs. Therefore, implementation of the proposed CPU would result in a significant increase in noise levels along various segments of major roadways. While existing structures may be retrofitted with acoustically rated windows and walls featuring higher Sound Transmission Class ratings (a measure of exterior noise reduction performance), there is no City procedure in place to ensure that exterior noise affecting existing NSLUs is adequately attenuated to City standards. Additionally, new development projects under the proposed CPU could place sensitive receptors in locations where the exterior noise levels exceed the Land Use – Noise Compatibility Guidelines. Although new development would be subject to Title 24 noise requirements, as well as General Noise Element policies, there is no feasible way to ensure compliance with established noise guidelines at the program-level. Therefore, impacts to existing and proposed NSLUs would be significant and unavoidable. No feasible mitigation is available to reduce this impact to less than significant.

Issue 3: Airport Noise

Title 24 of the CBC requires that projects must demonstrate that interior noise levels would be reduced to acceptable levels (45 CNEL or less) through submission and approval of a Title 24 Compliance Report. General Plan Noise Element policy NE-A.4 requires an acoustical study consistent with the Acoustical Study Guidelines (Table NE-4 of the General Plan) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the City's Land Use – Noise Compatibility Guidelines. However, because new residential development may be exposed to exterior noise levels from aircrafts that exceed the Land Use – Noise Compatibility Guidelines, aircraft noise impacts would remain significant and unavoidable and there are no feasible mitigation measures available.

Issue 5: Construction Noise

Implementation of mitigation measure (MM)-NOI-1 would reduce construction-related noise impacts; however, even with implementation of MM-NOI-1, significant construction noise impacts may still occur because it is not feasible to ensure and enforce implementation for all projects

developed per the proposed project. Construction-related noise impacts would therefore be significant and unavoidable.

Issue 6: Vibration

Implementation of MM-NOI-2 would reduce potential construction vibration-related impacts; however, even with implementation of MM-NOI-2, significant construction vibration-related impacts may still occur because it is not feasible to ensure and enforce implementation for all projects developed per the proposed CPU. Vibration impacts would therefore be significant and unavoidable.

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5.10 PUBLIC SERVICES AND FACILITIES

This section of the Program Environmental Impact Report (PEIR) analyzes potential impacts to public services and facilities that could result from implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Public services are those functions that serve residents on a community-wide basis and include police protection, fire/life safety protection, parks and recreation facilities, schools, and libraries.

5.10.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion and description of existing public services and facilities within the CPU area is contained in Section 2.2.10 of this PEIR. The existing regulatory setting is summarized in Section 4.10 of this PEIR, including applicable public service regulations and ordinances.

5.10.2 METHODOLOGY

Potential impacts resulting from implementation of the proposed CPU were evaluated based on relevant information from the City of San Diego (City) General Plan, San Diego Unified School District (SDUSD), San Diego Police Department (SDPD), San Diego Fire Department, San Diego Municipal Code (SDMC), and the adopted Mira Mesa Community Plan. Based on a review of relevant public facility and safety standards, policies, and population buildout and capacity estimates, the analysis presents the potential for programmatic impacts in broad, qualitative terms as no specific development projects are proposed within the CPU area at this time.

5.10.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to public services and facilities are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant public services and facilities impact could occur if implementation of the proposed project would:

Issue 1: Promote growth patterns resulting in the need for and/or provision of new or physically altered public facilities (including police protection, fire/life safety protection, parks or other recreational facilities, schools, or libraries), the construction of which could cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives;

Issue 2: Result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

Issue 3: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

5.10.4 IMPACTS

Issue 1: Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered public facilities (including police protection, fire/life safety protection, parks or other recreational facilities, schools, or libraries), the construction of which could cause significant environmental impacts in order to maintain service ratios, response times, or other performance objectives?

Police Protection

The CPU area is served by SDPD, which provides police protection, emergency response, and investigative services to the entire city. The majority of the CPU area (central and eastern portions) are within the Northeastern Division of the SDPD. The western portion of the CPU area between Camino Santa Fe and Interstate (I-) 805 is within the Northwestern Division. Each division contains one police station, and the Northeastern division contains two community storefronts. One of these storefronts is located in the CPU area, in a converted portion of the old community library building near Mira Mesa Community Park. The CPU area is patrolled by Beats 242, 243, and 931. Beat 242 covers the CPU area north of Miramar Road from I-15 to Camino Santa Fe. Beat 243 covers the CPU area from Camino Santa Fe to I-805. Beat 931 covers the southern boundary of the CPU area, north of Miramar Road. See Section 2.2.10.1 of this PEIR for more information about existing police facilities.

SDPD strives to achieve the citywide response time goals, as established by the General Plan (Public Facilities Element Policy PF-E.2). These response time guidelines include:

- Priority E Calls (imminent threat to life) within 7 minutes
- Priority 1 Calls (serious crimes in progress) within 12 minutes
- Priority 2 Calls (less serious crimes with no threat to life) within 30 minutes
- Priority 3 Calls (minor crimes/requests that are not urgent) within 90 minutes
- Priority 4 Calls (minor requests for police service) within 90 minutes

The estimated buildout of the proposed CPU would result in an increase in population in the SDPD service area, and could potentially result in a higher demand for police services, affecting police

response times. The proposed CPU does not include any new or expanded police facilities or services at this time. Policies 4.1 and 4.2 of the CPU would support the maintenance of a police storefront within the CPU area and communication between community groups and the SDPD. However, future development under the proposed CPU and subsequent growth and increased demand could result in the need to expand existing police stations or facilities, or increase the number of staff and services provided to the community, which could result in environmental impacts such as disturbance of land and stormwater runoff during construction, and noise or other land use conflicts during operations. At the time future police stations are proposed, they would require a separate environmental review and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of new police stations. However, as the location and need for potential future police stations cannot be determined at this time, it is unknown what specific impacts may occur. Thus, as it cannot be ensured that all impacts associated with the construction and operation of potential future police facilities could be mitigated to a less than significant level, impacts would be potentially significant.

Fire Protection

The CPU area is served by San Diego Fire Department for fire protection and emergency medical services. Three fire stations serve the CPU area: Fire Stations 38, 41, and 44. See Section 2.2.10.2 of this PEIR for further information regarding existing fire protection services and facilities. The General Plan outlines performance measures including response time objectives adopted by the City Council. See Table 2-13 and 2-14 of this PEIR for the performance standards.

The proposed CPU would result in a potential full buildout of 58,741 dwelling units. The population growth and new future development could result in a higher demand placed on fire protection and medical emergency services. The potential increase in demand could result in the need for new or expanded fire stations or facilities, such as additional personnel and truck apparatus, which could result in environmental impacts. To account for anticipated growth and meet existing demand, the proposed CPU includes Policy 4.3, which would support the construction of a fire station near Camino Santa Fe and Miramar Road. This proposed fire station is consistent with a proposed fire station identified in the Public Facilities, Services, and Safety Element of the General Plan. The proposed fire station and any future fire stations would require a separate environmental review and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of new fire stations. However, without project-specific information, it is unknown what specific impacts may occur. Thus, as it cannot be ensured that all impacts associated with the construction and operation of potential future fire stations could be mitigated to a less than significant level, impacts would be potentially significant.

Park Facilities

The CPU area is served by a community park, athletic field house, and aquatics facility, and a number of recreation centers, neighborhood parks, joint-use parks, trails, and open space areas (see Section 2.2.10.3 of this PEIR for more information). Opportunities for additional park land and recreational facilities within the CPU area are anticipated to come primarily through redevelopment of private and public properties. While it is a goal of the City is to obtain land for parks and recreational facilities and potential park sites have been identified in the proposed CPU, vacant land is limited, unavailable, or cost-prohibitive, and the General Plan encourages the development of both traditional parks and flexible public spaces that meet a community's needs, such as linear parks, public plazas and other park typologies.

The performance standards for park space in the City are outlined in the City's Parks Master Plan (City of San Diego 2021). The Parks Master Plan establishes a Recreational Value-Based Park Standard (Value Standard) as the guideline for providing adequate park space (see Section 2.2.10.3 of this PEIR for more information). The Value Standard requires 100 Recreation Value-Based points per 1,000 residents. For the buildout population estimate of approximately 143,000 residents in 2050, approximately 14,300 Recreational Value Points would be required to meet this standard. Existing and planned parks identified in the proposed CPU would total approximately 11,196 Recreational Value Points. In order to meet the goal of 14,300 Recreational Value Points, the proposed CPU identifies additional parks and recreational facilities and includes policies that encourage the development of new park facilities and the enhancement of existing park facilities (policies 6.1 through 6.9). Figure 2-19 of this PEIR and Figure 6-2 of the proposed CPU identifies the existing and proposed recreation centers, aquatics complexes, and other parks and recreation facilities in the CPU area. The proposed CPU also includes policies and SDRs in Chapter 7, Urban Design, and Chapter 8, Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ) which support the development of additional park amenities, such as plazas, linear parks, urban pathways, and other public spaces throughout the CPU area and especially in the Urban Village areas (see policies 7.1, 7.11, 7.15, 8.5 and 8.9, and SDRs 1 through 5). As new housing is developed, parks and recreational amenities may be required as part of the development, as publicly accessible open spaces or public parkland.

The future development of parks and recreational amenities in the CPU area could cause physical environmental impacts. Future park development would be subject to the regulations in existence at the time the park is proposed, as well as the requirements of the General Plan, the Parks Master Plan, and a project-level environmental review when design plans are available. However, as project-specific information is unavailable at this time, it is unknown what specific impacts may occur. Thus, as it cannot be ensured that all impacts associated with the construction and operation of potential

future parks and recreational facilities could be mitigated to a less than significant level, impacts would be potentially significant.

Schools

The CPU area is served by SDUSD, which serves students from kindergarten through 12th grade. See Section 2.2.10.4 and Table 2-15 of this PEIR for each school and their enrollment that serves the CPU area. The anticipated 2050 buildout would result in approximately 58,741 dwelling units. According to the SDUSD, student generation rates are based on the type of project, number of units, bedroom mix, affordable or age-restricted housing components, proximity to schools and other amenities, neighborhood, and other factors. SDUSD does not provide district standards or school-specific generation rates.

Typically, to provide student generation rates for a new project, SDUSD demographers will research similar nearby developments and their student generation rates as a guide for how many students a new development may generate. The proposed CPU, however, is not a specific development project and therefore does not identify specific housing types or bedroom mixes. As such, to estimate the number of students potentially generated by development under the proposed CPU, SDUSD demographers referenced the number of existing dwelling units by type within the CPU area and the number of SDUSD students who currently reside in each housing type to calculate student generation rates. To determine student generation with the most recent year of housing data available (2020), SDUSD demographers used student data from the 2019–2020 school year. Land use data from SanGIS was referenced for housing type. This information is presented in Table 5.10-1, Student Generation Rates from Existing Dwelling Units in the CPU Area.

Table 5.10-1
Student Generation Rates from Existing Dwelling Units in the CPU Area

Housing Type	Number of Existing Dwelling Units (2020)	Number of Students (2019–2020)	Student Generation Rate
Single Family	16,449	K–5: 2,901 6–8: 1,485 9–12: 2,212 **K–12: 6,598**	K–5: 0.176 6–8: 0.090 9–12: 0.135 **K–12: 0.401**
Multifamily	10,060	K–5: 1,251 6–8: 478 9–12: 610 **K–12: 2,339**	K–5: 0.124 6–8: 0.048 9–12: 0.061 **K–12: 0.234**

Source: SDUSD 2022
Note: CPU = Mira Mesa Community Plan Update

Potential student generation rates for future development within the CPU area, which are based on the number of additional dwelling units anticipated under the proposed CPU and the student generation rates presented in Table 5.10-1, are shown in Table 5.10-2, Potential Student Generation Rates from Future Additional Housing in the CPU Area. The generation rates are shown as a range. The low end of the range assumes that future additional dwelling units would generate students at a rate similar to current dwelling units. If future additional dwelling units are substantially different from the current units in terms of student generation, the number of students could be higher, as indicated by the high range.

Table 5.10-2
Potential Student Generation Rates from Future Additional Housing in the CPU Area

Housing Type	Number of Additional Dwelling Units (2050)	Estimated Student Generation Rates	Number of Potential Students
Single Family	621	K–5: 0.176–0.352 6–8: 0.090–0.180 9–12: 0.135–0.270 **K–12: 0.401–0.802**	K–5: 109–218 6–8: 56–112 9–12: 84–168 **K–12: 249–498**
Multifamily	31,611	K–5: 0.124–0.248 6–8: 0.048–0.096 9–12: 0.061–0.122 **K–12: 0.234–0.468**	K–5: 3,920–7,840 6–8: 1,517–3,035 9–12: 1,928–3,857 **K–12: 7,365–14,732**
Total	32,232	—	K–5: 4,029–8,058 6–8: 1,573–3,147 9–12: 2,012–4,025 **K–12: 7,614–15,230**

Source: SDUSD 2022
Notes: CPU = Mira Mesa Community Plan Update; — = not applicable

SDUSD demographers indicated that the potential increase of between approximately 7,614 and 15,230 students from the future additional dwelling units under the proposed CPU would exceed the capacity of current district facilities. Therefore, new or expanded school facilities would be needed.

Government Code Sections 65995 and Education Code Section 17620 authorize school districts to impose facility mitigation fees on new development to address any increased enrollment that may result. Senate Bill 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 provides 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. SDUSD will be responsible for any potential expansion or development of new facilities.

The proposed CPU identifies a potential school site in the proposed Stone Creek Master Plan area, consistent with the draft Stone Creek Master Plan (see Figure 2.18, Existing and Planned Public Services and Facilities, of this PEIR), and includes policy 4.5 which supports coordination with SDUSD to explore options for the provision of pre-kindergarten to 12th grade educational facilities to serve future Mira Mesa students as needed. Therefore, implementation of the proposed CPU would result in the need to develop new or expanded schools in the future, the construction and operation of which could result in physical environmental impacts. New or expanded school projects would be required to undergo project-specific environmental review during project review and approval, at which time environmental impacts would be identified and addressed. However, as the location and need for potential future schools cannot be determined at this time, it is unknown what specific impacts may occur. Thus, as it cannot be ensured that all impacts associated with the construction and operation of potential schools could be mitigated to a less than significant level, impacts would be potentially significant.

Libraries

The City's Library System provides library services to the CPU area. See Section 2.2.10.5 of this PEIR for more information regarding library services. The Mira Mesa Library serves the community, and the Scripps Miramar Ranch Library is located to the east of the CPU area. According to the City's General Plan standards, library branches should serve a resident population of 30,000 within a 2-mile radius. The proposed CPU supports library expansion and/or development of a new library as necessary to accommodate the growing community population (Policy 4.4), but does not propose or recommend specific future library development projects. However, given the anticipated 2050 buildout population, it is possible that new or expanded library facilities could be developed. The future construction of library facilities would be subject to a separate environmental review at the time design plans are available and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of new libraries. However, as the location and need for potential new or expanded library facilities cannot be determined at this time, it is unknown what specific impacts may occur. Thus, as it cannot be ensured that all impacts associated with the construction and operation of potential future libraries could be mitigated to a less than significant level, impacts would be potentially significant.

Issue 2: Would the project result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed CPU would result in a 2050 buildout of approximately 58,741 total dwelling units, approximately 60,314,214 square feet of non-residential development, and approximately 143,000 residents. The estimated population growth for the CPU area in 2050 could increase the use of existing neighborhood and regional parks or recreational facilities, potentially resulting in the physical deterioration of such facilities. The proposed CPU identifies planned parks to support the growing community as discussed in Chapter 6 Parks, Recreation, and Open Space, and Chapter 8 Urban Villages and CPIOZ includes SDRs that require the provision of parks, urban pathways, pedestrian pathways, linear parks, and trails and trail amenities in the proposed Urban Village areas (SDRs 1 through 5). In addition, the policies of the proposed CPU guide the City to coordinate with private developers; acquire private land; repurpose existing lands to encourage park development; preserve, expand, and enhance existing recreational facilities; and consider special activity parks on a case-by-case basis (policies 6.1 through 6.5). As discussed in Issue 1 above, the existing and planned parks would not meet the Value Standard goal for the community upon buildout. Although there are potential future parks and recreation opportunities identified in the CPU area, the deficit in population-based parks and recreation facilities would remain upon implementation of the proposed CPU. The policy framework within Chapter 6 and SDRs in Chapter 8 of the proposed CPU may help to decrease the deficit, but the extent to which the deficit could be reduced cannot be calculated at this time. As such, the anticipated population growth of the community could result in substantial physical deterioration of the neighborhood and regional parks or recreational facilities. Development of future parks and recreational facilities with the CPU area could offset the potential increased use of existing parks and recreational facilities and their associated physical deterioration; however, it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for parks and recreational facilities. Thus, impacts would be potentially significant.

Issue 3: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As discussed in Issues 1 and 2 above, a deficit of population-based recreational facilities would continue to occur within the CPU area upon buildout of the proposed CPU. While the proposed CPU contains policies within Chapter 6, Parks, Recreation, and Open Space (policies 6.1 through 6.5) and SDRs in Chapter 8, Urban Village Areas and CPIOZ to promote the development of future parks (policies 6.1 through 6.5), implementation of the proposed CPU would not result directly in the development of new or expanded parks and recreational facilities. The design, construction and

operation of future parks and recreational facilities within the CPU area would be subject to project-level environmental analysis at the time such facilities are reviewed and approved by the City. Environmental impacts resulting from the construction of future new or expanded recreational facilities would be identified during the project-level analysis. Nevertheless, this impact would be potentially significant as impacts associated with the development of future recreational facilities are not known at this time.

5.10.5 SIGNIFICANCE OF IMPACT

Issue 1: Public Facilities

Implementation of the proposed CPU would not result directly in the construction or operation of new or expanded facilities; however, the future facilities that are proposed in the CPU, as well as the CPU's policy framework and SDRs which support the expansion of public services and facilities in order to adequately serve the growing population in the community, would facilitate the future construction and operation of new or expanded police stations, fire stations, libraries, schools, and parks and recreational facilities. Buildout of the proposed CPU would result in population growth which could increase demand on existing facilities and necessitate the construction of new or expanded facilities in order to maintain public services at the desired performance standards. Future public facilities projects would be subject to a separate environmental review at the time design plans are available and compliance with regulations in existence at that time would address potential environmental impacts related to the construction and operation of these facilities. As the location and need for potential future facilities cannot be determined at this time, it is unknown what specific impacts may occur associated with the future construction and operation of such facilities. Thus, as it cannot be ensured that all impacts could be mitigated to a less than significant level, impacts would remain significant and unavoidable.

Issue 2: Deterioration of Existing Neighborhood Parks and Recreational Facilities

The proposed CPU would result in a buildout of approximately 58,741 dwelling units and a population of approximately 143,000 residents by 2050. In order to maintain the Value Standard established by the City for parks and recreational facilities, the community of Mira Mesa would be required to provide park facilities totaling approximately 14,300 Recreational Value Points upon buildout under the proposed CPU. The existing and planned park facilities at this time total 11,196 Recreational Value Points, leaving a deficit of recreational facilities upon implementation of the proposed CPU. Due to the increase in population and the deficit of appropriate recreational facilities, it is possible the increased use of the facilities could result in substantial physical deterioration. The proposed CPU contains policies and SDRS that support the maintenance of existing facilities, as well as the provision of new facilities as the community grows, which would

serve to reduce the impact. However, it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for recreational facilities. Thus, impacts would remain significant and unavoidable.

Issue 3: Construction or Expansion of Recreational Facilities

Implementation of the proposed CPU would result in a deficit of population-based recreation facilities. While the proposed CPU contains policies and SDRs that would support and require the development of future parks and recreational facilities and identifies planned park facilities in the community, the proposed CPU would not directly result in the construction of these planned facilities. Nonetheless, the proposed CPU's policies and SDRs would facilitate the future development of parks and recreational facilities, the construction and operation of which could result in physical environmental impacts. While these impacts would be assessed during project-level environmental review and projects would comply with regulations in existence at that time to address these impacts, it cannot be ensured that potential significant impacts could be mitigated to less than significant. Therefore, impacts would remain significant and unavoidable.

5.10.6 MITIGATION, MONITORING, AND REPORTING

Buildout of the proposed CPU could result in the need for new police protection facilities, fire protection facilities, parks and recreational facilities, schools, and libraries. The construction of new or altered public facilities that may be needed would be subject to environmental review at the time of facility design and approval. While existing regulations at the time projects are proposed would serve to reduce potential environmental impacts associated with the development of future facilities, this impact would remain significant and unavoidable as impacts associated with the construction and operation of future public facilities are not known. No feasible mitigation measures are available at this time.

In addition, the proposed CPU would increase the capacity for multi-family residential and non-residential development in the CPU area, which could result in an increase in the use of existing neighborhood and regional parks or other recreational facilities, potentially causing physical deterioration of such facilities. While the development of future park and recreational facilities within the CPU area could offset the potential increased use of existing recreational facilities and their associated physical deterioration, it is unknown to what extent potential future facilities would be able to accommodate increases in demand for recreation facilities. Thus, as it cannot be ensured that impacts associated with the deterioration of neighborhood parks and recreational facilities could be mitigated to a less than significant level, impacts would remain significant and unavoidable. No feasible mitigation measures are available at this time.

5.11 PUBLIC UTILITIES

This section addresses potential impacts to public utilities that could result from implementation of the proposed Mira Mesa Community Plan Update ("proposed project" or "proposed CPU"). Public utilities addressed include those related to water supply, utility infrastructure (i.e., stormwater, sewer, water distribution facilities, and communications systems), and solid waste management. The analysis in this section is based, in part, on the *Water Distribution and Wastewater Collection System Technical Study* prepared by River Focus and the *Water Supply Assessment* (WSA) prepared by the City of San Diego (City) Public Utilities Department (PUD), included in Appendix J and Appendix K, respectively, to this Program Environmental Impact Report (PEIR).

5.11.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion and description of existing public services within the CPU area, is contained in Section 2.2.11 of this PEIR and Appendix J and Appendix K. The existing regulatory setting is summarized in Section 4.11 and Section 4.7 of this PEIR, including applicable public utilities and water quality regulations and ordinances.

5.11.2 METHODOLOGY

Potential impacts to public utilities resulting from implementation of the proposed CPU were evaluated based on relevant regulations and development guidelines of the San Diego Municipal Code (SDMC), existing conditions, data on existing facilities and projected capacity needs found in online documentation and the CalRecycle Solid Waste Information System Database, and the Water Distribution and Wastewater Collection System Technical Study and WSA prepared for the proposed CPU (see Appendix J and Appendix K).

5.11.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to public utilities are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant impact related to public utilities could occur if implementation of the proposed project would:

Issue 1: Use excessive amounts of water beyond projected available supplies;

Issue 2: Promote growth patterns resulting in the need for and/or provision of new or physically altered utilities, the construction of which could cause significant environmental impacts in order to maintain service ratios or other performance objectives; or

Issue 3: Result in impacts to solid waste management, including the need for the construction of new solid waste infrastructure including organics management, materials recovery facilities, and/or landfills; or result in a land use plan that would not promote the achievement of the waste diversion goals targeted in AB 341 and the City's Climate Action Plan.

5.11.4 IMPACTS

Issue 1: Would the project use excessive amounts of water beyond projected available supplies?

A WSA was prepared for the proposed project (Appendix K) by the City's PUD in compliance with Senate Bill 610 to assess whether sufficient water supplies are, or will be, available to meet the projected water demands of the proposed CPU 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 CPU, and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements. The WSA found the proposed water demand projections for the proposed CPU are included in the regional water resource planning documents of the City and the San Diego County Water Authority. The City's 2020 Urban Water Management Plan (UWMP) indicates there will be sufficient water supplies available to meet demands for existing and planned future developments that are projected to occur by 2045. The WSA demonstrates, using the City's UWMP based upon San Diego Association of Governments (SANDAG) Series 14 Forecast land use, there is sufficient water planned to supply the proposed CPU's estimated annual average usage of 1,149 acre-feet per year. Therefore, the proposed CPU would result in no unanticipated demands, and there would be sufficient water supply planned to serve the CPU area future water demands within the PUD service area in normal, single-dry, and multiple-dry water year forecasts. Impacts would be less than significant.

Issue 2: Would the project promote growth patterns resulting in the need for and/or provision of new or physically altered utilities, the construction of which could cause significant environmental impacts in order to maintain service ratios or other performance objectives?

The City's General Plan calls for future growth to be focused into mixed-use activity centers linked to the regional transit system. Implementation of the proposed CPU would result in infill development,

redevelopment, and Urban Villages in an existing developed area. The City's existing built areas are currently served by stormwater, sewer, and water infrastructure, as well as various communication systems; however, some of the City's built areas, including those within the CPU area, have existing infrastructure deficiencies or aging infrastructure that could require capacity improvements to serve the existing and projected population within the CPU area. There are current ongoing capital improvement projects (CIPs) in the CPU area that are intended to address aging or insufficient infrastructure and that would continue to serve the Mira Mesa community. The current utilities-related CIPs in the Mira Mesa community area include: replacing existing clay, concrete, or polyvinyl chloride (PVC) sewer mains with new PVC pipes, replacing sewer manholes, and replacing existing and deteriorated pressure reducing stations within the water distribution system (City of San Diego 2022). The following is a program-level analysis of the significance of impacts for each applicable public utility.

Stormwater Infrastructure

Physical development, including stormwater infrastructure, would not be constructed as a direct result of the proposed CPU. However, the proposed CPU would support future development that could result in impacts on the existing stormwater conveyance system, which could require the physical construction of new or expanded stormwater infrastructure that could result in detrimental effects on the environment. In addition, systematic improvements to stormwater facilities throughout the CPU area currently occur and are expected to be provided in the future as the gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing stormwater pipes and infrastructure are an ongoing process. Upgrades to and maintenance of public stormwater facilities or facilities granted and accepted via easement are administered by the City's Stormwater Department. City Council Policy 800-04 also establishes guidelines for the construction and maintenance of storm water drainage facilities, and states that private land owners and developers are responsible for upgrading and maintaining stormwater drainage facilities on private property. The City also assesses the condition of and maintains its storm drain system on a continuous basis through its Municipal Waterways Maintenance Plan.

Future development projects would be required to comply with the City's Stormwater Management and Discharge Control provisions at SDMC Chapter 4, Article 3, Division 3 and the City's Stormwater Standards Manual that outlines requirements for design elements intended to reduce a project's stormwater runoff and improve stormwater quality. The design elements include Low Impact Development (LID) strategies and Best Management Practices (BMPs) as outlined in the City's Jurisdictional Runoff Management Plan to minimize water pollution in the stormwater system. Future projects would also be required to comply with stormwater source control and site design practices as mandated by the Municipal Storm Sewer System (MS4) Permit, issued by the San Diego

Regional Water Quality Control Board (RWQCB). Both public and private projects would be subject to these requirements in order to reduce their impact on existing stormwater infrastructure or guide the development of new infrastructure as necessary. In addition, if new or expanded stormwater infrastructure is required as part of a future development project, these facilities would comply with the design standards and requirements of SDMC Chapter 14, Article 2, Division 2, Stormwater Runoff and Drainage Regulations, and Appendix B, Drainage Design Manual, of the City's Land Development Manual (LDM).

Chapter 4, Public Services, Facilities, and Safety, of the proposed CPU addresses stormwater facilities and identifies a goal to provide public facilities to serve the existing and future residents and employees. Additional goals identified in Chapter 6, Parks, Recreation, and Open Space, and Chapter 7, Urban Design, promote the incorporation of sustainable design, such as "green streets," to help manage stormwater and improve the overall quality of the environment. The proposed CPU also includes policy 6.15 which calls for the City to repair and retrofit storm drain discharge systems to prevent erosion and improve water quality.

Given that the buildout of the proposed CPU would result in population growth in the community and more dense development, it is possible that future development could require the expansion of stormwater facilities, which would be determined on a project-by-project basis. Such infrastructure expansion could result in significant impacts to the environment. As individual development projects are initiated, required improvements to the storm drain system would be identified as part of the project design and review process. Future stormwater facilities would be required to comply with the requirements of applicable City standards and design guidelines, and would be subject to environmental review at the time design plans are available. As site-specific information regarding new stormwater facilities is unknown at this time, the physical impacts associated with the construction and operation of future stormwater facilities would be potentially significant.

Sewer Infrastructure

A programmatic analysis of the existing wastewater collection system (sewer) was performed to support this PEIR (Appendix J), the results of which are described in Chapter 2.0, Environmental Setting (Section 2.2.11.2). Systematic improvements to sewer facilities throughout the CPU area are expected to be provided as gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing sewer pipelines and mains are an ongoing process. Upgrades to sewer infrastructure are administered by the City's PUD and are handled on a project-by-project basis.

The proposed CPU does not include any specific improvements to the sewer infrastructure system, but future development that could occur as a result of the proposed CPU could require the upgrade,

expansion, or new construction of sewer infrastructure. The necessity of new sewer facilities would be determined on a project-specific basis. As individual development projects are initiated under the proposed CPU, site-specific studies would be required to address the condition and capacity of the existing sewer infrastructure pre- and post-development, and to identify necessary sewer infrastructure upgrades. All future sewer facilities within the CPU area would be required to comply with the SDMC regulations regarding sewers and wastewater facilities (SDMC Chapter 6, Article 4, Division 4), the City's Sewer Design Guidelines, and PUD's Capital Improvement Program Guidelines and Standards (see Section 4.11 of this PEIR), and would be subject to a separate environmental review at the time design plans are available. As site-specific information regarding new sewer facilities is unknown at this time, the physical impacts associated with the construction and operation of future sewer facilities would be potentially significant.

Water Distribution Infrastructure

Systematic improvements to water facilities throughout the CPU area are expected to be provided as gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing water pipelines and mains are an ongoing process. Upgrades to water infrastructure are administered by the City's PUD and are handled on a project-by-project basis.

The proposed CPU does not include any specific improvements to the water distribution infrastructure system. Future development that could occur as a result of the proposed CPU could require the upgrade, expansion, or new construction of water distribution infrastructure. In general, future development would include infill and redevelopment of areas already served by existing infrastructure. The necessity of new or upgraded water facilities would be determined on a project-specific basis. As individual development projects are initiated under the proposed CPU, focused site-specific studies would be required to address water service, including meeting fire flow requirements, and to identify any water infrastructure upgrades which may be needed. Future water facilities would be required to comply with the standards and design guidelines of the City's Water Facility Design Guidelines and would be subject to a separate environmental review at the time design plans are available. As site-specific information regarding new water facilities is unknown at this time, the physical impacts associated with the construction and operation of future water facilities would be potentially significant.

Communication Systems

Private utility companies currently provide communications systems within the CPU area. Facilities are located above and below ground within private easements. The proposed CPU does not include any specific communications-related development projects. Chapter 3.0, Mobility, of the proposed

CPU addresses the use of Intelligent Transportation Systems, which include the use of high-speed communication networks and emerging technology to improve transportation safety and efficiency. CPU Policy 3.41 directs the City to facilitate the implementation of Intelligent Transportation Systems and emerging technologies. Additionally, CPU Policy 4.6 of the Public Services and Facilities Chapter directs the City to work with utility providers to accelerate the undergrounding of overhead communication lines and electrical distribution lines within residential neighborhoods. As such, the implementation of these policies could result in the physical development of communication systems. Additionally, future development implemented in accordance with the proposed CPU could result in an increased demand for new communication systems. Associated utility improvements to existing communication systems would be determined on a project-specific basis. As individual public or private development projects are initiated under the proposed CPU, coordination with communications utility providers would occur as part of the project design and review process.

Future siting of communications infrastructure would be in accordance with the SDMC Section 141.0420, which regulates wireless communications facilities (WCF), as well as the City's Wireless Communications Facilities Guidelines and General Plan policies, which seeks to minimize WCF visual impacts, and would be subject to a separate environmental review at the time design plans are available. As site-specific information regarding new communications systems is unknown at this time, the physical impacts associated with the construction and operation of future communications systems would be potentially significant.

Issue 3: Would the project result in impacts to solid waste management, including the need for the construction of new solid waste infrastructure including organics management, materials recovery facilities, and/or landfills; or result in a land use plan that would not promote the achievement of the waste diversion goals targeted in AB 341 and the City's Climate Action Plan?

CalRecycle provides estimates of solid waste generation rates for different types of land uses. Waste generation rates include all materials discarded, regardless of whether they are later recycled or disposed of in a landfill, since under state law the total amount of waste "generated" is considered to be the sum of the waste "disposed of" plus the waste "diverted" from disposal. Waste generation rates can be used to estimate the impact of new development on the local solid waste infrastructure, although it should be noted that impacts to solid waste infrastructure are not necessarily based on the amount of waste, but whether any increase would require the development of new facilities. Since the majority of waste is managed through waste diversion, solid waste facilities include those necessary to provide composting, recycling, and other collection, separation, and diversion services.

Implementation of the proposed CPU would increase the areas that would allow for multi-family residential and mixed-use development in Urban Village areas compared to the land uses under the adopted Community Plan. The proposed CPU would cause an overall net increase in solid waste generation, as shown in Table 5.11-1, Estimated Change in Solid Waste Generation.

Table 5.11-1
Estimated Change in Solid Waste Generation

Land Use	Unit	Waste Generation Rate (lbs/unit/day)	Unit Change between Adopted and Proposed Buildout	Change in Waste Generation (lbs/unit/day)
Single-family residential	Dwelling unit	10	0	0
Multifamily residential	Dwelling unit	4	24,024	96,096
Mobile home	Dwelling unit	10	0	0
Office Commercial	Square feet	0.006	-916,369	-5,498
Retail Commercial	Square feet	0.046	353,962	16,282
Visitor Commercial	Square feet	0.005	206,737	1,033
Industrial	Square feet	0.006	7,436,856	44,621
Institutional	Square feet	0.007	27,295	191
Educational	Square feet	0.002	31,699	63
Recreation	Square feet	0.0312	52,859	1,649
Total				**154,437**

Source: CalRecycle 2019
Note: lbs = pounds

Future development projects that involve the construction, demolition, and/or renovation of 40,000 square feet or more of building space which could generate approximately 60 tons of waste or more are required to prepare and implement a Waste Management Plan (WMP). The WMPs would include measures to provide sufficient interior and exterior storage space for refuse and recyclable materials, and measures to handle landscaping and green waste materials associated with the occupancy of the proposed development. In tandem with the WMP, all development projects must comply with the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Section 66.0601 et seq.), which would reduce the amount of construction-related solid waste that is deposited in the landfill, and would further conserve the capacity of the landfill. Future projects would also be required to comply with the City's Refuse, Organic Waste, and Recyclable Materials Storage Ordinance (SDMC Section 142.0801 et seq.) and Recycling Ordinance (SDMC

Section 66.0701 et seq.) which require the provision of refuse, organic waste, and recyclable materials storage, and the collection and recycling of these materials at a recycling or organic waste facility. Adherence to these regulations would help the City meet its recycling and waste reduction goals as established by the City and mandated by the State of California, and would further conserve the capacity of the landfill as these solid waste materials would be diverted to the appropriate recycling or organic waste facility. The City is also proposing an expansion of its Organics Processing Facility on the Miramar Landfill to continue meeting the City's organics diversion processing needs.

Future projects in the CPU area would be required to comply with existing City regulations, and thus, would not affect the City's overall ability to attain a 75% waste diversion target as required under Assembly Bill 341 or an 82% waste diversion by 2030 as set in the City's Climate Action Plan. In addition, the proposed project would not conflict with the City's Zero Waste Plan, which provides a framework of potential strategies for meeting the City's waste diversion goals. Some provisions of the Zero Waste Plan have been adopted as ordinances, amending the San Diego Municipal Code. Article 6, Collection, Transportation and Disposal of Refuse and Solid Waste, of the San Diego Municipal Code was most recently amended in 2022, expanding the City's recycling requirements and aligning the City's solid waste collection franchise provisions with state requirements. Additionally, as discussed in Section 2.11, existing landfills currently serving the CPU area have sufficient remaining capacity to serve the project as buildout occurs. Implementation of the proposed CPU would not result in the need for the construction of new solid waste infrastructure, nor would it affect attainment of the City's waste diversion targets; therefore, impacts associated with solid waste management would be less than significant.

5.11.5 SIGNIFICANCE OF IMPACT

Issue 1: Water Supply

Based on the findings of the WSA (Appendix K), there is sufficient water supply to serve the existing and projected demands associated with implementation of the proposed CPU, and future water demands within the PUD's service area in normal, single-dry year, and multiple-dry year forecasts. Therefore, impacts on water supply would be less than significant.

Issue 2: Infrastructure

Stormwater Infrastructure

Systematic improvements and replacement of the public stormwater facilities throughout the CPU area are expected to take place as needed due to aging and substandard infrastructure. Upgrades such as increasing capacity and replacement of existing stormwater pipes are an ongoing process performed by the City's Stormwater Department under its Municipal Waterways Maintenance Plan.

The proposed CPU also includes policy 6.15 which calls for improvements to existing storm drain outfalls and drain discharge systems. Future stormwater improvement projects, as well as future development projects proposed within the CPU area, would be reviewed by the City to determine any significant adverse effects to the City's stormwater system, as well as any significant environmental impacts associated with the installation of new stormwater infrastructure. Given the programmatic nature of the proposed CPU, and lack of site-specific information regarding potential new stormwater infrastructure at this time, this impact would remain significant and unavoidable as impacts associated with the improvements to existing stormwater facilities and the construction of future stormwater facilities cannot be determined at this time.

Sewer Infrastructure

Systematic improvements to sewer facilities throughout the CPU area are expected to be provided as the gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing sewer pipelines and mains are an ongoing process. Upgrades to sewer infrastructure are administered by the City's PUD and are handled on a project-by-project basis. Future development projects proposed within the CPU area would be reviewed by the City to determine any significant adverse effects to the City's sewer facilities, as well as any significant environmental impacts associated with the improvements to existing sewer infrastructure and the installation of new sewer facilities. Given the programmatic nature of the proposed CPU, and the lack of site-specific information regarding potential new sewer facilities, this impact would remain significant and unavoidable as impacts associated with the improvements to existing sewer infrastructure and the construction and operation of future sewer facilities are not known at this time.

Water Infrastructure

Systematic improvements to water facilities throughout the CPU area are expected to be provided as the gradual replacement of aging and substandard infrastructure is needed. Upgrades such as increasing the capacity and replacement of existing water pipelines and mains are an ongoing process. Upgrades to water infrastructure are administered by the City's PUD and are handled on a project-by-project basis. Future development projects proposed within the CPU area would be reviewed by the City to determine any significant adverse effects to the City's water distribution system, as well as any significant environmental impacts associated with the installation of new or improved water infrastructure. Nevertheless, given the lack of site-specific information regarding potential new water facilities, this impact would remain significant and unavoidable as impacts associated with the construction and operation of future water infrastructure are not known at this time.

Communication Systems

No specific communications systems improvements are proposed as part of the CPU; however, certain policies encourage the future development of communications infrastructure such as CPU policies 3.42 and 3.43 which direct the City to facilitate the implementation of Intelligent Transportation Systems and emerging technologies, and CPU policy 4.6 which directs the City to work with utility providers to accelerate the undergrounding of overhead communication lines and electrical distribution lines within residential neighborhoods. As individual development projects are initiated under the proposed CPU, coordination with communications utility providers would occur as part of the project design and review process to identify any needed improvements to communication facilities. Future communications systems infrastructure would undergo project-level review by the City to determine any significant environmental impacts associated with the installation of this infrastructure. Nevertheless, given the lack of site-specific information regarding potential new or expanded communications systems infrastructure, this impact would remain significant and unavoidable as impacts associated with the construction and operation of future communications systems are not known at this time.

Issue 3: Solid Waste Management

It is anticipated that implementation of the proposed CPU would increase the solid waste management needs within the CPU area due to increased population and development. The proposed CPU would provide more concentrated land uses within portions of the CPU area which would result in an increase in solid waste generated. When land uses are more concentrated, per-unit environmental impacts associated with solid waste management, such as collection truck miles per ton collected, are reduced. Greater efficiencies and expanded opportunities for the recycling of marginally marketable items becomes more feasible. Future development projects implemented within the CPU area would be required to comply with the solid waste regulations of the SDMC (SDMC Section 66.0601 et seq., SDMC Section 142.0801 et seq., and SDMC Section 66.0701 et seq.). In addition, any future discretionary development exceeding the City's 60-ton solid waste threshold must prepare a WMP demonstrating how it will meet the City's waste reduction targets. Implementation of WMPs at the project level would ensure consistency with Assembly Bill 341 and the City's Climate Action Plan. Therefore, impacts to solid waste management from implementation of the proposed CPU would be less than significant.

5.11.6 MITIGATION, MONITORING, AND REPORTING

Impacts associated with water supply and solid waste management would be less than significant; therefore, no mitigation is required. Impacts under the proposed CPU associated with stormwater infrastructure, sewer infrastructure, water infrastructure and communication facilities would be significant and unavoidable and no feasible mitigation measures are available at this time.

5.12 TRANSPORTATION

This section of the Program Environmental Impact Report (PEIR) addresses potential impacts related to transportation that could result from implementation of the proposed Mira Mesa Community Plan Update (CPU) ("proposed project" or "proposed CPU"). Information in this section is based, in part, on the *Mira Mesa Community Plan Update Traffic Impact Study* (TIS) prepared by Kimley Horn, which is included as Appendix L of this PEIR.

5.12.1 EXISTING CONDITIONS

The existing environmental setting, which includes a description of existing transportation conditions within the CPU area is contained in Section 2.2.12 of this PEIR. Section 4.12 of this PEIR includes a summary of the regulatory framework relative to transportation.

5.12.2 METHODOLOGY

The analysis methodology used in the TIS and presented in this section was prepared in accordance with the City's Transportation Study Manual, which was developed in compliance with Senate Bill 743 requiring analysis of vehicle miles traveled (VMT) for the purposes of CEQA (City of San Diego 2020) (refer to Section 4.12 of this PEIR).

The population and employment data were obtained from the San Diego Association of Governments (SANDAG) Series 13 Activity Based Model (ABM), which was calibrated and customized for the proposed CPU. The ABM is a travel demand forecasting model that incorporates census data and travel surveys to inform the algorithms of the model's projections. It uses a simulated population based on existing and projected demographics to match residents to employment and forecasts the daily travel on the regional transportation network. In addition, the model is able to estimate the daily travel of individuals in the simulated population, including origins, destinations, travel distances and mode choices. The Series 13 ABM has four forecast years: 2012, 2020, 2035, and 2050.

For the proposed CPU, the 2012 forecast, which was the base year for the SANDAG Series 13 ABM used for the proposed CPU, was calibrated using detailed existing land use inputs for the CPU area. In addition, the local transportation network was refined to match ground conditions more closely in 2012. By refining land use and network assumptions, a Base Year scenario was developed that closely matched travel conditions in 2012. With the calibrated base year model as a foundation, the proposed project, adopted Community Plan, and alternative scenarios to the proposed CPU were also developed with a build-out year of 2050. These scenarios provided the relevant traffic data and metrics for the analysis.

In consultation with SANDAG modelers, additional model output data was provided to support the proposed CPU's efforts and some of these methodologies are documented in the Vehicle Miles Traveled Calculation using the SANDAG *Regional Travel Demand Model–Technical White Paper* (San Diego Institute of Transportation Engineers 2013).

More detailed methodology information can be found in Appendix L.

5.12.3 THRESHOLDS OF SIGNIFICANCE

The City's *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (City of San Diego 2020) and Appendix G of the CEQA Guidelines contain significance guidelines related to transportation. Based on the City's thresholds, a significant transportation impact could occur if implementation of the proposed project would:

Issue 1: Conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities;

Issue 2: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

Issue 3: Result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual; or

Issue 4: Result in inadequate emergency access.

The VMT thresholds identified in the City of San Diego's Transportation Study Manual and provided in Table 5.12-1 were developed based on Senate Bill (SB) 743 legislation and the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which covers specific changes to the CEQA guidelines and contains OPR's technical recommendations related to the use of VMT, as the preferred CEQA transportation metric.

Table 5.12-1
Significance Thresholds for Transportation VMT Impacts by Land Use Type

Land Use Type	Significance Threshold
Residential	15% below regional average[2] Resident VMT/Capita
Employment[1]	15% below regional average[2] Employee VMT/Employee
Retail	Zero net increase in VMT generated by retail uses

Source: City of San Diego 2022
Notes: VMT = vehicle miles traveled
1 This land use type includes commercial and industrial employment.
2 The regional average is determined using the Base Year (2012) of the current version of the SANDAG Regional Travel Demand Model (Series 13, version 13.3.2) that has been calibrated for Mira Mesa.
3 VMT for mixed use land uses were analyzed individually per the above categories.

The following definitions describe how VMT is referred to, calculated, and accounted for in this CEQA impact analysis:

- Resident VMT/Capita includes, for all San Diego County residents, all vehicle -based resident travel grouped and summed to the home location of the individual. It includes all resident vehicle travel: home-based and non-home-based. The VMT for each individual is then summed for all individuals residing in a particular census tract and divided by the population of that census tract to arrive at Resident VMT/Capita.
- Employee VMT/Employee includes, for all San Diego County residents, all vehicle-based employee travel grouped and summed to the work location of the individual. This includes all employee travel, not just work-related trips. The VMT for each work location is then summed for all work locations in a particular census tract and divided by the number of employees of that census tract to arrive at Employee VMT/Employee. This does not include employees whose work location is specified as home.
- Mira Mesa Total Retail VMT is the sum of all vehicle mile trips generated by trips for retail uses in the community multiplied by their associated trip lengths.

5.12.4 IMPACTS

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

Issue 1 focuses on whether the proposed CPU conflicts with an adopted program, plan, ordinance, or policy related to the transportation system. For the purposes of this analysis, a significant transportation impact could occur if implementation of the proposed CPU would conflict with the General Plan Mobility Element or other adopted programs, plans, ordinances, or policies that address the transportation system.

The proposed CPU is consistent with the Mobility Element of the General Plan, Climate Action Plan (CAP), Bicycle Master Plan, and other adopted policies, plans, or programs addressing the transportation system, as it would provide a balanced, multimodal transportation network with planned improvements to pedestrian, bicycle, transit, and roadway facilities. Additionally, the proposed CPU includes a robust policy framework and Supplemental Development Regulations (SDRs) that would support and facilitate the multimodal improvements proposed in the CPU (see proposed CPU policies 3.1 through 3.32 and SDRs 2, 3, and 5 through 8). Refer also to Section 5.8, Land Use, of this PEIR for an additional discussion regarding the proposed CPU's consistency with the General Plan Mobility Element.

Pedestrian Facilities

The proposed project includes a network of planned pedestrian facilities to support the level of pedestrian traffic in the CPU area, which are shown on Figure 3-1 of the proposed CPU and Figure 3-6 of this PEIR. Proposed improvements such as urban pathways, ancillary pedestrian facilities, and pedestrian bridges would establish an interconnected and cohesive network of pedestrian mobility throughout the CPU area while enhancements such as curb extensions and high-visibility crosswalks would improve pedestrian safety. The proposed CPU also includes policies that would support a safe and comfortable pedestrian environment by encouraging the prioritization of enhanced pedestrian improvements, expansion of sidewalks to separate pedestrian walkways from automobiles, creation of pedestrian walksheds with enhanced streetscape, and implementation of ADA features (see proposed CPU policies 3.1, 3.5, 3.9, and 3.13). Therefore, the proposed CPU would not conflict with the CAP as it would implement CAP Measure 3.1 to create safe and enjoyable routes for pedestrians and cyclists and its supporting action to identify and address gaps in the City's pedestrian network. The proposed CPU would also implement General Plan Mobility Element policies that call for the design and operation of sidewalks to emphasize pedestrian safety (ME-A.1), the design and implementation of safe pedestrian routes (ME-A.2), the creation of accessible sidewalks and street crossings to pedestrians of all abilities (ME-A.4), a complete, functional, and interconnected pedestrian network (ME-A.6), and improved walkability through pedestrian oriented design (ME-A.7). Thus, the proposed CPU would not conflict with the General Plan Mobility Element. Planned pedestrian facilities are discussed below and in detail in Section 4.1.1 of the TIS (Appendix L of this PEIR) and Section 3.2.2 of the Mobility Technical Report the proposed CPU.

Intersection Pedestrian Enhancements

All crossing points at signalized and unsignalized intersections are planned to be upgraded during future street resurfacing projects to current City standards to include the following:

- ADA-compliant pedestrian ramps
- High-visibility continental crosswalks[1]
- Advanced stop bar placement[2]
- Pedestrian countdown signal timers (signalized intersections only)

In addition, pedestrian mid-block and intersection treatments would be considered through service notifications submitted to the City of San Diego Transportation Department to expand the existing pedestrian network and to maximize the benefit of new connections as they are built.

Urban Pathways and Ancillary Pedestrian Facilities

A series of urban pathways and ancillary pedestrian facilities have been identified in Chapter 8, Urban Villages and Community Plan Implementation Overlay Zone (CPIOZ) of the proposed CPU. These proposed urban pathways and ancillary pedestrian facilities will create stronger bicycle and pedestrian connections in the central core of the community and in newly identified mixed-use residential areas and urban villages, which would support the vision for a vibrant and walkable employment and residential environment in Mira Mesa. The proposed CPU includes SDRs 2 and 3 which would require the development of urban pathways and ancillary pedestrian facilities in the proposed Urban Village areas. These urban pathways and ancillary pedestrian facilities would transform superblocks into accessible environments resulting in more direct and convenient pedestrian connections. They could also be combined with linear parks, plazas, and streetscape elements to provide a connected and attractive pedestrian network.

Segment Improvements

New sidewalks along several locations within -Mira Mesa are identified in Section 4.1.1 of the TIS (Appendix L) and in Section 3.2.2 of the Mobility Technical Report prepared for the proposed CPU. All asphalt paths would be upgraded to concrete sidewalks to meet City of San Diego and ADA requirements, and all missing sidewalk segments would be constructed with the exception of Vista Sorrento Parkway where a wide multi-use path along the east side of Vista Sorrento Parkway is

[1] Continental markings are longitudinal stripes designated where pedestrians can walk across the road and are the preferred crosswalk markings for the City of San Diego.
[2] Advanced stop bar is a limit line that is installed a minimum of four (4) feet from the marked crosswalk for the approach lanes which provides spacing between vehicles and pedestrians using the marked crosswalk.

recommended to accommodate pedestrians and bicyclists traveling north-south along this high-speed corridor.

Lead Pedestrian Intervals

Lead Pedestrian Intervals, which are early pedestrian starts at crossing signals, are recommended by the proposed project to improve pedestrian safety and efficiency at signalized intersection locations along District and Corridor pedestrian route types; high existing pedestrian volume locations (defined as more than 50 pedestrians during AM and PM peak periods); and frequent pedestrian collisions during the 5-year study period. Refer to Section 4.1.2 of the TIS (Appendix L) for a complete list of intersections where Lead Pedestrian Intervals are recommended.

Curb Extensions

As part of the pedestrian network evaluation, several key intersections were identified as locations where crossings connect with potential high-volume paths of travel and/or a combination of both pedestrian and bicycle facilities. At these locations, enhanced pedestrian crossings are considered including curb extensions for shortened crossing distances and increased visibility for pedestrians. Curb extensions also serve as a traffic calming measure, oftentimes reducing vehicular speeds along a corridor. Refer to Section 4.1.2 of the TIS (Appendix L) for a complete list of corridors where curb extensions are recommended.

Additional Safety Enhancements

Safety assessments were performed at eight intersections in the CPU area with the highest number of pedestrian-related collisions in the most recent 5-year period with available data. Many of the strategies already discussed in this section (i.e., curb extensions, Lead Pedestrian Intervals, high-visibility crosswalks, advanced stop bars, and pedestrian countdown timers) are all pedestrian safety enhancements recommended in the TIS (Appendix L) and in the Mobility Technical Report prepared for the proposed CP. The following strategies have been identified to supplement those enhancements to further reduce the number of pedestrian-related collisions at these intersections:

- Mira Mesa Boulevard and Westmore Road/Marbury Avenue: Upgrade the existing traffic signals on the north and south legs to a mast arm to increase motorists' cone of vision while navigating through the intersection.
- Mira Mesa Boulevard Westview Parkway: Construct a pedestrian bridge on the east side of the intersection as discussed in the next section.

- Camino Ruiz and Capricorn Way: Reconfigure lane geometry to include eastbound and westbound left turn lanes and protected left turn phasing to reduce the number of pedestrian-related left-turn collisions.
- Black Mountain Road and Gemini Avenue: Modify signal phasing to provide eastbound and westbound protected left turn phases.
- Camino Ruiz and Reagan Road/Marauder Way: Add no right turn on red restrictions to reduce the number of pedestrian-related right-turn collisions.

Bridge Connections

In general, pedestrian crossings should be provided at grade unless special circumstances apply. A pedestrian bridge improves the pedestrian environment by providing a connection/crossing free from conflicts with vehicles. The proposed CPU Chapter 3 Mobility, recommends the following locations to be considered for future pedestrian bridges for Mira Mesa:

- Across Mira Mesa Boulevard (between Westview Parkway and I-15 ramps): A pedestrian bridge between Westview Parkway and I-15 southbound ramps could provide a pedestrian crossing (free of vehicular conflict) between the large residential development on the north side of Mira Mesa Boulevard (Casa Mira View) to the existing commercial and proposed Urban Village area r (identified as the Mira Mesa Gateway in the proposed CPU), Miramar College Transit Station, and Miramar College located on the south side of Mira Mesa Boulevard (see SDR 7 in Chapter 8, Urban Villages and CPIOZ, of the proposed CPU). Mira Mesa Boulevard experiences high vehicular traffic volumes (almost 90,000 average daily trips [ADT]) and high vehicle speeds due to the proximity to the freeway ramps. A pedestrian bridge would provide a grade-separated crossing for the large number of pedestrians currently needing to cross 12 lanes of traffic.
- Across I-15 near the Hillery Drive Bridge: A pedestrian bridge connecting Mira Mesa to Scripps Miramar Ranch across I-15 would provide an essential low-stress east-west connection from high residential redevelopment areas in both communities to schools, transit centers, and recreational facilities from both communities. A feasibility study would need to be performed to determine the best location for a structure across the I-15 freeway. Options would include extending the existing Hillery Drive bridge Direct Access Ramp bridge all the way across the freeway, connecting Scripps Lake Drive to North Campus Drive, connecting South Campus Drive to Scripps Ranch High School, or connecting Gold Coast Drive to Scripps Ranch Court.

Bicycle Facilities

The proposed project would support existing plans and policies relative to the bicycle network. The bicycle facility network for the proposed CPU is shown in Figure 3-2 of the proposed CPU and Figure 3-5 of this PEIR. Bicycle-focused policies in the proposed CPU support the implementation of new separated and on-street bicycle facilities, and the installation and maintenance of bicycle parking facilities, signage, lighting, crosswalks, urban greening, and other appropriate traffic calming measures to increase the level of bicycle comfort and safety for all levels of bicycle riders (policies 3.2, 3.3, 3.4, 3.6, and 3.10). Proposed CPU policies also support coordination with SANDAG on the planning and implementation of regional bicycle facilities and support increased bicycle comfort and safety, repurposing ROW for bicycle facilities, and bike sharing (policies 3.7, 3.14, 3.18, 3.36, and 3.40). The proposed bicycle improvements and supporting policy framework would create safe and enjoyable routes for pedestrians and cyclists consistent with CAP Measure 3.1, and would implement CAP Measure 3.1's supporting action to include in Bicycle Master Plan update policies and programs to increase bicycle storage near bikeways. The proposed CPU would also be consistent with General Plan Mobility Element and Bicycle Master Plan policies that call for maintaining and improving the quality, operation, and integrity of the bikeway network and roadways regularly used by bicyclists (Mobility Element Policy ME-F.3 and Bicycle Master Plan Policy 3), providing safe, convenient, and adequate bicycle parking facilities and amenities (Mobility Element Policy ME-F.4 and Bicycle Master Plan Policy 4), identifying the general location and extent of transportation facilities and services needed to enhance mobility in community plans (Mobility Element Policy ME-C.1 and Bicycle Master Plan Policy 8), and designing an interconnected street network which includes bicycle access (Mobility Element Policy ME-C.3 and Bicycle Master Plan Policy 9). Thus, implementation of the proposed CPU would not conflict with adopted policies, plans, or programs supporting bicycle facilities.

A key focus of the San Diego Regional Bike Plan prepared by SANDAG is to develop an interconnected network of bicycle corridors to improve the connectivity and quality of bicycle facilities and their supporting facilities. Similarly, the City of San Diego Bicycle Master Plan establishes guidance on achieving an ideal bicycle environment throughout the City and refines the Regional Bike Plan to include community-wide bicycle facilities. Together, these facilities promote intra-community and inter-community bicycle trips to strengthen connections within the planning area and between adjacent communities.

The proposed project improves existing facilities identified in the Regional Bike Plan and City of San Diego Bicycle Master Plan and provides new recommendations with an emphasis on protected facilities such as multi-use paths and cycle tracks (City of San Diego 2013 and SANDAG 2010). Thus, the proposed project would be consistent with CAP Measure 3.1's action to implement the City's Bicycle Master Pan and community plan bicycle networks with a Class IV First approach. The

Bicycle Master Pan and community plan bicycle networks with a Class IV First approach. The proposed CPU recommends a variety of bicycle facilities on the local street network, including multi-use paths (Class I), bicycle lanes (Class II), bicycle routes (Class III), and cycle tracks (Class IV). Planned bicycle facilities are discussed below and in detail in Section 4.1.2 of the TIS (Appendix L of this PEIR) and Section 3.3.2 of the Mobility Technical Report prepared for the proposed CPU. Refer to Section 4.1.2 of the TIS (Appendix L) for a complete list of bicycle classifications for various community roadways.

Urban Pathways

Urban pathways are discussed in Urban Pathways and Ancillary Pedestrian Facilities, above.

Bicycle Signal Phasing

Bicycle signal phasing, which are fully separate signal phases for bikes, is proposed to improve bicyclist safety, efficiency, and compliance at signalized intersections. Bike signal phasing is recommended at all intersections where Class IV bikeways intersect, which accounts for a majority of the signals in the community.

Protected Intersections

Protected intersections are recommended at certain intersections and provide safety benefits for cyclists at these intersections and improve low stress connectivity through intersections within the community (Appendix L). One of the key features of a protected intersection is a raised corner island that reduces speeds of right turning vehicles, thereby improving visibility of pedestrians and bicyclists, and providing a physically separated space for a bicyclist to wait for a green light before proceeding through the intersection.

Protected intersection treatments require further study and design prior to implementation, and they could be implemented through the following mechanisms, as appropriate: repurposing existing public ROW, coordinating with abutting property owners, or having developers implement the adjacent improvement. At the project level when more information is available, modifications to improvements identified may be considered by the City. Refer to Section 4.1.2 of the TIS (Appendix L) for a complete list of potential protected intersection locations.

Transit Facilities

The proposed CPU supports the overall transit goals of the General Plan Mobility Element to increase transit ridership and develop an attractive and convenient transit system. As detailed below, the proposed CPU includes transit improvements consistent with SANDAG's 2021 Regional

Element policies ME-B.1 through ME-B.8 that call for regional agency collaboration of transit system improvements. Additionally, the proposed CPU is consistent with General Plan Mobility Element policies ME-B.9 and ME-B.10 by integrating transit-oriented development and priority projects into long-range land use planning (CPU policies 3.17 through 3.26). Thus, the proposed CPU would not conflict with the General Plan Mobility Element. Planned transit facilities are discussed below and in detail in Section 4.1.3 of the TIS (Appendix L of this PEIR) and Section 3.4.2 of the Mobility Technical Report the proposed CPU.

SANDAG 2021 Regional Plan

SANDAG's 2021 Regional Plan identifies transit improvements within the Mira Mesa community and surrounding area with the vision of 13% of commuters using transit by horizon year 2050. The following are planned transit projects identified in the 2021 Regional Plan to increase mobility connections for the Mira Mesa community and are included in the proposed CPU as shown on Figure 3-3. More information about these planned transit projects can be found in Appendix A of SANDAG's 2021 Regional Plan.

- Commuter Rail 582 providing service from Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights
- Double tracking for COASTER with peak train frequencies of 20 minutes
- Proposed MTS Rapid 30 providing service from the Balboa Station to Sorrento Mesa via Pacific Beach, La Jolla and UTC
- Create Rapid Route 104 providing service from Sorrento Valley to Sabre Springs via SR-56
- Create Rapid Route 890 providing service from El Cajon to Sorrento Mesa via Santee, SR 52, I-805
- Rapid Route 238 providing service from UC San Diego to Rancho Bernardo via Sorrento Valley and Carroll Canyon Road.
- Local bus route 984 Hillery Transit Center to Sorrento Valley via Carroll Canyon/Miramar Road Business Parks. Bus service frequency enhancements for routes 31 and route 921 from 30 minute headways to 15 minute headways during peak periods,110 from 4 morning and evening peak hour trips to 15 minute headway during peak periods 237 from 15 minute headways to 10 minute headways during peak periods,972 and 973 bus routes from 45 minute headways to 20 minute headways during peak periods

The proposed network of transit improvements is shown on Figure 3-3 of the proposed CPU and Figure 3-7 of this PEIR.

The proposed network of transit improvements is shown on Figure 3-3 of the proposed CPU and Figure 3-7 of this PEIR.

Sorrento Valley Transit Station Relocation

Relocation of the Sorrento Valley Station has also been considered and recommended in previous planning efforts. The Project Report for *I-5/Sorrento Valley Road Interchange Improvements* recommends relocating the Sorrento Valley Station south, close to the interchange of Mira Mesa Boulevard and I-805. This would modify the transit connections to the community and would need to be evaluated for connections by all modes. The relocation provides an opportunity to explore first-mile and last-mile improvements for access to the Sorrento Valley employment center.

Sorrento Valley Skyway

The steep terrain characteristic of the canyons and valleys of Mira Mesa limit the feasibility of additional roadway connections in and out of CPU area. Skyways, which are also referred to as aerial cableways, trams, or gondolas, offer a potential solution that can traverse natural obstacles while requiring a limited ROW. Connectivity between the Mira Mesa and University communities is very desirable as both are high employment areas specializing in life sciences and technology. However, the I-805 freeway presents a major barrier for making this connection. SANDAG performed a feasibility study in 2017 for the Sorrento Valley Skyway connection between the Mid-Coast transit station in University City and the Sorrento Valley employment area in Mira Mesa. The proposed CPU also proposes to extend the aerial skyway further into the heart of the community, to the Mira Mesa Town Center area near the Camino Ruiz and Mira Mesa Boulevard intersection.

Transit Priority Improvements

SMART Corridors

The proposed CPU Chapter 3 incorporates Sustainable Mobility for Adaptable and Reliable Transportation, (SMART) Corridors, that incorporate flexible lanes and emerging technology (CPU policy 3.19), such as transit signal priority and adaptive signal timing to increase person throughput. The proposed CPU includes three SMART corridors along Mira Mesa's major east-west roadways as identified in Section 4.1.3 of the TIS (Appendix L) and Section 3.4.2 of the Mobility Technical Report prepared for the proposed CPU:

- Mira Mesa Boulevard
- Carroll Canyon Road
- Miramar Road

Flexible Lanes

Flexible lanes as depicted in proposed CPU Figure 3-3 and Figure 3-7 of this PEIR, provide dedicated roadway space for any combination of non-single occupancy vehicles, including transit only lanes or high-occupancy vehicle lanes. The following corridors with flexible lanes proposed were identified for transit-only lanes:

- Mira Mesa Boulevard
- Barnes Canyon Road/Scranton Road
- Carroll Canyon Road
- Pacific Heights Boulevard
- Lusk Boulevard

The remaining flexible lane corridors identified below and shown on Figure 3-3 of the proposed CPU and Figure 3-7 of this PEIR could also be designated as transit-only lanes or high-occupancy vehicle lanes:

- Camino Ruiz
- Westview Parkway
- Miramar Road

Mobility Hubs

Mobility hubs are places where different travel options intersect. They provide an integrated suite of mobility services, amenities, and supporting technologies to better connect high-frequency transit to an individual's origin of destination. Several mobility hubs are included in Figure 3-3 in the proposed CPU and Figure 3-7 of the PEIR at:

- Sorrento Valley Coaster Station (relocated)
- Mira Mesa Boulevard and Pacific Heights Boulevard
- Mira Mesa Boulevard and Genetic Center Drive
- Mira Mesa Boulevard and Camino Ruiz
- Carroll Canyon Road and Camino Santa Fe
- Miramar College Transit Center

Transit Signal Priority

Figure 3-3 in the proposed CPU and Figure 3-7 of the PEIR includes transit priority measures along the following corridors:

- Mira Mesa Boulevard (SMART Corridor) between I-805 to I-15
- Carroll Canyon Road (SMART Corridor) (Center Running Bus Rapid Transit) from Camino Santa Fe to Black Mountain Road
- Miramar Road (SMART Corridor)
- Pacific Heights Boulevard
- Black Mountain Road
- Camino Ruiz
- Vista Sorrento Parkway
- Pacific Center Boulevard
- Pacific Mesa Boulevard

Roadways

Changes to roadways in Mira Mesa are predominately based on traffic volumes that are projected under buildout of the proposed CPU and to accommodate the multimodal improvements. The proposed roadway network is depicted in Figure 3.4 of the proposed CPU and Figure 3-4 of this PEIR. The proposed CPU policies 3.27 through 3.36 emphasize complete street improvements to provide a safe and interconnected network to improve connectivity and operations of all modes of travel. These policies and planned improvements discussed below are consistent with General Plan Mobility Element Policies ME-C.1 and ME-C.2. The proposed CPU identifies specific priority improvements and design treatments for segments and intersections, consistent with General Plan Mobility Element Policy ME-C.3, which calls for street network connectivity improvements to be identified in the community plan update process. Additionally, proposed CPU policies 3.29 and 3.30 which call for new connections to break up "superblocks" and reconfiguration of streets would be consistent with General Plan Mobility Element Policy ME-C.3(b). Thus, the proposed CPU would not conflict with the General Plan Mobility Element.

The proposed project incorporates SMART Corridors to further SANDAG's 5 Big Moves strategy. A SMART Corridor is a six-lane major arterial roadway that provides access to or between at least two freeways, whereby mobility improvements are planned for transit and other congestion reducing mobility forms through the repurposing of roadway space. This repurposing creates facilities with

general purpose lanes plus flexible lanes, that may be used by a combination of non-single occupancy vehicles, connected/autonomous vehicles, or other emerging mobility concepts. SMART corridors would increase safety, capacity, and efficiency; provide dedicated space for efficient transit and other pooled services; manage demand in real-time; and maximize use of existing roadways. The lane configuration and type of use is contingent upon time of need. Implementation of SMART corridors through proposed CPU policy 3.19 is consistent with General Plan Mobility Element Policy ME-C.1.

The proposed roadway network is shown on Figure 3-4 to this PEIR.

Roadway Classification Modifications

The construction and extension of the planned Carroll Canyon Road from the adopted Community Plan, spans from I-805 to I-15 as an additional east-west roadway and will help alleviate some of the congestion currently experienced along Mira Mesa Boulevard and some of the more residential east-west roadways such as Gold Coast Drive and Flanders Drive. Carroll Canyon Road will provide another major east-west roadway that will connect new housing within the planned 3Roots San Diego Master Plan area and the proposed Stone Creek Master Plan area to employment and parks that will be constructed along Carroll Canyon Road. Refer to Table 4-1 of the TIS (Appendix L) for a complete list of modifications to roadway classifications.

Intersection Modifications

Several intersections are proposed in the CPU to be modified to accommodate buildout of the roadway segment and bicycle classifications, as well as to support the pedestrian treatments associated with the pedestrian route typologies. Improvements are aimed at enhancing operation and safety for all travel modes. These intersection improvements can include, but are not limited to, restriping, lane reconfiguration, new intersection legs, signal modifications, new signals, and other modifications to accommodate the proposed project's active transportation facilities, transit corridors, and the SMART corridors. Refer to Table 4-2 of the TIS (Appendix L) for a complete list of intersection modifications.

Conclusion

As discussed above, the proposed project would be consistent with the Mobility Element of the General Plan, Climate Action Plan, Bicycle Master Plan, and other adopted policies, plans, or programs supporting the transportation system, including pedestrian, bicycle, transit, and roadway facilities. Policies contained in the proposed CPU would support improvements to pedestrian, bicycle, transit, and roadway facilities. All transportation facilities would be designed in accordance

with applicable City standards. Thus, the proposed project would not conflict with adopted policies, plans, or programs related to the transportation system. Impacts would be less than significant.

Issue 2: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Issue 2 relates to whether transportation infrastructure meets design standards as identified in the City's Street Design Manual or other transportation infrastructure-related codes and regulations enforced by the City Engineer.

The proposed project would result in repurposing roadways to accommodate all modes of transportation, which would alter the existing street geometry of some roadways in the CPU area. The design of roadways in the CPU area, however, would be required to conform with applicable federal, State, and City of San Diego's design criteria which contain provisions to minimize roadway hazards. Compliance with these standards and design to the satisfaction of the City of San Diego's City Engineer would avoid impacts related to roadway hazards due to a design feature or incompatible uses. Furthermore, the proposed project would improve existing transportation deficiencies by providing higher quality bicycle facilities and improving pedestrian connectivity with the closure of facility gaps. These multimodal enhancements are intended to improve safety for bicycle and pedestrians on the roadway. Therefore, impacts related to hazardous design features would be less than significant.

Issue 3: Would the project result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual?-

Issue 3 focuses on whether the proposed project would have a significant impact if proposed new residential, office, or retail land uses would in aggregate exceed the respective VMT by land use thresholds in Table 5.12-1.

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. The Office of Planning and Research (OPR) published its latest recommended *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018. This Technical Advisory provides recommendations on how to evaluate transportation impacts under SB 743. The OPR guidance covers specific changes to the CEQA guidelines and recommends elimination of auto delay as measured by level of service for CEQA purposes and the use of Vehicle Miles Traveled, or VMT, as the preferred CEQA transportation metric.

VMT is positively correlated with growth and as the region is expected to grow, VMT is also expected to increase. How and where growth occurs plays a substantial role in determining how much VMT will increase. Growth areas are projected to be more VMT efficient with the following: high quality transit such as Transit Priority Areas[3], a complete active transportation network, and complementary land use mixes.

In the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), OPR recommends the use of VMT metrics when analyzing land use projects and plans using the following efficiency metrics:

- For residential uses, the recommended efficiency metric is Resident VMT per Capita
- For employment uses, the recommended efficiency metric is Employee VMT per Employee
- For retail uses, the recommended metric is a net change of total area (i.e., Mira Mesa) VMT due to the nature of retail trips typically redistributing shopping trips rather than creating new trips. With respect to the proposed CPU, by adding more locally-serving retail opportunities into the urban fabric, retail destination proximity is improved and tends to shorten trips and reduce VMT.

Consistent with the OPR Technical Advisory, the significance thresholds are shown in Table 5.12-1.

As described in Section 5.12.2, SANDAG's ABM was used to calculate the proposed CPU's VMT. The proposed land uses and mobility network were inputs to the model to develop future roadway forecasts and VMT. It should be noted that the recommended bicycle network was not coded into the ABM. It was determined that the bicycle network would result in a mode shift from vehicle to bicycles of 5%. As such, the VMT obtained from the ABM was reduced by 5%. Additional details are provided in Appendix L.

Table 5.12-2 presents the Mira Mesa resident and employee VMT efficiency metrics for Base Year (2012) conditions. Under Base Year (2012) conditions, the community is above the 85 percent threshold for average Resident VMT per Capita and average Employee VMT per Employee.

[3] Transit Priority Areas, within the context of Mira Mesa, include areas within 0.5 miles of existing or planned trolley stations 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.

Table 5.12-2
Mira Mesa Base Year VMT Metrics for Transportation Impact Analysis

VMT Metric[1]	Based Year (2012) (VMT)			Percent of Regional Base Year (Average)	
	Region	*City of San Diego*	*Mira Mesa*	*City of San Diego*	*Mira Mesa*
Resident VMT/Capita	17.3	15.2	16.2	87.9%	93.6%
Employee VMT/Employee	25.2	24.9	30.3	98.8%	120.2%

Note:

[1] Mira Mesa Base Year VMT efficiency metrics were obtained from the SANDAG's Vehicle Miles of Travel Report specific to the Mira Mesa modeling scenario. Data is provided in Appendix L.

By 2050 with the implementation of the proposed CPU, the VMT efficiency of Mira Mesa substantially improves. Table 5.12-3 presents the Mira Mesa average resident and employee VMT under the proposed CPU. Mira Mesa is projected to have an average resident VMT per Capita at 10.7 and an average employee VMT per employee at 23.3, which are 62.1% and 92.4%, respectively, of the Base Year regional averages. These reductions assume implementation of the SANDAG 2021 Regional Plan. VMT associated with the residential land uses would not exceed the 85% thresholds at buildout of the proposed project and would be less than significant. However, the employment land use would exceed the 85% threshold and would be considered a significant impact.

Table 5.12-3
Mira Mesa Base Year VMT Metrics for Transportation Impact Analysis of Residential and Employment Uses

VMT Metric[1]	Base Year (2012) (VMT)	2050 Proposed Project Buildout (VMT)			Percent of Regional Base Year		Significant Impact?
	Region	*Region*	*City of San Diego*	*Mira Mesa*	*City of San Diego*	*Mira Mesa*	
Resident	17.3	14.7	12.5	10.7	72.3%	61.8%	No
Employee	25.2	21.9	20.7	23.3	82.1%	92.4%	Yes

Note:

[1] Mira Mesa Base Year VMT efficiency metrics were obtained from the SANDAG's Vehicle Miles of Travel Report specific to the Mira Mesa modeling scenario. Data is provided in Appendix L.

Between the Base Year to the 2050 buildout of the proposed CPU, Mira Mesa's commercial retail/office/visitor square footage would in aggregate increase by approximately 55% (approximately 15,109,851 square-feet to approximately 23,510,812 square-feet). Although an increase in retail uses would occur under buildout of the proposed CPU, these uses are locally serving. Per OPR's Technical Advisory "local-serving retail development tends to shorten trips and

reduce VMT," creating a less than significant transportation impact. Therefore, impacts related to VMT for the commercial retail/office/visitor land uses would be less than significant.

Issue 4: Would the project result in inadequate emergency access?

Emergency access requirements are established in the City's Fire Code. The CPU area is an established, developed urbanized area with ample access for emergency service providers. Future development under the proposed CPU would likely require encroachment upon adjacent roadways, for typical construction activities such as frontage improvements, utility connections, and roadway/mobility improvements. Such activities would temporarily affect localized circulation patterns in the CPU area. A Traffic Control Plan/Permit would be implemented on a project-by-project basis for any lane closures in the public ROW or driveway closures that would impact adopted emergency access or response plans. The contractor would follow standard construction practices and ensure adequate on-site circulation and access is always maintained for all users, including emergency service providers.

Site design of future development would be subject to the emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Additionally, the proposed CPU aims to improve circulation and mobility throughout the CPU area through several planned bicycle and transit facilities within the community as depicted in the proposed CPU Figure 3-2 and Figure 3-3. This includes the development and implementation of a comprehensive Intelligent Transportation System (CPU policy 3.42 and policy 3.43), which would help better manage and improve the local transportation system, including incident and emergency response.

Therefore, the project would not create significant impediments for emergency access, and impacts would be less than significant.

5.12.5 SIGNIFICANCE OF IMPACT

Issue 1: Conflicts with Current Plans/Policies

Pedestrian Facilities

The proposed project would be consistent with and would implement the General Plan's safety and accessibility, connectivity, and walkability policies. Pedestrian-focused policies contained in the proposed CPU include enhancements to pedestrian travel within the CPU area, such as implementing the multi-use urban pathway system, constructing sidewalk and intersection improvements, and installing missing sidewalks and curb ramps. The proposed project would include planned pedestrian improvements to install curb ramps, sidewalks, and audible pedestrian

signals to meet ADA standards. Implementation of the proposed project would not restrict or impede pedestrian connectivity and would not conflict with any adopted policies or plans addressing pedestrian facilities. Thus, impacts would be less than significant.

Bicycle Facilities

The proposed project includes facilities that build on those identified in the Regional Bike Plan and City of San Diego Bicycle Master Plan, while also identifying new recommendations and improving upon existing facilities through an emphasis on protected facilities such as multi-use paths and cycle tracks. Bicycle-focused policies contained in the proposed CPU are consistent with current Regional and City plans that include providing and supporting a continuous network of safe, convenient, and attractive bicycle facilities throughout the community, and enhancing safety, comfort, and accessibility for all levels of bicycle riders. The proposed project supports improvements such as wayfinding marking, bicycle signals, buffered bicycle lanes, and protected bicycle facilities. Implementation of the proposed CPU would not restrict or impede bicycle connectivity and would not conflict with any adopted policies or plans addressing bicycle facilities. Thus, impacts would be less than significant.

Transit Facilities

The General Plan includes policies for supporting the provision of higher-frequency transit services and implementing transit priority measures to help bypass congested areas. Transit-focused policies contained in the proposed CPU support implementation of the transit improvements identified in the Regional Plan by prioritizing the transit system and improving efficiency of transit services. The proposed project includes implementation of transit priority signals on key transit corridors and roadway ROWs specifically for high-quality transit facilities. In addition, the proposed project provides for a complete bicycle and pedestrian network connecting with and improving access to transit. Thus, implementation of the proposed CPU would not interfere with implementation of planned transit improvements and would provide policy support for their implementation. Thus, impacts related to conflicts with plans or policies addressing existing or planned transit facilities would be less than significant.

Roadway Facilities

The proposed project would support goals and policies included in the General Plan to provide a balanced, multimodal transportation network where each travel mode can contribute to an efficient network of services meeting varied user needs. The General Plan advocates for interconnected street networks within and between communities, and the proposed project would support this effort by creating a walkable and bicycle-friendly environment and supporting transit as a primary mode of travel for many users. Roadway improvements include, but are not limited to, repurposing

vehicle travel lanes to provide protected bicycle facilities and flexible lanes for SMART corridors, signal operational improvements for corridor management, reserving ROW to implement multi-use paths, and providing bicycle and pedestrian signal enhancements to improve safety. Implementation of the proposed CPU would not conflict with any adopted policies or plans addressing roadway facilities. Thus, impacts would be less than significant.

Issue 2: Hazardous Design Features

The design of roadways in the CPU area would be required to conform with applicable federal, state, and City of San Diego's design criteria which contain provisions to minimize roadway hazards. Compliance with these standards and design to the satisfaction of the City of San Diego's City Engineer would avoid roadway hazards. Impacts would be less than significant.

Issue 3: Vehicle Miles Traveled

Residential Land Uses

With the proposed CPU, Mira Mesa's Resident VMT per Capita is 61.8% of the Base Year regional average and under the 85% threshold (i.e., 15% below the Base Year regional average) for this efficiency metric. Therefore, the transportation impacts related to residential uses are considered less than significant.

Employment Land Uses

With the proposed project, the average employee VMT per employee for Mira Mesa is greater than the 85% threshold. However, the citywide average employee VMT per employee is below the 85% threshold under the proposed project. Mira Mesa's employee VMT per employee for the proposed project is 92.5% of the Base Year regional average, and therefore, the transportation impacts related to employment uses are considered significant.

Overall, the proposed CPU's lower residential and employment related VMT compared to the Base Year is largely because the proposed CPU was designed to self-mitigate by increasing the transportation efficiency in the community guided by the General Plan and Climate Action Plan. The proposed CPU is also consistent with the City of San Diego's Complete Communities initiative, which includes planning strategies that work together to create incentives to build homes near transit and near places of employment, provide more mobility choices, enhance opportunities for places to walk, bike, relax and play, and more quickly bring neighborhood benefits where needed the most. Nevertheless, impacts are considered significant.

Retail Land Uses

According to OPR's recommendations, a retail impact is considered significant when there is a net increase in total area (i.e., Mira Mesa CPU area) VMT related to the new retail and commercial uses that could be developed with the adoption of the proposed CPU. Mira Mesa Total Retail VMT is anticipated to increase with the build-out of the proposed project when compared to the present condition due to the higher-density redevelopment that could occur in all of the seven Urban Village areas identified in Chapter 8 of the proposed CPU where future retail is anticipated to serve nearby residences and places of employment. With the proposed project, it is anticipated that further redevelopment would maintain and possibly expand neighborhood and community-serving retail. This potential increase in VMT, although related to retail, is not regionally serving retail and therefore the increase in retail trips would result in short trips as they are anticipated to originate and end within the community. Per OPR's Technical Advisory "local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than significant transportation impact." Furthermore, when evaluating Employee and Resident (per capita) VMT, both metrics account for the employee and resident tour VMT. Tour VMT includes trips made by employees and residents within the community to retail uses in addition to all other trips they make on a daily basis. At a programmatic level without site specific details regarding retail uses it is anticipated that retail uses complying with the proposed project would be community serving. Therefore, retail VMT has already been accounted for in the Employee and Resident (per capita) VMT and consistent with OPR's guidance retail VMT impacts would be less than significant.

Issue 4: Inadequate Emergency Access

A Traffic Control Plan/Permit would be implemented on a future project-by-project basis for any lane closures in the public ROW or driveway closures, which would ensure access at all times including to emergency service providers. Site design of future development would be subject to emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Additionally, the proposed CPU aims to improve circulation and mobility throughout the CPU area. This includes the development and implementation of a comprehensive Intelligent Transportation System, which would help better manage and improve the local transportation system, including incident and emergency response. Therefore, the project would not create significant impediments for emergency access, and impacts would be less than significant.

5.12.6 MITIGATION, MONITORING, AND REPORTING

VMT is positively correlated with growth and as the region is expected to grow, VMT is also expected to increase. However, where the growth occurs plays a significant role in determining how much VMT will increase. Concentrating growth in areas with access to high-quality transit such as Transit Priority Areas, complete active transportation networks, and complementary land use mixes are more VMT efficient than areas without these features.

Guided by the City's General Plan and Climate Action Plan, SANDAG's Regional Plan, as well as current urban planning principles (i.e., such as Transit Oriented Development and Complete Streets), the proposed CPU land use plan focuses growth along transit corridors and provides a complementary mix of uses. With a fully connected active transportation network, this mix of uses in the locations proposed is planned for the purpose of eliminating and reducing vehicular trips, thereby resulting in reduced VMT. A key theme behind the proposed CPU is the connected community. The proposed CPU envisions this community as a sub-regional employment center adaptable to future employment trends and technologies that would bring in a diversified workforce. New development would be focused in mixed-use villages that would introduce new residential, retail, and employment opportunities consolidated around transit corridors with a supportive and balanced mobility system to serve the needs of all current and future users. This system would provide an active transportation network that would be a viable and enjoyable option for traveling within the community in addition to providing connections to transit to get to and from destinations around the region. By bringing in varied and complementary uses in transit corridors and a mobility network that supports and encourages alternative mode choice, the proposed CPU plans a more VMT efficient and sustainable future for the community.

As described in Sections 5.12.4 and 5.12.5, the proposed project would result in a significant VMT impact related to employment land uses due to exceeding the threshold for employee VMT per employee. As previously mentioned, the proposed project identified active transportation connections to these employment areas, providing an opportunity for VMT to be reduced as more employees opt to commute by walking, scootering and/or biking. Overall, the proposed CPU is a planning document intended to guide future development throughout the CPU area. It provides detailed policies and implementation guidance that would be applicable to many specific details of future development as applications are filed and future implementing actions are considered. Due to the programmatic nature of the proposed CPU, it does not propose any specific development projects, and thus, cannot adequately anticipate specific project-level requirements at this time. Future development under this proposed CPU would be required to comply with the City's Mobility Choices Ordinance (San Diego Municipal Code section 143.1103 et seq.) which requires development projects to reduce their VMT to the extent feasible by providing on-site VMT reducing infrastructure such as those found in the California Air Pollution Control Officers Association

Quantifying Greenhouse Gas Mitigation Measures Report, and the SANDAG Mobility Management Toolbox; or pay a fee that would fund active transportation infrastructure in VMT efficient areas to reduce Citywide VMT. Although compliance with the Mobility Choices Ordinance is anticipated to result in the implementation of infrastructure improvements that could result in per capita VMT reductions, at a program level of analysis, it cannot be determined with certainty whether improvements would be implemented at the time a future development project's VMT could occur and whether those impacts would be mitigated to a less than significant level. Thus, impacts would remain significant and unavoidable.

5.12.7 SIGNIFICANCE AFTER MITIGATION

Compliance with the Mobility Choices Ordinance would reduce community and citywide VMT for both ministerial and discretionary projects, thereby mitigating the potential impact identified in the previous section. However, the effectiveness of the Mobility Choices Ordinance in reducing VMT in the CPU area would be context sensitive and would vary depending on the individual project site such as the location, access to transit, and other factors, and VMT reducing strategies that the individual project would provide. For this reason, compliance with the Mobility Choices Ordinance would not fully mitigate the VMT impact for employment. Thus, transportation related VMT impacts due to the proposed project's employee land uses would remain significant and unavoidable.

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5.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

This section of the Program Environmental Impact Report (PEIR) discusses potential impacts associated with implementation of the Mira Mesa Community Plan Update (CPU) ("proposed project" or "proposed CPU") with respect to the existing visual resources and neighborhood character of the Mira Mesa CPU area.

5.13.1 EXISTING CONDITIONS

The existing environmental setting, which includes a detailed discussion and description of existing visual resources within the CPU area, is contained in Section 2.2.13 of this PEIR. Section 4.13 of this PEIR includes a summary of the regulatory framework relative to visual resources, which describes applicable urban design guidelines, ordinances, and regulations.

5.13.2 METHODOLOGY

Potential visual effects and neighborhood character impacts resulting from implementation of the proposed CPU were evaluated using information from existing conditions assessments of urban design, recreation, and conservation in the CPU area. This section includes a program-level analysis of the proposed CPU under the California Environmental Quality Act (CEQA), which takes into consideration the scale, bulk, materials, or style of proposed development in the context of existing conditions. The impact analysis considers operation or long-term visual and neighborhood character impacts (such as the obstruction of a scenic vista or view, creation of substantial light or glare, substantial changes to the character or landform of the area, or the loss of a distinctive or landmark tree) associated with implementation of the proposed CPU, as well as short-term construction impacts. The impact analysis assumes that proposed CPU would be constructed in compliance with the most current provisions of the California Building Code (CBC) and City of San Diego (City) development standards, as described in Chapter 4.0, Regulatory Framework.

5.13.3 THRESHOLDS OF SIGNIFICANCE

Thresholds used to evaluate potential impacts related to visual effects and neighborhood character are based on applicable criteria in the City of San Diego (City's) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (2022) and Appendix G of the CEQA Guidelines. Thresholds are modified from the City's CEQA Significance Determination Thresholds and Appendix G of the CEQA Guidelines to reflect the programmatic analysis for the proposed project. A significant impact related to visual effects or neighborhood character could occur if implementation of the proposed project would:

Issue 1: Result in a substantial obstruction of a vista or scenic view from a public viewing area as identified in the proposed Mira Mesa Community Plan;

Issue 2: Result in a substantial adverse alteration (e.g., bulk, scale, materials or style) to the existing or planned (adopted) character of the area;

Issue 3: Result in a substantial change in the existing landform;

Issue 4: Create substantial light or glare which would adversely affect daytime and nighttime views in the area; or

Issue 5: Result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the proposed Mira Mesa Community Plan.

5.13.4 IMPACTS

Issue 1: Would the project result in a substantial obstruction of a vista or scenic view from a public viewing area as identified in the proposed Mira Mesa Community Plan?

Mira Mesa is characterized by steep slopes on the west overlooking Sorrento Valley, trending eastward to a series of flat mesas with steep-sided canyons. Most development has occurred on relatively flat topography atop the flat mesa areas. Canyons within the CPU area, such as Los Peñasquitos Canyon, Carroll Canyon and Lopez Canyon, are part of the community's open space areas and the City's Multi-Habitat Planning Area (MHPA), and existing public trails and scenic overlooks provide views of these open space areas. There are no designated scenic highways within or adjacent to the CPU area.

The proposed CPU identifies future trail improvements/extensions and new pocket parks, linear parks, parklets, and scenic overlooks that will provide public access to scenic views of the CPU area's canyons and natural resources (see Table 6-2, Existing and Planned Parks and Recreation Facilities Matrix, of the proposed CPU). These facilities are illustrated on Figure 6-1 of the proposed CPU and Figure 2-19 of this PEIR. The proposed CPU also includes policies that highlight the CPU area's open space areas and natural resources, such as policy 8.9 which supports the provision of new and improved connections to existing creeks, canyons, and trails where feasible, and states that new mixed-use developments should orient views to adjacent canyons and creeks and/or provide publicly accessible pathways to nearby creek trailheads. Additionally, proposed CPU policy 6.17 calls for the preservation of the scenic qualities of the surrounding coastal and canyon viewshed areas within scenic overlooks.

Construction of the proposed project could affect the existing visual environment through excavation, grading, and on-site storage of equipment and materials. Temporary visual impacts would include views of large construction vehicles and earth moving equipment, storage areas, and any temporary signage. Grading of future project sites could result in the introduction of expansive

and light tan-colored graded pads, and the removal of vegetation and existing structures. However, the presence of construction equipment within any public view would be short-term and temporary because construction equipment would vacate the project site upon completion of the project. Future development in the CPU area would be concentrated in the proposed Urban Village areas located along major transit corridors and would occur within existing developed areas. While it is unlikely that future redevelopment will occur near and result in a substantial obstruction of the scenic overlooks identified in Figure 6-2 of the proposed CPU, it cannot be known at this program-level of review without site specific plans. Thus, impacts associated with substantial obstruction of scenic vistas or views would be considered significant.

Issue 2: Would the project result in a substantial adverse alteration (e.g., bulk, scale, materials or style) to the existing or planned (adopted) character of the area?

Mira Mesa is a developed, urbanized community with residential, mixed-use, office/research and development, and light industrial uses, as well as other types of land uses such as retail, commercial, and educational. Future development projects implemented within the CPU area would be undertaken in accordance with the General Plan and proposed CPU, which provide direction on urban design, and the San Diego Municipal Code (SDMC) which provides development standards by zone. The proposed CPU land use development strategy focuses growth into pedestrian-oriented, residential, and commercial mixed-use areas that are served by transit and are referred to as "Urban Villages" (see Figure 8-1 of the proposed CPU). Chapter 8, Urban Villages and Community Plan Implementation Zone (CPIOZ), of the proposed CPU includes urban village and CPIOZ policies and Supplemental Development Regulations (SDRs) intended to direct future development in a manner that improves the community's sense of place by incorporating pedestrian-friendly and transit-oriented community development with unique districts and villages (policies 8.1 through 8.9 and SDR.1 through SDR.10).

Construction of the proposed project could result in short-term, temporary alterations to the character of the CPU area. However, the presence of construction materials would not be permanent because construction equipment would vacate the project site upon completion of the project. Therefore, construction-related impacts to the existing or planned character of the CPU area would be less than significant. As such, the following discussion focuses on the potential for permanent visual impacts related to bulk, scale, materials, or style resulting from proposed project buildout.

Redevelopment within the CPU area to create Urban Villages would primarily occur on infill sites and areas that are already generally developed, such as existing industrial and commercial areas. Infill development can stimulate visual changes that are often perceived as improvements to a neighborhood's setting and contribute to revitalizing neighborhoods and establishing unique neighborhood qualities. Accommodating growth through infill and redevelopment is consistent with

the City's strategy for protecting canyons and open spaces, including the MHPA, by focusing development in existing developed areas. Therefore, policies in the proposed CPU emphasize combining housing, retail, employment uses, and other uses, at different scales, in Urban Village centers (policy 8.1 and policy 8.6).

Proposed urban design features include the creation of new open spaces and paseos that provide visible and physical connections between streets, sidewalks, and buildings (policy 7.1). The proposed CPU identifies streetscape enhancements, improved pedestrian crossings, and reconfigured blocks to support a pedestrian-oriented pattern and scale of development (policy 7.15). As new development occurs in Mira Mesa in accordance with the proposed CPU, the implementation of urban design policies, such as policy 7.4, would increase landscaping and green infrastructure, including trees. Trees contribute to the spatial definition of a street, providing both a comfortable sense of scale and enclosure to the public realm. They also add shade, which contributes to pedestrian comfort, and color, texture, and pattern that contribute to the street's visual quality. These urban design standards would enhance the urban forest and the existing visual character of the CPU area.

As described above, the CPU proposes to develop new mixed-use Urban Villages that would construct housing in proximity to public amenities, such as dining, shopping, entertainment, public services, and public spaces. The proposed Urban Villages would predominantly be located in areas with existing industrial, employment or commercial uses. Sorrento Mesa and Miramar Gateway, for example, are major employment areas in the technology, life science, and manufacturing/industrial sectors. The proposed commercial developments at Mira Mesa Town Center and Mira Mesa Gateway, on the other hand, would provide retail amenities, goods, and services to residents, employees, and visitors. The majority of these areas are currently defined by auto-oriented development patterns, such as single-use "superblocks" that can impede walkability and connectivity and exacerbate traffic. "Superblocks" are existing large-scale development typically bounded by arterial roads that offer limited connectivity to surrounding blocks. They typically have one means of entrance and egress, as well as limited internal connectivity. In the CPU area, "superblocks" are situated along roadways such as Black Mountain Road, Mira Mesa Boulevard and Miramar Road. Transportation improvements to support the Urban Villages would include interconnected streets, private street connections, and multi-use pedestrian and bicycle pathways to encourage multimodal transportation and break up the "superblocks." Urban Villages would also include a variety of public spaces, such as parks, plazas, and pathways, and would also provide new and accessible connections to creeks, canyons, and trails, and integrate access to them into future developments.

The existing character of the CPU area would be most subject to change in areas designated for the development of Urban Villages. Implementation of the CPU could alter the bulk and scale of these areas by allowing for an increase in housing density, new street connections, pedestrian and bicycle

facilities, and new public spaces. However, the proposed CPU provides urban design policies and SDRs for achieving a high-quality design of the built environment and the proposed community connections (policy 7.1 and SDR.1 through SDR.10). Proposed urban design policies and SDRs related to buildings and streetscape improvements will help create distinct neighborhoods, villages, corridors, and a sense of place (policies 8.1 through 8.9). Regarding the size and scale of new development, including Urban Villages, the CPU includes policies which require the design of new building heights, masses, and volumes to complement the scale and proportion of adjacent buildings (policy 7.23).

Implementation of the proposed CPU policies and SDRs in the CPIOZ areas would occur at the project level for future development within the CPU area and would provide for cohesive design themes, visual elements, and development patterns on a communitywide basis as the CPU area is built out. An aggregate shift in character would occur predominantly in proposed Urban Villages from commercial and industrial employment centers to higher density, mixed-use Urban Village and employment hubs. However, compliance with City development standards, CPU urban design policies, and SDRs would ensure that these changes would not substantially alter the existing neighborhood character of the CPU area as a whole. Therefore, implementation of the proposed CPU would not result in a substantial adverse alteration to the existing or planned (adopted) character of the area and impacts would be less than significant.

Issue 3: Would the project result in a substantial change in the existing landform?

It is anticipated that future development in accordance with the proposed CPU would not result in substantial landform alteration. The community is largely developed with existing urban land uses. While the proposed CPU would intensify some uses, development pursuant to the proposed project would occur in the future over an extended time period, and specific grading quantities associated with future development are currently unknown. However, no mass grading is anticipated since the developed CPU area is relatively flat and already nearly fully developed with urban uses, and areas in the CPU area with steep slopes that would require extensive grading are associated with canyons that are generally protected from further development under the City's Multiple Species Conservation Program (MSCP) and Environmentally Sensitive Lands (ESL) Regulations. As discussed under Issue 2, the CPU proposes intensification of existing commercial and employment uses to create "Urban Villages," and does not propose development of open space. Further, Chapter 6: Parks, Recreation, and Open Space, of the proposed CPU contains policies that prevent development, grading, and alterations of steep slopes, canyons, or other significant natural features within the community, which would prevent alteration of these landforms (CPU P policies 6.11, 6.12, and 6.21). Future development within the CPU area would also be required to comply with the SDMC's grading and landscape regulations. Thus, impacts related to landform alteration would be less than significant.

Issue 4: Would the project create substantial light or glare which would adversely affect daytime and nighttime views in the area?

The CPU area is a developed urban community and sources of light currently include those typical of the urban environment, such as building lighting for residential and non-residential land uses, parking lot lighting, street lighting, and signage. Future development implemented in accordance with the proposed CPU would necessitate the use of additional light fixtures and may contribute to existing conditions of light and glare. New light sources may include residential and non-residential interior and exterior lighting, parking lot lighting, commercial signage lighting, and lamps for streetscape and public recreational areas. The use of lights during construction activities would be temporary and limited to the work area, and construction equipment and associated lighting would vacate the project site upon completion of the project. In addition the City's outdoor lighting regulations, discussed in more detail below, would also apply to site-specific construction projects. Therefore, construction impacts related to light and glare would be less than significant. As such, the following discussion focuses on the potential for permanent light and glare impacts resulting from project buildout.

The purpose of the City's outdoor lighting regulations (SDMC Section 142.0740) is to minimize negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Regulation of outdoor lighting is also intended to promote lighting design that provides for public safety and conserves electrical energy. New outdoor lighting fixtures must minimize light trespass in accordance with the California Green Building Regulations (CalGreen), where applicable, or otherwise direct, shield, and control light to keep it from falling onto surrounding properties. The City's regulations prohibit direct-beam illumination from leaving the premises and require that most outdoor lighting be turned off between 11:00 p.m. and 6:00 a.m. with some exceptions (such as lighting provided for commercial and industrial uses that continue to be fully operational after 11:00 p.m. for public safety).

SDMC Section 142.0730 regulates glare and mandates that no greater than 50% of the exterior of a building be composed of reflective material that has a light reflectivity factor greater than 30%. Additionally, pursuant to SDMC Section 142.0730(b), reflective building materials are not permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space. Lighting impacts to MHPA areas that occur adjacent to the CPU area (e.g., residences along Sorrento Valley Boulevard, adjacent to the Los Peñasquitos Open Space in the northern portion of the CPU area, and adjacent to creeks and canyons such as Carroll Canyon in the center portion of the CPU area) would be regulated through compliance with the MHPA Land Use Adjacency Guidelines, which require lighting of all developed areas adjacent to the MHPA to be directed away from the MHPA.

Lighting and glare restrictions are also contained in the Marine Corps Air Station (MCAS) Miramar Airport Land Use Compatibility Plan (ALUCP). Section 2.6.2(a)(2)(iii) of the MCAS Miramar ALUCP requires ALUC review of projects within Review Area 2 that would have the potential to create electrical or visual hazards to aircrafts in flight, including electrical interference with radio communications or navigational signals, lighting which could be mistaken for airport lighting, glare or bright lights (including laser lights) in the eyes of pilots or aircraft using the airport, certain colors of neon lights (especially red and white) that can interfere with night vision goggles, and impaired visibility near the airport. Additionally, Section 3.5.6 (a)(1) of the MCAS Miramar ALUCP regulates potential sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights and laser light displays).

Through compliance with existing development standards and regulations pertaining to lighting and glare contained in the SDMC, MHPA Land Use Adjacency Guidelines, and the MCAS Miramar ALUCP, impacts related to light and glare would be less than significant.

Issue 5: Would the project result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the proposed Mira Mesa Community Plan?

No designated distinctive heritage or landmark trees occur within the CPU area that would qualify for protection under City Council Policy 900-19, Public Tree Protection, which provides regulations for community trees on public and private land. Mature stands of trees can be found within canyon floors such as Carroll Canyon, Lopez Canyon, and Los Peñasquitos Canyon, which support mature sycamore trees and other riparian vegetation. Tree canopy in the CPU area is primarily concentrated in canyons, open space areas, parks, and along streets and transportation corridors. These areas are generally protected as part of the MHPA under the City's MSCP Subarea Plan and are not proposed for development under the CPU. Street trees are present along many of the major roadway corridors within the CPU area, and future development within the CPU area would be subject to City Council Policy 900-19, Public Tree Protection, which also provides for the protection of street trees. Additionally, the proposed CPU provides policies and SDRs that support the City's Climate Action Plan in the preservation, improvement, and maintenance of the City's urban forest through the incorporation of trees in transit passenger areas, landscaped areas in Caltrans rights-of-way, and along commercial streets, open spaces, and urban pathways (CPU policies 3.18, 4.8 and 7.4, and SDR.2 [Urban Pathways]). Proposed CPU policy 7.8 also encourages the use of broad canopy trees to provide shade. Figure 7-2 of the proposed CPU provides the urban forestry plan for the CPU area, and the recommended street tree palette is provided in Table 7-3 of the proposed CPU. The Urban Design Chapter of the proposed CPU also includes a goal to promote "green" streets and development that incorporate sustainable designs and practices that strengthen the urban tree canopy, maximize shade, reduce the urban heat island effect, reduce air pollution, expand habitat, manage stormwater, and improve the overall quality of the environment (Proposed CPU pg. 121).

Further, as noted above, the proposed CPU contains Parks, Recreation, and Open Space policies to preserve canyon ecosystems and prohibit development that may affect mature trees (CPU Policy 6.7 and policy 6.10). Therefore, impacts related to the loss of distinctive or landmark trees would be less than significant.

5.13.5 SIGNIFICANCE OF IMPACT

Issue 1: Scenic Views or Vistas

The proposed CPU identifies future trail improvements/extensions and new pocket parks, linear parks, parklets, and scenic overlooks that will provide public access to scenic views of the CPU area's canyons and natural resources, and includes policies that emphasize views to the CPU area's natural resources, coastal views and open space areas. Although development in the CPU area is anticipated to be concentrated in the proposed Urban Village areas and would occur within existing developed areas, it cannot be known at this program-level of analysis without site-specific plans whether future redevelopment will result in a substantial obstruction of the scenic overlooks identified in the proposed CPU. Thus, impacts would remain significant and unavoidable and no feasible mitigation measures are available at this time.

Issue 2: Neighborhood Character

The proposed CPU includes policies and Supplemental Development Regulations intended to direct future development in a manner that improves the community's sense of place by transitioning towards a pedestrian-friendly community with unique districts and villages. The proposed Urban Villages are primarily focused on infill development with a mix of compact uses, and mobility improvements that will support a pedestrian-oriented area with connections to transit and employment. This shift in character from a predominantly commercial and industrial employment center to a higher density, mixed-use Urban Village and employment hub would not substantially adversely alter the existing neighborhood character of the CPU area as whole. Impacts would be less than significant

Issue 3: Landform Alteration

It is anticipated that future development in accordance with the proposed CPU would not result in substantial landform alteration because the CPU area is largely developed with existing urban land uses concentrated on the relatively flat mesa top that characterizes most of the CPU area. While the proposed CPU would intensify some uses, the proposed CPU contains policies to ensure that redevelopment takes into account existing landforms. Future development within the CPU area would also be required to comply with the SDMC's grading and landscape regulations. Thus, impacts related to landform alteration would be less than significant.

Issue 4: Light and Glare

With adherence to the City's outdoor lighting and glare regulations, the MHPA Land Use Adjacency Guidelines and MCAS Miramar ALUCP's lighting and glare regulations, impacts associated with lighting and glare would be less than significant.

Issue 5: Loss of Distinctive or Landmark Trees

No designated distinctive or landmark trees occur within the CPU area. Mature stands of trees can be found on the floor of canyon areas; however, such areas are not proposed for development. The proposed CPU includes policies that promote the planting of new trees, and future development within the CPU area would be subject to City Council Policy 900-19, which provides for the protection of street trees. Therefore, impacts related to the loss of distinctive or landmark trees would be less than significant.

5.13.6 MITIGATION, MONITORING, AND REPORTING

Potential impacts to neighborhood character, landform alteration, light and glare, and loss of distinctive or landmark trees resulting from implementation of the proposed CPU would be less than significant and no mitigation measures are required. Potential impacts to scenic views or vistas would be significant and unavoidable and no feasible mitigation measures are available at this time.

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6.0 CUMULATIVE IMPACTS

6.1 CUMULATIVE ANALYSIS APPROACH

The California Environmental Quality Act (CEQA) Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." These individual effects may entail changes resulting from a single project or from a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects occurring over a period of time.

Section 15130 of the CEQA Guidelines requires that an Environmental Impact Report (EIR) discuss the cumulative impacts of a project when the project's incremental effect would potentially be cumulatively considerable. Cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3), means that the incremental effects of the individual project are significant when viewed in connection with the effects of past projects, other current projects and the effects of probable future projects. Where a lead agency determines the project's incremental effect would not be cumulatively considerable, a brief description of the basis for such a conclusion must be included (CEQA Guidelines Section 15130(a)). In addition, the CEQA Guidelines allow for a project's contribution to be rendered less than cumulatively considerable with implementation of appropriate mitigation.

According to Section 15130(b) of the CEQA Guidelines, the discussion of cumulative impacts "…need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." Additionally, one of the following two possible approaches is required for considering cumulative effects:

A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated region- 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.

Pursuant to CEQA Guidelines Section 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans, and may be incorporated by reference. In addition, no further cumulative impact analysis is

required when a project is consistent with such plans, and the lead agency determines that the regional or area-wide cumulative impacts of the project have already been adequately addressed in a certified EIR for that plan.

CEQA Guidelines Section 15130(e) also states that "If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j)."

Per CEQA Guidelines Section 15130(e), the cumulative impacts assessment in this section primarily relies on the cumulative impact determinations in the City of San Diego (City) General Plan Program Environmental Impact Report (PEIR) which guides the City's development and has previously identified cumulative issues. The following issues were identified as cumulatively considerable in the General Plan PEIR: agricultural resources, air quality, biological resources, geological conditions, health and safety, historical resources, hydrology, land use, mineral resources, noise, paleontological resources, population and housing, public services and facilities, public utilities, transportation/traffic/circulation/parking, visual effects and neighborhood character, water quality, and greenhouse gases (GHGs). Consistent with CEQA Guidelines Section 15130(e), where the significance of cumulative impacts was previously identified for the General Plan PEIR, and the proposed project is consistent with that plan, those impacts do not need to be analyzed further. The Mira Mesa Community Plan Update (CPU) ("proposed project" or "proposed CPU") would add incremental effects to several of the cumulative impact areas identified above; however, the effects associated with the proposed project would also be cumulatively significant. The following impact areas identified as cumulatively significant in the General Plan PEIR are assessed below: Air Quality and Odor; Biological Resources; Geology and Soils; GHG Emissions; Historical, Archaeological, and Tribal Cultural Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use; Noise; Public Services and Facilities; Public Utilities; Transportation; and Visual Effects and Neighborhood Character.

6.2 CUMULATIVE IMPACT ANALYSIS

6.2.1 AIR QUALITY AND ODOR

The cumulative study area for regional air quality analysis is the San Diego Air Basin (SDAB). SDAB is designated as a nonattainment area for ozone, respirable particulate matter, and fine particulate matter under state standards and a nonattainment area for ozone under federal standards. The San Diego County Regional Air Quality Strategy (RAQS) and California State Implementation Plan (SIP) are the most appropriate documents for evaluating the proposed project's cumulative effects because the San Diego County RAQS and applicable portions of the California SIP evaluated air quality

emissions for the whole of SDAB using a future development scenario. As analyzed in Section 5.1, Air Quality and Odor, of this PEIR, the CPU proposes greater density than the adopted Community Plan, which would result in greater emissions than what was accounted for in the RAQS and SIP. The proposed CPU is intended to further express and implement General Plan policies in the CPU area through the provision of community-specific recommendations that implement citywide goals and policies, address community needs, and guide zoning. The two documents work together to establish the framework for growth and development in the CPU area; thus, the goals and recommendations of the proposed CPU are designed to be consistent with the goals and policies of the General Plan. Furthermore, implementation of mitigation measure MM-AQ-1 would ensure the City provides a revised land use map and housing and employment forecast to the San Diego Association of Governments (SANDAG) to be considered in future updates to the RAQS and SIP. Nevertheless, the proposed project would conflict with implementation of the San Diego County RAQS and California SIP, and impacts would be significant and cumulatively considerable.

The volatile organic compound, respirable particulate matter, and fine particulate matter emissions generated by implementation of the proposed project could also contribute to existing violations of their respective standards. Implementation of mitigation measures MM-AQ-2 through MM-AQ-3 would reduce criteria pollutant emissions. However, because it cannot be demonstrated at the programmatic level that future development would not exceed applicable air quality standards, cumulative impacts associated with air quality standards would be significant and unavoidable.

The proposed CPU would not expose sensitive receptors to substantial pollutant concentrations, nor would it result in the creation of objectional odors. Thus, impacts associated with these issues would be less than significant and not cumulatively considerable.

6.2.2 BIOLOGICAL RESOURCES

Preservation of the region's biological resources is addressed through the implementation of regional Habitat Conservation Plans. Impacts to biological resources in the City are managed through the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP), which is incorporated by reference in the General Plan, and the City's Vernal Pool Habitat Conservation Plan (VPHCP).

The CPU area currently supports sensitive biological resources, including wetlands, scrub habitats, chaparral, and grasslands, as well as sensitive plants and wildlife. While much of the CPU area is developed and does not contain sensitive biological resources, sensitive vegetation occurs along the northern, northeastern, and western edges of the CPU area boundary, as well as within the vegetated canyons in the central southern portion of the CPU. The entire CPU area is within the City's MSCP and VPHCP areas and Multi-Habitat Planning Area (MHPA) lands occur in the areas listed

above. Resources within the CPU area and in adjacent communities are protected through Open Space designations and/or their location within the MHPA in addition to protections provided by the City's Environmentally Sensitive Lands (ESL) Regulations. The MSCP was designed to compensate for the regional loss of biological resources throughout the region. Projects that conform with the MSCP, as specified by the MSCP SAP and other City programs and regulations, are not expected to result in a significant cumulative impact for those biological resources adequately covered by the MSCP. These resources include the vegetation communities identified as Tier I through IV and the MSCP-covered species. The proposed CPU also includes policies 6.7 through 6.21 related to the protection of biological resources. Future development projects within the CPU area would be subject to the City's ESL Regulations, MSCP and VPHCP policies, and CPU policies to protect biological resources.

Cumulative development that would occur within the CPU area and in the surrounding communities would result in less than significant cumulative impacts to biological resources due to the developed nature of these communities combined with the existing regulatory framework that would ensure that impacts to sensitive biological resources are avoided. Although individual future projects could contribute to incremental biological resource impacts, compliance with proposed CPU policies, the MSCP SAP, VPHCP, ESL Regulations, and the Land Development Manual Biology Guidelines would ensure that cumulative impacts from future development would be less than significant. Furthermore, for future projects within the CPU area, avoidance, minimization, and/or mitigation will be determined on a project-by-project basis to address potentially significant impacts to biological resources. Avoidance and minimization measures are intended to guide projects to avoid impacts to sensitive biological resources during the planning process through incorporation of project design features and mitigation measures. The proposed project's contribution would not be cumulatively considerable, and cumulative impacts related to biological resources would be less than significant.

6.2.3 GEOLOGY AND SOILS

Cumulative impacts related to geologic hazards within the CPU area and surrounding communities would be less than significant with implementation of recommendations included in future site-specific geotechnical investigations required under the California Building Code (CBC) and San Diego Municipal Code (SDMC), as well as compliance with applicable regulations and industry standards and codes. As previously discussed, geologic hazards occur from mapped faulting and site-specific soil or geologic conditions.

Development of the proposed project in combination with development in surrounding communities would not compound or worsen potential geologic hazards. Geologic hazard conditions are site-specific and do not compound or increase in combination with projected development elsewhere in the City. Thus, as individual future development projects would be

required to comply with remedial measures identified in a site-specific geotechnical investigation and applicable regulations and industry standards and codes, as required by the SDMC and CBC, cumulative impacts related to geologic hazards would be less than significant and the proposed project's contribution would not be cumulatively considerable.

6.2.4 GREENHOUSE GAS EMISSIONS

The impact analysis discussed under Issue 1 in Section 5.4, Greenhouse Gas Emissions, is a cumulative analysis by its nature because the generation of GHG emissions and their overall impact are a global matter. Cumulatively, there exists a significant impact related to GHG emissions at the global level. However, pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of a plan for the reduction of mitigation of GHG Emissions, such as the City's Climate Action Plan (CAP), adopted for its respective geographic location. As discussed under Issue 1 in Section 5.4, the proposed project's contribution to the cumulative impact from GHG emissions would be less than cumulatively considerable because implementation of the proposed project would be consistent with the goals and policies of the City's CAP and the City's General Plan City of Villages strategy. As discussed under Issue 2 in Section 5.4, the proposed project is consistent with City policies, plans, and codes that have been adopted to ensure that CAP GHG emissions reduction targets are met. Thus, cumulative impacts related to conflicts with GHG plans and policies would be less than significant and the proposed project's contribution would not be cumulatively considerable.

6.2.5 HISTORICAL, ARCHAEOLOGICAL, AND TRIBAL CULTURAL RESOURCES

Although the proposed CPU could result in direct impacts to historical resources, the goals, policies, and recommendations enacted by the City, combined with federal, state, and local regulations, provide a framework for developing project-level historical resources mitigation measures for future discretionary projects. Future discretionary projects proposed within the CPU area would be required to comply with and be subject to site-specific review in accordance with the City's Historical Resources Regulations and Historical Resources Guidelines. The City's process for evaluating discretionary projects includes environmental review and documentation pursuant to CEQA, as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. As individual future projects may contribute to incremental historical resource impacts, and the degree of future impacts and the applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at this program level of analysis, the cumulative impact on historical resources would be considered significant.

The General Plan PEIR states that the continued pressure to develop or redevelop areas in the region would result in incremental impacts to the historic record in the San Diego region, which was determined to be a cumulatively significant impact. Regardless of the efforts taken to avoid impacts to cultural resources, the more land that is converted to developed uses, the greater the potential for impacts to cultural resources. While individual projects can avoid or mitigate the direct loss of a specific resource, the effects would be cumulatively considerable, and therefore could result in a significant cumulative impact.

Impacts to archaeological resources, sacred sites, human remains, and tribal cultural resources would be considered significant with the implementation of the proposed CPU. Although federal, state, and local regulations, as well as goals and policies developed by the City would reduce impacts to these resources, future development in the CPU area could still result in significant impacts. Impacts to archaeological and tribal cultural resources from future development projects, in conjunction with impacts from development in surrounding communities, could result in a significant cumulative impact to these resources. Implementation of the existing regulatory and mitigation framework could minimize the impacts of development under the proposed project, but cumulative impacts to archaeological resources, sacred sites, human remains, and tribal cultural resources would remain significant and unavoidable.

6.2.6 HAZARDS AND HAZARDOUS MATERIALS

As discussed in Section 5.6, Hazards and Hazardous Materials, compliance with federal, state, regional, and local health and safety laws and regulations would address potential health and safety impacts. Potential health and safety impacts associated with wildfires, hazardous substances, emergency response and evacuation plans, and aircraft hazards would not combine to create cumulative impacts when viewed together with the potential growth that could occur within the CPU area and surrounding communities (Scripps Miramar Ranch, Miramar Ranch North, Carmel Valley, University, etc.). Wildfire impacts on the urbanized CPU area would be limited because future projects implemented in accordance with the proposed project would be subject to the City's Brush Management regulations and the City's Fire Code requirements. Similarly, potential hazards associated with hazardous material sites are site specific and would not combine with hazards in other communities to create a cumulative impact. Future development projects within the CPU area, as well as in surrounding communities that lie within the Airport Influence Areas of the Marine Corps Air Station (MCAS) Miramar Airport Land Use Compatibility Plan (ALUCP), would be subject to the requirements of the ALUCP, including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. Therefore, implementation of the proposed CPU would not result in significant cumulative impacts related to hazards and hazardous materials issues and the proposed project's contribution would not be cumulatively considerable.

6.2.7 HYDROLOGY AND WATER QUALITY

Future projects within the CPU area and surrounding areas could have a cumulative impact on hydrology and water quality, including downstream problems with flooding, capacity of drainage facilities, erosion, and sedimentation. However, all future development within the CPU area and surrounding communities would be required to comply with applicable National Pollutant Discharge Elimination System permit requirements, including the development of a Stormwater Pollution Prevention Program if the disturbed area covers 1 acre or more, or a Water Quality Control Plan if the disturbed area is less than 1 acre. Future projects would also be required to follow the City's Drainage Design Manual for drainage design and best management practices for retention and treatment of storm water runoff. Portions of the CPU area contain mapped floodplains, including special flood hazard areas (SFHAs). Future development within mapped floodplains would be subject to applicable City (SDMC Sections 143.0145 and 143.0146) and Federal Emergency Management Agency requirements to ensure that development would not impede or redirect flood flows and to avoid flood hazards. Thus, cumulative water quality, runoff, and flooding impacts would be less than significant and the proposed CPU's contribution would not be cumulatively considerable.

6.2.8 LAND USE

As discussed in Chapter 5.8 of this PEIR, the proposed CPU would be consistent with the goals of the General Plan and the regulatory framework of the SDMC. The proposed CPU is also consistent with the goals and objectives of SANDAG's 2050 Regional Plan, the City's Historical Resources Regulations, the City's MSCP SAP, MHPA Land Use Adjacency Guidelines, VPHCP, and the MCAS Miramar ALUCP. Future development projects within the CPU area would comply with the applicable regulations and requirements within these planning documents intended to ensure compatibility of land uses. Additionally, the proposed CPU does not include any features that would divide an established community. Based on the compatibility of the proposed project with the General Plan policy framework and other applicable land use plans and regulations, cumulative land use impacts associated with the proposed CPU would be less than significant and the proposed project's contribution would not be cumulatively considerable.

6.2.9 NOISE

The analysis provided in Section 5.9, Noise, is cumulative in nature because the analysis considers noise and vibration impacts associated with buildout of the entire CPU area, and the traffic assumptions used in the analysis include cumulative traffic associated with buildout of neighboring communities. Noise impacts associated with growth in neighboring communities would be localized in nature. However, the land uses within the CPU area would be subject to the same General Plan

policies, noise ordinance requirements, and Title 24 standards discussed in this PEIR. Thus, cumulative noise impacts associated with stationary noise would be less than significant, and the proposed project's contribution would not be cumulatively considerable. Cumulative impacts associated with construction noise and groundborne vibration would be less than significant because construction activities would be temporary and short-term in duration and would not combine with construction activities around the CPU area to result in a cumulatively considerable impact. However, the proposed CPU's contribution to cumulative noise impacts associated with ambient noise increases, noise–land use compatibility, and airport noise would be cumulatively considerable and significant and unavoidable, as discussed in Section 5.9.

6.2.10 PUBLIC SERVICES AND FACILITIES

Population growth in the CPU area and surrounding areas could have a cumulative impact related to public services and facilities, including potential environmental impacts related to construction of new or expanded facilities. Future facilities that are proposed in the CPU area, as well as the CPU's policy framework which supports the expansion of public services and facilities in order to adequately serve the growing population in the community, would facilitate the future construction and operation of new or expanded police stations, fire stations, libraries, schools, and parks and recreational facilities. Construction of these proposed facilities would be subject to environmental review pursuant to CEQA at the time of facility design and approval. Additionally, the specific public services and facilities improvements that would be constructed in the surrounding, cumulative impact area of the CPU and adjacent Community Plan areas, the degree of future impacts, and the applicability, feasibility, and success of future mitigation measures cannot be adequately known at this program level of analysis. Therefore, cumulative impacts related to public services are considered significant and unavoidable.

6.2.11 PUBLIC UTILITIES

The Water Supply Assessment (WSA) prepared for the proposed CPU concluded that the proposed CPU would be consistent with the water demand assumptions included in the regional water resource planning documents of the San Diego County Water Authority (SDCWA) and the Metropolitan Water District (MWD). Furthermore, 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 the City's Public Utilities Department (PUD), the SDCWA, and MWD to serve the projected demands of the CPU area, in addition to existing and planned future water demand of the City. Thus, cumulative impacts related to water supply would be less than significant.

Past, present, and future projects within the CPU area and surrounding areas could have a cumulative impact related to public utilities, including potential environmental impacts related to the

construction of new or expanded facilities. Cumulative projects, such as past, present and future projects, in the surrounding areas could result in increased demand on public utilities due to more dense development, requiring upgrades or replacement of existing utility infrastructure. However, implementation of these projects would be required to comply with the regulatory framework established by the General Plan, the SDMC, Municipal Separate Storm Sewer System requirements, the Stormwater Standards Manual, the City's Capital Improvement Program Guidelines and Standards, and other relevant regulatory documents. Current and future planning documents would assess future development projects' demand for public utilities, and address the provision of new or expanded utility infrastructure to meet the expected demand. However, the specific utilities improvements that would be constructed in the cumulative area of the CPU area and adjacent Community Plan areas, the degree of future impacts, and the applicability, feasibility, and success of future mitigation measures cannot be adequately known at this program level of analysis. The proposed CPU could result in the future development of upgraded or new infrastructure for water distribution, stormwater drainage, sewer conveyance, and communication systems, which could result in a significant impact on the environment. As such, the proposed CPU could result in cumulative impacts associated with the construction of the new or expanded infrastructure. Therefore, this impact would be significant and cumulatively considerable.

The proposed CPU would generate solid waste through demolition/construction activities and ongoing operations that would increase the amount of solid waste generated within the region. Future projects within the CPU area would be required to comply with City regulations regarding solid waste including the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Section 66.0601 et seq.) and Recycling Ordinance (SDMC Section 66.0701 et seq.) which would divert solid waste from the Miramar Landfill and preserve the landfill capacity. Compliance with the SDMC and consistency with General Plan policies promoting waste diversion would help preserve the City's solid waste capacity. Future projects that involve the construction, demolition, and/or renovation of 40,000 square feet or more which could generate approximately 60 tons of waste or more are also required to develop and implement waste management plans which would include measures to provide sufficient interior and exterior storage space for refuse and recyclable materials, and measures to handle landscaping and green waste materials associated with the occupancy of the proposed development. Therefore, cumulative solid waste impacts would be less than significant.

6.2.12 TRANSPORTATION

The proposed project is a long range plan and an update to the adopted Community Plan with no specific development project proposed at this time. The transportation analysis provided in Section 5.12 of this PEIR is therefore cumulative in nature as it takes into account potential transportation impacts from the entire CPU area as well as adjacent areas. Thus, as discussed in Section 5.12,

cumulative transportation impacts related to VMT for employment land uses upon buildout of the proposed project would be significant and unavoidable. Impacts associated with conflicts with current plans and policies, hazardous design features, and inadequate emergency access would be less than significant and would not be cumulatively considerable.

6.2.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

Changes in visual effects and neighborhood character resulting from individual development projects under the proposed CPU could contribute incrementally to cumulative impacts with regard to visual effects and neighborhood character. Future growth within the CPU area has the potential to cumulatively impact the visual environment due to the overall intensification of development associated with buildout of the CPU area and would result in changes to existing development patterns and neighborhood character.

An aggregate shift in character would occur predominantly in the proposed Urban Villages from commercial and industrial employment centers to higher density, mixed-use Urban Villages and employment hubs. Compliance with City development standards and CPU urban design policies would ensure that these changes would not substantially adversely alter the existing neighborhood character of the CPU area as a whole. Since the CPU area is already urbanized and future development in the CPU area and surrounding communities is likely to take place on infill sites in previously developed communities, cumulative impacts to neighborhood character resulting from implementation of the proposed CPU would be less than significant. Future development patterns and intensities in surrounding communities, are anticipated to undergo change as the respective community plans are implemented. Pursuant to the implementation of the General Plan's City of Villages strategy and general shift to infill development, it is anticipated that existing urbanized communities would intensify as they are built out. The degree of change in neighborhood character would vary per community (as envisioned in the respective community plan). The proposed CPU's contribution to the overall change in this area of the City at buildout would be less than significant given the proposed CPU focuses changes in existing developed locations of the CPU area.

As discussed in Section 5.13, within the CPU area, it cannot be known at this program-level of analysis without site-specific plans whether future redevelopment will result in a substantial obstruction of the scenic overlooks identified in the proposed CPU. As such, localized impacts to scenic views and vistas are considered significant and unavoidable. However, cumulative development and projects in surrounding communities would not contribute to these localized visual impacts. Therefore, cumulative impacts related to scenic vistas or views would be less than significant and not cumulatively considerable.

As most steep slopes and landforms are designated as open space areas and included in the MHPA, future development that would require extensive landform alteration is not proposed under the CPU. Therefore, cumulative impacts related to landform alteration are not anticipated. Furthermore, the proposed CPU contains policies to ensure that redevelopment takes into account existing landforms. The proposed CPU contains Parks, Recreation, and Open Space policies 6.11 and 6.12 that prevent development, grading, and alterations of steep slopes, canyons, or other significant natural features within the community. As future development projects within the CPU area are proposed, they would be reviewed to determine whether grading plans demonstrate compliance with the City's SDMC regarding grading and if a permit is required. Thus, cumulative impacts related to landform alteration would be less than significant and not cumulatively considerable.

With adherence to the City's outdoor lighting and glare regulations, the MHPA Land Use Adjacency Guidelines, and MCAS Miramar ALUCP's lighting and glare regulations, cumulative impacts associated with lighting and glare would be less than significant and the project's contribution would not be cumulatively considerable.

While mature trees exist within the canyons and MHPA in the CPU area, these areas will continue to be preserved under the proposed CPU. No designated distinctive or landmark trees or mature stands of trees occur within areas that are proposed to be developed under the CPU. The proposed CPU includes policies that promote the planting of new trees (policies 7.4 and 7.8) and future development within the CPU area would be subject to City Council Policy 900-19, which provides for the protection of street trees. Therefore, cumulative impacts related to the loss of distinctive or landmark trees would be less than significant and not cumulatively considerable.

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7.0 OTHER MANDATORY DISCUSSION AREAS

Sections 15126.2 and 15128 of the California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) provide a summary of growth-inducing impacts, effects found not to be significant, significant and unavoidable impacts, and significant irreversible environmental changes that would result from implementation of the proposed Mira Mesa Community Plan Update (CPU) ("proposed project" or "proposed CPU"). These findings are based in part on the analysis provided in Chapter 5.0, *Environmental Analysis*.

7.1 GROWTH INDUCEMENT

CEQA Guidelines Section 15126.2(e) requires that EIRs include an evaluation of potential growth inducement impacts to "[d]iscuss 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 evaluation includes projects that 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."

The City of San Diego (City) *CEQA Significance Determination Thresholds* (City of San Diego 2022) provide additional direction on this issue, noting that growth inducement:

> …is usually associated with those projects that foster economic or population growth, or the construction of additional housing, either directly or indirectly which may result in the construction of major and new infrastructure facilities. Also, a change in land use policy or projects that provide economic stimulus, such as industrial or commercial uses, may induce growth. Accelerated growth may further strain existing community facilities or encourage activities that could significantly affect the surrounding environment.

The City's CEQA Significance Determination Thresholds (City of San Diego 2022) also state that "the analysis must avoid speculation and focus on probable growth patterns or projects."

The City's General Plan Program EIR (PEIR; City of San Diego 2007) notes that the "population in San Diego will grow whether or not the Draft General Plan is adopted…" and a number of the General Plan policies are in place to "…encourage business, education, employment and workforce development…preserve and protect valuable employment land, especially prime industrial land, from conversion to other uses…and facilitate expansion and new growth of high quality employment opportunities in the City." The General Plan incorporates the "City of Villages" strategy,

which notes that a "village" is a place where residential, commercial, employment, and civic uses are present and integrated, and are characterized by compact mixed-use areas that are pedestrian-friendly and linked to the regional transit system (City of San Diego 2021). Based on Government Code Section 65300, the General Plan serves as a comprehensive, long-term plan for physical development of the City and, by definition, is intended to manage and address future growth in the City. Implementation of the "City of Villages" strategy relies on the future designation and development of village sites through comprehensive community plan updates.

The proposed CPU serves as a comprehensive long-term plan for future growth and development within the Mira Mesa community. The proposed CPU would be consistent with and would implement the General Plan's City of Villages Strategy as it would focus future development into mixed-use activity centers that are pedestrian-friendly and linked to an improved regional transit system. The proposed CPU land uses would accommodate residential and non-residential growth. The proposed CPU also includes a robust policy framework that promotes mixed-use (Policies 2.1 through 2.7; 8.1, 8.2), transit-oriented development (Policies 3.17 through 3.25); supports the creation of a safe, comfortable, and accessible pedestrian and bicycle network (Policies 3.1 through 3.16; 7.1 through 7.4); and provides guidance regarding the provision of public services, facilities, and parks to support the population in the CPU area (Policies 4.1 through 4.11; 6.1 through 6.6; 8.8, 8.9). Other potential environmental impacts associated with population growth in the CPU area (e.g., transportation, air quality, noise, greenhouse gas emissions, public utilities and public services and facilities) are addressed in the relevant sections of this PEIR.

The proposed CPU promotes infill residential, commercial, and industrial development in proximity to existing and planned transit services. Additional proposed policies would support the economic viability and growth of the CPU area's commercial and employment areas and the maintenance of portions of the CPU area as a major employment area (i.e., the industrial areas of Miramar and employment centers in Sorrento) (Policies 2.1, 2.3, 2.13, 8.4, 8.5. These policies would serve to facilitate expansion and new growth of high-quality employment opportunities with bicycle or pedestrian access to transit. The proposed CPU provides comprehensive planning for the management of population growth, necessary economic expansion to support development efforts, and allows for an appropriate balance of managed population, housing, and economic growth to accommodate community development while maintaining related community and environmental standards. Therefore, growth inducement impacts would be less than significant.

7.2 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires that an EIR contain a brief statement disclosing the reasons why various possible significant effects of a project were found not to be significant and therefore were not discussed in detail in the EIR. The impacts associated with the following environmental issue areas were

found to not be significant as a result of the proposed project: Agricultural and Forestry Resources, Energy, Mineral Resources, Paleontological Resources, and Population and Housing.

7.2.1 AGRICULTURAL AND FORESTRY RESOURCES

7.2.1.1 Farmland Mapping and Monitoring Program

Based on farmland mapping prepared by the California Department of Conservation's Farmland Mapping and Monitoring Program (DOC 2022), the CPU area is not identified as containing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Most of the CPU area is classified as Urban and Built-up Land. A few areas within the CPU boundary are mapped as Other Land. Therefore, there would be no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

7.2.1.2 Agricultural Zoning/Williamson Act

The CPU area does not have any lands under a Williamson Act contract. There are a few areas of the CPU that will retain their agricultural base zone, as shown in Figure 2-15, Existing Zoning, and Figure 3-9, Proposed Zoning, of this PEIR. These areas are not currently used for agricultural purposes, and they are designated as Parks, Institutional, or Open Space areas under the proposed CPU. The proposed CPU does not propose development in designated Open Space areas, and the development of parks and institutional facilities associated with the proposed CPU will not conflict with an existing agricultural use. Therefore, no impact is identified for this issue area.

7.2.1.3 Forest, Timberland, Timberland Production Zone

The CPU area is located within an urbanized area. There are no existing forestlands, timberlands, or timberlands-zoned Timberland Production either within the CPU area or in the immediate vicinity that would conflict with existing zoning or the proposed rezoning. Therefore, no impact is identified for this issue area.

7.2.1.4 Loss of Forest Land

The CPU area is located within an urbanized area. There are no existing forestlands either within the CPU area or in the immediate vicinity. Implementation of the proposed project would not result in the loss of forestland or conversion of forestland to non-forest use. Therefore, no impact is identified for this issue area.

7.2.1.5 Conversion of Farmland or Forest

The CPU area is located within an urbanized area; there are no existing forestland uses either within the CPU area or the immediate vicinity. Implementation of the proposed project would not involve any changes that could result in the conversion of farmland to non-agricultural use or the conversion of forestland to non-forest use. Therefore, no impact is identified for this issue area.

7.2.2 ENERGY

7.2.2.1 Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources

The project considered in this PEIR is the adoption of a community plan and does not propose any specific development project(s); therefore, impacts to energy resources are addressed generally, based on projected buildout of the proposed project. Implementation of the proposed CPU has the potential to result in impacts to energy supply due to development that is anticipated to occur in response to projected population growth. Depending on the types of future uses, impacts would need to be addressed in detail at the time specific projects are proposed. At a minimum, future projects implemented in accordance with the proposed project would be required to meet the mandatory energy standards of the current California Energy Code (Title 24 Building Energy Standards of the California Public Resources Code). As detailed below, the proposed CPU would promote increases in density and would be consistent with the General Plan "City of Villages" strategy, resulting in more efficient energy use.

Energy resources would be consumed during construction of future development under the proposed project, and would also be consumed to provide operational lighting, heating, cooling, and transportation for future development.

a. Construction-related Energy Use

During construction, energy use would occur through fuel use associated with the operation of vehicles and equipment to conduct construction activities, and worker traffic to and from the construction site. At the program level of analysis, it is too speculative to comprehensively quantify the construction-related energy consumption of future development, either in total or by fuel type. Although the exact details of the projects that could be implemented in accordance with the proposed project are not known at this time, construction activities would be temporary and there are no known conditions in the CPU area that would require non-standard equipment or construction practices that would increase fuel-energy consumption above typical rates. Furthermore, construction equipment used for future development projects is anticipated to become more efficient as engines are replaced, exhaust systems are retrofitted, and older equipment is retired and new equipment meeting more stringent emission standards is put into

service, thus further reducing construction-related energy consumption. Future projects would also be required to comply with the California Air Resource Board's Airborne Toxics Control Measures, which restrict heavy-duty diesel vehicle idling time to 5 minutes. Therefore, development implemented in accordance with the proposed project would not result in the use of wasteful amounts of fuel or other forms of energy during the construction of future projects. Impacts would be less than significant.

b. Long-term Operation-related Energy Use

Transportation-related Energy Use

Transportation energy use associated with the proposed project would be attributed to trips by individuals traveling to and from the CPU area using passenger vehicles or public transit. Passenger vehicles would be mostly powered by gasoline, with some fueled by diesel or electricity. Public transit would be powered by gasoline, diesel or natural gas and could potentially be fueled by electricity.

As detailed in Appendix L, Traffic Impact Study, both the Resident vehicle miles travelled (VMT) per Capita and Employee VMT per Employee at build out of the current adopted community plan would be higher than the proposed CPU (12.6 versus 10.7 Resident VMT per Capita and 25.9 versus 23.3 Employee VMT per Employee). Thus, the proposed land use changes would result in decreased VMT compared to buildout of the adopted land uses. The proposed CPU policies support General Plan concepts such as increased walkability, enhanced pedestrian and bicycle networks, and improved connections to transit (Policies 2.2, 2.11; 3.1 through 3.25; 7.1 through 7.4). The increased development potential within the CPU area would be focused around the existing and planned transit stations and is intended to support increased use of these transit stations and reduce overall VMT. Access to the existing and planned bus lines, as well as the proximity of homes to transit services, combined with the mobility and transit improvements, would support a more energy-efficient transportation system and increase opportunities for non-single occupancy vehicle travel. Long-term buildout of the proposed project, therefore, would not create a land use pattern that would result in a wasteful, inefficient, or unnecessary use of transportation-related energy. Impacts would be less than significant.

Building-related Energy use

As future development within the CPU area is implemented, new or renovated buildings would use electricity and natural gas to run various appliances and equipment, including space and water heaters, air conditioners, ventilation equipment, lights, and numerous other devices. Generally, electricity use is higher in the warmer months due to increased air conditioning needs, and natural gas use is highest when the weather is colder as a result of high heating

demand. Residential uses would likely see the most energy use in the evening as people return from work, while most non-residential facilities would have high energy use during normal business hours and lower levels at other times.

Buildout of the proposed project would result in an increase of natural gas and electricity usage when compared to both the existing conditions and buildout of the adopted Community Plan, as the proposed project would allow for increased development intensity within certain areas. Future development implemented under the proposed project would be required to meet the mandatory energy standards of California Green Building Standards Code (CALGreen) and the California Energy Code (24 CCR Part 6) in effect at the time of development and would benefit from the efficiencies associated with these regulations as they relate to building heating, ventilation, and air conditioning (HVAC) mechanical systems; water heating systems; and lighting. Additionally, rebate and incentive programs that promote the installation and use of energy-efficient plug-in appliances and lighting may be available as incentives for future development.

In addition to the energy efficiencies that would be realized from compliance with CALGreen and Title 24 standards in new developments, the proposed CPU includes policies that support energy-efficient and renewable energy sources and systems in future development. There are no features of the project that would support the use of excessive amounts of energy or would create unnecessary energy waste. Impacts would be less than significant.

7.2.2.2 Conflicts with Adopted Plans

The proposed CPU supports the multimodal strategy of the San Diego Association of Governments' (SANDAG's) Regional Plan through improvements to increase bicycle, pedestrian, and transit access and would result in a decrease in VMT at build out when compared to the adopted community plan (SANDAG 2021). The proposed CPU would include policies to promote and enhance mobility throughout the Mira Mesa community. The proposed CPU includes goals and policies that support the General Plan and City's Climate Action Plan (CAP) policies aimed at reducing energy consumption (City of San Diego 2022a and 2022b). Furthermore, energy efficiencies associated with future development within the CPU area would be realized from compliance with CALGreen and Title 24 standards. Refer to Sections 5.4 and 5.8 of this PEIR for a discussion of the proposed project's consistency with adopted plans, including SANDAG's Regional Plan, the City's General Plan, and the City's CAP. Impacts would be less than significant.

7.2.3 MINERAL RESOURCES

According to the California Geological Survey Special Report 240 (DOC 2017), areas classified as Mineral Resource Zone 1, 2, 3, and 4 (MRZ-1 through MRZ-4) have been mapped for the City of San Diego. These categories are described as follows:

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or areas where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- **MRZ-3:** Areas containing mineral occurrences of undetermined mineral resource significance.
- **MRZ-4:** Areas where available information is inadequate for assignment to any other MRZ category.

The Conservation Element of the General Plan indicates that the eastern portion of the CPU area is classified as MRZ-2 (City of San Diego 2008). The MRZ-2 area is in a developed and highly urbanized area. The CPU area also includes areas mapped as MRZ-3 (City of San Diego 2008). Land within the CPU area is either already developed with commercial, residential, and industrial uses, or is designated open space. Mineral extraction would not occur in these existing developed and open space areas. Additionally, mineral extraction has occurred within the CPU area for decades and these quarries are currently undergoing redevelopment under the 3Roots San Diego Master Plan. The draft Stone Creek Master Plan also proposes the redevelopment of a closed quarry. Implementation of the proposed project would not affect or result in the loss of identified mineral resources, nor would it result in the loss of availability of a locally important mineral resource recovery site delineated on any local or general plan. Therefore, no impact to mineral resources would occur.

7.2.4 PALEONTOLOGICAL RESOURCES

Future development implemented in accordance with the proposed project that requires grading or excavation into underlying geologic formations with moderate to high paleontological sensitivity could expose fossil remains. Table 7-2 provides a list of geological rock units and their associated paleontological sensitivity rating within the City. Geological rock units in the CPU area are also shown on Figure 2-6, Regional Geology. As shown in Table 7-2, certain geological units have known moderate to high-sensitivity for containing paleontological resources within the CPU area. Thus,

paleontological resources could be impacted by earthwork that would disturb deposits of formational materials within the CPU area.

Table 7-2
Paleontological Sensitivity of Geological Rock Units within the City

Geological Rock Units	Potential Fossil Localities	Sensitivity Rating
Alluvium (Qsw, Qal, or Qls)	All communities where this unit occurs	Low
Ardath Shale (Ta)	All communities where this unit occurs	High
Bay Point/Marine Terrace (Qbp) [1]	All communities where unit occurs	High
Cabrillo Formation (Kcs)	All communities where unit occurs	Moderate
Delmar Formation (Td)	All communities where unit occurs	High
Friars Formation (Tf)	All communities where unit occurs	High
Granite/Plutonic (Kg)	All communities where unit occurs	Zero
Lindavista Formation (Qln, Qlb) [2]	Mira Mesa/Tierrasanta All other areas	High Moderate
Lusardi Formation (Kl)	Black Mountain Ranch/Lusardi Canyon Poway/Rancho Santa Fe All other areas	High Moderate
Mission Valley Formation (Tmv)	All communities where unit occurs	High
Mt. Soledad Formation (Tm, Tmss, Tmsc)	Rose Canyon All other areas where this unit occurs	High Moderate
Otay Formation (To)	All communities where unit occurs	High
Point Loma Formation (Kp)	All communities where unit occurs	High
Pomerado Conglomerate (Tp)	Scripps Ranch/Tierrasanta All other areas	High
River /Stream Terrace Deposits (Qt)	Southeastern/Chollas Valley/Fairbanks Ranch/Skyline/Paradise Hills/Otay Mesa, Nestor/ San Ysidro All other areas	Moderate Low
San Diego Formation (Qsd)	All communities where this unit occurs.	High

Table 7-2
Paleontological Sensitivity of Geological Rock Units within the City

Geological Rock Units	Potential Fossil Localities	Sensitivity Rating
Santiago Peak Volcanics (Jsp) Metasedimentary Metavolcanic	Black Mountain Ranch/La Jolla Valley, Fairbanks Ranch/Mira Mesa/Peñasquitos All other areas	Moderate Zero
Scripps Formation (Tsd)	All communities where this unit occurs	High
Stadium Conglomerate (Tst)	All communities where this unit occurs	High
Sweetwater Formation	All communities where this unit occurs	High
Torrey Sandstone (Tf)	Black Mountain Ranch/Carmel Valley All other areas	High Low

Source: City of San Diego 2022.

Future development projects implemented under the proposed project could destroy paleontological resources if the fossil remains are not recovered and salvaged. In addition, future projects proposing shallow grading where formations are exposed and where fossil localities have already been identified could also impact paleontological resources. Grading activities associated with future projects implemented under the proposed project could potentially result in earthwork greater than 1,000 cubic yards in quantity, extending to a depth of 10 feet or greater, earthwork greater than 2,000 cubic yards in quantity, or grading on a fossil recovery site or within 100 feet of a mapped location of a fossil recovery site.

Pursuant to San Diego Municipal Code (SDMC) Section 142.0151, all development is required to screen for grading quantities and geologic formation sensitivity and apply the appropriate requirements for paleontological monitoring. Paleontological monitoring is required for grading that extends 10 feet or greater in depth and involves 1,000 cubic yards or more within high-sensitivity paleontological geological units and/or 2,000 cubic yards or more within moderate sensitivity paleontological geological units, grading on a fossil recovery site, or grading within 100 feet of a mapped location of a fossil recovery site. Implementation of the General Grading Guidelines for Paleontological Resources in the City's Land Development Manual (LDM), as required by SDMC Section 142.0151, would ensure that impacts to paleontological resources would be less than significant.

7.2.5 POPULATION AND HOUSING

While population projections for the CPU area indicate that the population will increase over time under the proposed project, this population growth would not be substantial and unplanned. The proposed CPU serves as a comprehensive, long-term plan for the physical development of the Mira

Mesa community and is intended to manage and address future growth in the community and to support transit use and multimodal mobility. The proposed project would not displace people or existing housing, as it would designate planned land uses and zoning that would accommodate future development within the CPU area. Therefore, impacts related to population and housing would be less than significant.

7.3 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL IMPACTS

In accordance with CEQA Guidelines Section 15126.2(c), an EIR must discuss any significant unavoidable impacts of a project, including those impacts that can be mitigated, but not reduced to below a level of significance. Chapter 5.0 identifies significant unavoidable impacts related to the following:

- Air Quality and Odors;
- Historical, Archaeological, and Tribal Cultural Resources;
- Noise;
- Public Services and Facilities;
- Public Utilities;
- Transportation; and
- Visual Effects and Neighborhood Character

All other potentially significant impacts identified in Chapter 5.0 can be reduced to below a level of significance with implementation of the mitigation framework identified, as well as through compliance with General Plan and proposed CPU policies and applicable federal, state, and/or local regulations.

7.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(d) requires an evaluation of significant irreversible environmental changes which could occur should the project be implemented. Irreversible changes typically fall into three categories:

- Primary impacts such as the use of non-renewable resources (i.e., biological habitat, agricultural land, mineral deposits, water bodies, energy resources and cultural resources);
- Secondary impacts such as highway improvements which provide access to previously inaccessible areas; and
- Environmental accidents potentially associated with future development under the project.

7.4.1 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 on biological habitat, agricultural land, forestry resources, mineral deposits, water bodies, and energy resources. Although sensitive biological resources are identified within the CPU area, direct and indirect impacts would be offset through compliance with CPU policies and the City's Multiple Species Conservation Program (MSCP) Subarea Plan, Vernal Pool Habitat Conservation Plan (VPHCP), and Environmentally Sensitive Lands (ESL) Regulations of the City's Land Development Code (LDC). As discussed in Section 7.2 of this PEIR, implementation of the proposed project would not have an impact on agricultural, forestry, or mineral resources. Water bodies in the CPU area include Los Peñasquitos Creek, adjacent to the northern CPU area boundary, and Carroll Canyon Creek in the southern portion of the CPU area. Implementation of the proposed project would not directly affect these water bodies and, as discussed in Section 5.7, Hydrology and Water Quality, future development in the CPU area would be required to demonstrate how pollutants would be treated to prevent discharge into receiving waters.

Construction activities in accordance with the proposed project would require the irreversible consumption of natural resources and energy. Natural resource consumption would include lumber and other forest products, sand and gravel, asphalt, steel, copper, other metals, and water. Building materials, while perhaps recyclable in part at some long-term future date, would for practical purposes be considered permanently consumed. Energy derived from nonrenewable sources, such as fossil fuels, would be consumed during construction and as a result of operational lighting, heating, cooling, and equipment and transportation uses. The proposed CPU includes policies aimed at improving energy efficiency, reducing water use, minimizing impacts on other natural resources, and encouraging renewable energy generation. These policies would serve to reduce irreversible water, energy, and building materials consumption associated with construction, occupation, and operation of the proposed project. Energy consumption is discussed in greater detail in Section 7.2.2 of this PEIR.

Future development within the CPU area could have an impact on important historical, tribal cultural, or archaeological resources given the presence of known and potential historical, archaeological, and tribal cultural resources within the CPU area. Potential impacts to historical, tribal cultural, or archaeological resources would be mitigated through adherence to proposed CPU policies, regulatory compliance (i.e., the Historical Resource Regulations of the LDC), and implementation of the mitigation framework further detailed in Section 5.5 of this PEIR, but would remain significant and unavoidable.

7.4.2 SECONDARY IMPACTS RELATED TO ACCESS TO PREVIOUSLY INACCESSIBLE AREAS

The CPU area is accessible via regional transportation facilities (e.g., Interstate [I-] 15 and I-805). No new freeways or roadways are proposed that would provide access to currently 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.

7.4.3 IMPACTS RELATED TO ENVIRONMENTAL ACCIDENTS

With respect to environmental accidents, and as further discussed in Section 5.6, Hazards and Hazardous Materials, 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 regulations and industry standards and codes. The potential for wildfire hazards exists throughout the CPU area, particularly within undeveloped open space areas, such as Los Peñasquitos Canyon, Lopez Canyon, Carroll Canyon, Flanders Canyon, and the adjacent Rancho Peñasquitos and Scripps Miramar Community Plan Areas which are mapped as Very High Fire Hazard Severity Zones (CAL FIRE 2009). However, future development would be subject to applicable state and City regulations related to fire hazards and prevention and brush management. Accidents related to flood hazards would be less than significant because all development would be subject to the drainage and floodplain regulations in the SDMC and would be required to adhere to the City's Drainage Design Manual and Stormwater Standards Manual.

8.0 ALTERNATIVES

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an Environmental Impact Report (EIR) compare the effects of a project to those of a "reasonable range of alternatives" to the project. The CEQA Guidelines further specify that the alternatives evaluated should attain most of the basic project objectives and avoid or substantially lessen any significant effects of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency, and to foster meaningful public participation (CEQA Guidelines Section 15126.6(f)). The impacts of the alternatives may be discussed "in less detail than the significant effects of the project as proposed" but must provide sufficient information to allow meaningful evaluation, analysis, and comparison of each alternative. The discussion must also include an evaluation of the No Project Alternative to allow decision makers to compare the impacts of approving the proposed project against the impacts of not approving it. The CEQA Guidelines also require the identification of the environmentally superior alternative among the analyzed alternatives.

8.1 DEVELOPMENT AND IDENTIFICATION OF ALTERNATIVES

The alternatives addressed in this Program Environmental Impact Report (PEIR) were selected in consideration of one or more of the following factors:

- The extent to which the alternative would feasibly accomplish most or all of the primary objectives of the proposed Mira Mesa Community Plan Update (CPU) ("proposed project" or "proposed CPU") stated in Chapter 3.0 of the PEIR:
    - Sustain and enhance employment areas, including industrial and commercial office uses within the Community Plan area to support the City's economy;
    - Provide for a vibrant employment and residential community by establishing mixed-use villages along major corridors with a range of housing types and employment uses within a distinctive, pedestrian-oriented setting;
    - Provide housing, employment, and commercial uses in proximity to existing and proposed transit, including bus transit and light rail, by focusing growth in the planned Urban Villages;
    - Enhance community connectivity by creating urban pathways, linear parks, paseos, complete streets, and mobility hubs to link land uses and activity centers throughout the community of Mira Mesa;
    - Enhance community identity and the pedestrian environment through land use, urban design, specific pedestrian improvements, such as pedestrian bridges and expanded

sidewalks, and linear parks to retrofit the existing superblocks and to create an inviting destination for residents, businesses, and visitors;

- Provide parks, plazas, and promenades that promote a healthy, active community and provide multiple benefits as areas for recreation, community events, and connections by developing park facilities near employment centers and Urban Villages and keeping pace with population growth;
- Create a robust mobility system of high-quality facilities and connections that promote more transportation choices for pedestrians, bicyclists, and transit users within the community of Mira Mesa and integrate the Urban Villages;
- Locate housing in select areas near employment centers, such as the Urban Villages, to improve jobs-housing balance and sustainability in support of the City's Climate Action Plan; and
- Preserve open space areas and important natural resources, including vernal pools, drainages, sensitive habitat, and steep slopes.

- The extent to which the alternative would avoid or substantially lessen any of the significant and unavoidable environmental impacts of the proposed CPU identified in Chapter 5.0 of the PEIR, including:
  - Air Quality and Odor (conflicts with or obstructs regional air quality plans, and air quality standards);
  - Historical, Archaeological, and Tribal Cultural Resources;
  - Noise (ambient noise, noise–land use compatibility, airport noise, temporary construction noise, and vibration);
  - Public Services and Facilities (provision of adequate police and fire protection, parks and recreation, schools, and libraries);
  - Public Utilities (stormwater, sewer, water facilities, communication systems);
  - Transportation (vehicle miles traveled); and
  - Visual Effects and Neighborhood Character (scenic vistas or views).
- The feasibility of the alternatives, taking into account site suitability, economic viability, availability of infrastructure, General Plan consistency, and consistency with other applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and

- The requirement of the CEQA Guidelines to consider a "no project" alternative; and to identify an "environmentally superior" alternative in addition to the no project alternative (Section 15126.6[e]).

Based on the criteria described above, this PEIR considers the following alternatives:

- No Project Alternative (Adopted Community Plan);
- Alternative 1 (Medium Density Alternative); and
- Alternative 2 (Low Density Alternative).

General descriptions of the characteristics of each of these alternatives, along with a discussion of their ability to reduce the significant environmental impacts associated with the proposed CPU, are provided in the following subsections. Table 8-1, Summary of Impacts for the Proposed CPU and Alternatives, provides a side-by-side summary comparison of the potential impacts of the alternatives to the impacts of the proposed CPU.

Plan Mira Mesa! Online Community Engagement Tool was created to provide a more innovative approach to public engagement that reached a broader audience. The survey was available from August 17 to September 30, 2020, where participants could review and select various land use scenarios. Approximately 700 people representing a broad cross-section of the community completed the online exercise, generating 4,493 data points and 197 comments to inform the development of future land use scenarios.

Based on the survey results, three land use scenarios were initially developed and presented to the Mira Mesa CPU Advisory Committee and at the second Planning Commission Workshop on March 18, 2021. Based on stakeholder discussion and inputs two additional land use scenarios were developed. As a part of the participatory planning process five different land use alternatives were considered:

1. Land Use Scenario 1 (Low Density)
2. Land Use Scenario 2 (Medium Density)
3. Land Use Scenario 3
4. Land Use Scenario 3a
5. Land use Scenario 3b (Proposed CPU)

The Mira Mesa CPU Advisory Committee made a recommendation to proceed with the Land Use Scenario 3b on May 17, 2021, as preliminary planned land use and Scenario 2 as alternative land use for mobility modeling and further urban design analysis. Two alternative land use scenarios were considered but not included as a potential alternative in this PEIR because these two alternatives were not substantially different from the proposed CPU.

Table 8-1
Summary of Impacts for the Proposed CPU and Alternatives

Impact	Proposed Project	No Project	Alternative 1	Alternative 2
Air Quality and Odor				
Conflicts with or Obstructs Regional Air Quality Plans	SU	LS<	SU=	SU=
Air Quality Standards	SU	LS	SU=	SU=
Sensitive Receptors	LS	LS<	LS=	LS=
Odors	LS	LS<	LS=	LS=
Biological Resources				
Sensitive Species	LS	LS=	LS=	LS=
Sensitive Habitats	LS	LS=	LS=	LS=
Wetlands	LS	LS=	LS=	LS=
Wildlife Movement	LS	LS=	LS=	LS=
Conservation Planning	LS	LS=	LS=	LS=
Geology and Soils				
Seismic Hazards	LS	LS=	LS=	LS=
Erosion and Sedimentation	LS	LS=	LS=	LS=
Geologic Instability	LS	LS=	LS=	LS=
Greenhouse Gas Emissions				
Greenhouse Gas Emissions	LS	LS>	LS>	LS>
Conflicts with Plans or Policies	LS	LS>	LS>	LS>
Historical, Archaeological, and Tribal Cultural Resources				
Historic Structures, Objects, or Sites	SU	SU=	SU=	SU=
Prehistoric or Historic Archaeological Resources, Sacred Sites, and Human Remains	SU	SU=	SU=	SU=
Tribal Cultural Resources	SU	SU=	SU=	SU=
Human Health, Public Safety, and Hazardous Materials				
Wildland Fire Risk	LS	LS=	LS=	LS=

Table 8-1
Summary of Impacts for the Proposed CPU and Alternatives

Impact	Proposed Project	No Project	Alternative 1	Alternative 2
Hazardous Emissions and Materials	LS	LS=	LS=	LS=
Emergency Plan Consistency	LS	LS=	LS=	LS=
Hazardous Materials Sites	LS	LS=	LS=	LS=
Aircraft Hazards	LS	LS=	LS=	LS=
Hydrology and Water Quality				
Flooding and Drainage Patterns	LS	LS=	LS=	LS=
Flood Hazard Areas	LS	LS=	LS=	LS=
Water Quality	LS	LS=	LS=	LS=
Groundwater	LS	LS=	LS=	LS=
Land Use				
Conflicts with Environmental Policies of Adopted Land Use Plans	LS	LS>	LS>	LS>
Consistency with MSCP and VPHCP	LS	LS=	LS=	LS=
Consistency with Adopted ALUCPs	LS	LS=	LS=	LS=
Community Division	LS	LS=	LS=	LS=
Noise				
Ambient Noise	SU	SU<	SU<	SU<
Noise–Land Use Compatibility	SU	SU=	SU=	SU=
Airport Noise	SU	SU=	SU=	SU=
Noise Ordinance Compliance	LS	LS=	LS=	LS=
Temporary Construction Noise	SU	SU=	SU=	SU=
Vibration	SU	SU=	SU=	SU=
Public Services and Facilities				
Police Protection	SU	SU<	SU<	SU<
Fire/Life safety Protection	SU	SU<	SU<	SU<
Parks and Recreation	SU	SU<	SU<	SU<

Table 8-1
Summary of Impacts for the Proposed CPU and Alternatives

Impact	Proposed Project	No Project	Alternative 1	Alternative 2
Schools	SU	SU<	SU<	SU<
Libraries	SU	SU<	SU<	SU<
Public Utilities				
Water Supply	LS	LS<	LS<	LS<
Utilities	SU	SU=	SU=	SU=
Solid Waste Management	LS	LS=	LS<	LS<
Transportation				
Conflicts with Current Plans/Policies	LS	LS>	LS=	LS=
Hazardous Design Features	LS	LS=	LS=	LS=
Residential VMT (Per Capita)	LS	LS>	LS>	LS>
Employment VMT (Per Employee)	SU	SU>	SU>	SU>
Total VMT Generated by Retail	LS	LS<	LS<	LS<
Inadequate Emergency Access	LS	LS=	LS=	LS=
Visual Effects and Neighborhood Character				
Scenic Vistas or Views	SU	LS	SU=	SU=
Neighborhood Character	LS	LS	LS=	LS=
Landform Alteration	LS	LS=	LS=	LS=
Light and Glare	LS	LS=	LS=	LS=
Loss of Distinctive or Landmark Trees	LS	LS=	LS=	LS=

Notes:

vehicle miles traveled (VMT); = Multiple Species Conservation Program (MSCP); Vernal Pool Habitat Conservation Plan VPHCP; Airport Land Use Compatibility Plan (ALUCP).

Less than significant (LS); impacts greater than proposed project (>);Significant and unavoidable (SU);

impacts less than proposed project (<);impacts the same/similar to proposed project (=)

8.2 NO PROJECT ALTERNATIVE (ADOPTED COMMUNITY PLAN)

8.2.1 DESCRIPTION

The No Project Alternative assumes that the CPU analyzed in this PEIR would not be implemented, and the adopted Mira Mesa Community Plan would continue to guide development in the community. The purpose of evaluating the No Project Alternative is to allow decision makers to compare the potential impacts of approving the proposed CPU with the potential impacts of not approving the proposed CPU. The No Project Alternative represents what would reasonably be expected to occur in the foreseeable future if the proposed CPU were not approved. The No Project Alternative would consist of the adopted Community Plan land use designations as they apply today, including all amendments to the Community Plan from its original adoption in 1992 to the most recent amendment in 2020. The majority of Mira Mesa is designated for industrial uses, and the adopted Community Plan land use designations would retain the existing residential, commercial, industrial, and open space uses. The adopted Community Plan includes planned mixed-use development in the Carroll Canyon Master Plan Area, but otherwise does not propose the development of Urban Villages or housing in existing commercial and employment hubs.

Buildout under the No Project Alternative compared to the base year of 2012 and proposed CPU buildout year of 2050 is shown in Table 8-2, Buildout Summary. As shown, the No Project Alternative would be expected to result in substantially fewer residential units than the proposed CPU. Both the adopted Community Plan and proposed CPU call for an increase in multifamily dwelling units; however, the proposed CPU calls for a greater number of multifamily units and the addition of mixed-use residential units (i.e., residential units integrated within the same building as office and/or retail uses) as part of higher density mixed-use developments within the Urban Village areas. The adopted Community Plan encouraged transit-oriented development and housing opportunities near employment centers; however, the adopted Community Plan did not provide for mixed-use Urban Villages in proximity to transit networks. The No Project Alternative would not increase capacity for new residential units in the planning area, and would allow approximately 24,024 fewer dwelling units compared to the proposed CPU (see Table 8-2). Based on the smaller number of residential units, the total projected population accommodated under the No Project Alternative would also be less than under the proposed CPU.

The adopted Community Plan also calls for an increase in residential development, including master planned areas, and industrial uses, but to a lesser extent than the proposed CPU. At the time of its adoption, the adopted Community Plan proposed almost 27% of the community for residential development, 21% for industrial development, and approximately 23% to be preserved as open space, primarily in the major canyons that traverse the community (City of San Diego 2020). The adopted Community Plan maintains the 1981 Community Plan's recommendations to preserve

industrially designated sites for large lot, employment-generating uses and restrict retail development to existing commercial centers. The proposed CPU continues to preserve industrial land uses but to a lesser extent than the adopted CPU. However, while the proposed CPU retains key employment lands it also encourages mixed-use development which will support the redevelopment of existing commercial centers and super blocks. The adopted Community Plan and the proposed CPU both include criteria to be used in the review of new building proposals to ensure that development is designed to preserve Mira Mesa's unique system of canyons, ridge tops and mesas, and includes plans to develop new or expanded public facilities such as parks, libraries, and fire stations.

Similar to the proposed CPU, the adopted Community Plan also provides a roadway network with improvements, including street widenings, adequate space for sidewalks and landscaped medians, transit facilities for bus and future light rail, as well as a bikeway system. However, the adopted Community Plan does not plan for multimodal connections that promote sustainable travel via walking, rolling, biking, and riding transit to the extent of the CPU. The adopted Community Plan describes the current development pattern as automobile-oriented with large parking areas between the stores and the streets; however, the adopted Community Plan encourages pedestrian amenities such as sheltered passenger waiting areas, benches, shade trees, and pedestrian bridges over Black Mountain Road to improve other modes of travel and establish a sense of character for the commercial district.

Table 8-2
Buildout Summary

Land Use	Base Year (2012)	Proposed Project		No Project Alternative		Net Proposed Project Change from No Project Alternative
		Buildout (2050)	*Net Change from Base Year*	*Buildout (2050)*	*Net Change from Base Year*	
Residential (units)						
Single-family	13,929	17,070	3,141	17,070	3,141	0
Multifamily	10,734	41,671	30,937	17,647	6,913	24,024
Mobile home	286	0	-286	0	-286	0
Total Housing Units	24,949	58,741	33,792	34,717	9,768	24,024
Total Household Population	74,539	143,414	68,875	85,216	10,677	58,198
Institutional and Education (square feet)						
Institutional	570,901	1,014,396	443,495	987,101	1,236,656	27,295
Education	1,781,152	1,906,851	125,699	1,875,152	-12,114	31,699
Commercial (square feet)						
Office	9,445,503	16,753,537	7,308,034	17,669,906	8,224,403	-916,369
Retail	5,020,397	5,791,587	771,190	5,437,625	417,227	353,962
Visitor	643,951	965,688	321,737	758,951	115,000	206,737
Industrial (square feet)	27,113,012	33,650,802	6,537,790	26,213,946	-899,066	7,436,856
Parks (acres)	121	185	64	182	61	3
Recreational (square feet)	189,298	231,353	42,055	178,494	-10,805	52,859
Open Space (acres)	2,503	2,799	296	2731	228	68
Transportation/Utilities (acres)	41	25	-16	35	-6	-10
Vacant (acres)	160	0	-160	0	-160	0
Total Employment	76,398	117,310	40,912	112,300	35,902	5,010

Source: City of San Diego 2022
Note: Numbers are approximate.

8.2.2 ANALYSIS OF NO PROJECT ALTERNATIVE

Air Quality and Odor

The No Project Alternative would retain the adopted Community Plan land uses throughout the CPU area and therefore would not conflict with or obstruct implementation of the adopted San Diego County Regional Air Quality Strategy (RAQS) or California State Implementation Plan (SIP), which incorporated the adopted Community Plan into their growth projections. It would also not result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation because the land uses under the adopted community plan would be consistent with the adopted RAQS and SIP. As discussed in Section 5.1, Air Quality and Odors, the proposed CPU would result in significant and unavoidable impacts associated with conflicts with air quality plans and air quality standards. Thus, impacts related to conflicts with an applicable air quality plan or violation of an air quality standard associated with the No Project Alternative would be less compared to the proposed CPU. Additionally, because buildout under the No Project Alternative would be less dense than under the proposed CPU, impacts associated with the exposure of sensitive receptors to pollutants likely would be less than the anticipated impacts of the proposed CPU. Odor impacts would also likely be less under the No Project Alternative due to the higher density planned under the proposed CPU, though construction-generated odors under both scenarios would be localized and temporary in nature. Neither the proposed CPU nor the No Project Alternative would introduce land uses that would generate substantial odor during operations.

The No Project Alternative would result in less than significant impacts associated with air quality plan conflicts, air quality standards, sensitive receptors, and odors.

Biological Resources

Areas designated for growth and development under the No Project Alternative are generally already developed and do not support significant biological resources. Development under both the proposed CPU and No Project Alternative would be subject to applicable federal, state, and local regulations regarding the protection of biological resources, ensuring that biological resources are protected, preserved, or mitigated at appropriate ratios to maintain viable ecological communities. Thus, impacts on biological resources under the No Project Alternative would result in less than significant impacts related to sensitive species, sensitive habitats, wetlands, wildlife movement, and the City's Multiple Species Conservation Program (MSCP) and Vernal Pool Habitat Conservation Plan (VPHCP), the same as the proposed CPU.

Geology and Soils

Although seismic hazards are present in the CPU area, compliance with state and local safety codes and ordinances would reduce the risk of loss, injury, or death from these hazards under the No Project Alternative to a less than significant level, similar to the proposed CPU. Adherence to City-mandated grading requirements would ensure that impacts from the No Project Alternative related to the erosion of soil associated with future development would be less than significant, similar to the proposed CPU. Therefore, development under the No Project Alternative would have a less than significant impact related to landslides, lateral spreading, liquefaction, subsidence, collapse, or expansive soils, and impacts would be the same as under the proposed CPU.

Greenhouse Gas Emissions

The No Project Alternative would be anticipated to result in less operational greenhouse gas (GHG) emissions compared to the proposed CPU due to the reduced amount of development. However, emissions attributable to vehicle emissions would be greater per service population than the proposed CPU (Appendix L). The No Project Alternative would not include the proposed CPU VMT reduction measures nor would it emphasize the development of transit and active transportation options as compared to the proposed CPU. This alternative would therefore result in greater vehicle emissions per service population than the proposed CPU. While the No Project Alternative includes additional development, including some around transit corridors, it would not implement the City's Climate Action Plan (CAP) and General Plan City of Villages strategies to the same extent as the proposed CPU. Although impacts under the No Project Alternative would be less than significant, its overall GHG impacts are considered to be greater compared to the proposed CPU. The No Project Alternative would also result in less than significant impacts related to conflicts with plans and policies addressing GHGs; however, the proposed CPU land use designations were chosen to be consistent with the CAP and the General Plan City of Villages Strategies and are thus more consistent with the CAP than the No Project Alternative. Thus, although less than significant, impacts related to conflicts with plans or policies would be greater under the No Project Alternative compared to the proposed CPU.

Historical, Archaeological, and Tribal Cultural Resources

Future development and redevelopment under the No Project Alternative could result in direct or indirect impacts on historical, archaeological, or tribal cultural resources. As with the proposed CPU, future development under this alternative would be required to comply with applicable City, federal, state, and local regulations regarding the protection of such resources. However, even with implementation of the San Diego Municipal Code's (SDMC's) Historical Resources Regulations, it is not possible to ensure the successful preservation of all historic built environment resources in the

CPU area. Therefore, impacts on historical resources are considered significant and unavoidable under the No Project Alternative.

For archeological resources, human remains, and tribal cultural resource impacts, current regulations and policies, including the City's Historical Resources Regulations and Historical Resources Guidelines, would not guarantee the successful preservation of all resources particularly those discovered over the course of future development. Therefore, potential impacts on archaeological and tribal cultural resources are considered significant and unavoidable under the No Project Alternative. Impacts would generally be similar to those under the proposed CPU.

Hazards and Hazardous Materials

As with the proposed CPU, compliance with General Plan policies and state and local regulations intended to reduce wildfire risks would serve to reduce wildfire-related impacts under the No Project Alternative to less than significant. Through the implementation of existing regulations and adherence to General Plan policies related to hazardous materials and waste sites, impacts from hazardous materials, substances, or waste would also be less than significant. The No Project Alternative would neither impair implementation of nor interfere with San Diego County's Emergency Operations Plan and would have a less than significant impact. Compliance with existing regulations, including design standards related to emergency vehicle access in the SDMC, would ensure that development under the No Project Alternative would have a less than significant impact on emergency evacuation or response plans. Adherence to federal and state regulations and General Plan policies would reduce impacts related to hazardous materials sites to less than significant.

Future development projects under the No Project Alternative would be subject to the requirements of the Marine Corps Air Station (MCAS) Miramar ALUCP, including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. Through compliance with these requirements, potential hazards from airport operations would not expose people or structures to a significant risk of loss, injury, or death, from off-airport aircraft operational accidents. Similar to the proposed CPU, associated aircraft hazards impacts would be less than significant. Impacts associated with hazards and hazardous materials under the No Project Alternative would be similar to those under the proposed CPU.

Hydrology and Water Quality

Future development under the No Project Alternative would be less likely to result in the redevelopment of existing, developed commercial and industrial sites when compared to the proposed CPU. Additionally, development intensities under this alternative would be less than those allowed under the proposed CPU. Although this alternative would not include CPU policies that

encourage the incorporation of sustainable design elements into public rights-of-way areas for stormwater capture and infiltration to reduce stormwater runoff, peak flows, and flooding, future development under the No Project Alternative would be required to comply with existing federal, state, and local regulations relative to runoff and water quality at the project level. Thus, hydrology and water quality impacts of the No Project Alternative would be less than significant and similar to the proposed CPU.

Land Use

The No Project Alternative would retain the land use designations of the adopted Mira Mesa Community Plan and would be subject to the City's General Plan policies and SDMC regulations. As with the proposed CPU, this alternative would not conflict with the environmental goals, objectives, or guidelines of applicable land use plans and therefore impacts would be less than significant. Compared to the proposed CPU, this alternative would be less successful in implementing the General Plan City of Villages strategy and supporting the mobility goals of the applicable land use plans as it would not include proposed CPU policies aimed at increasing density and improving multimodal connectivity and accessibility through the encouragement of building mixed-use development with residential uses in close proximity to commercial and employment centers connected by bike lanes, walkable paths, and transit. Thus, while land use impacts related to conflicts with the environmental policies of adopted land use plans would be less than significant under the No Project Alternative, they would be slightly greater than the proposed CPU.

The No Project Alternative would not conflict with the provisions of the City's MSCP Subarea Plan, or VPHCP, nor would it conflict with the implementation of applicable requirements of the City's Environmentally Sensitive Lands (ESL) Regulations, or Biology Guidelines regarding the preservation, mitigation, acquisition, restoration, management, and monitoring of biological resources. Impacts related to conflicts with the City's MSCP Subarea Plan (SAP) and VPHCP would be less than significant, similar to the proposed CPU. Development under the No Project Alternative within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP, as well as associated Federal Aviation Administration and City requirements; therefore, impacts related to conflicts with an adopted ALUCP would be less than significant, similar to the proposed CPU.

There are no features or policies in the adopted Community Plan that would physically divide the community. However, the No Project Alternative would not include the policies and provisions for an improved multimodal network to encourage pedestrian, bicycle, and transit use that would result in improved community connectivity. Despite this, land use impacts related to community division would be less than significant under the No Project Alternative and similar to the proposed CPU.

Noise

Implementation of the No Project Alternative would result in a lower residential and employee population than estimated at buildout of the proposed CPU; therefore, this alternative would be expected to have fewer noise-related impacts than the proposed project. As discussed in Section 5.9.4., the proposed CPU could create a significant increase in the existing ambient noise levels due to future traffic noise. Under the proposed CPU, future traffic noise levels would likely increase along major roadway segments, such as Mira Mesa Boulevard, Miramar Road, Camino Santa Fe, and Camino Ruiz. Under the No Project Alternative, development of residential and other noise sensitive land use along major transit corridors that would result in the exposure of higher levels of traffic noise would occur at a lower intensity than under the proposed CPU. While the No Project Alternative would result in lower development potential and would generate less average daily trips compared to the proposed CPU, buildout under the adopted Community Plan would still increase noise levels that could exceed the General Plan Noise Element's Land Use–Noise Compatibility Guidelines. The increase in ambient noise levels would be reduced compared to those of the proposed CPU, but impacts would remain significant and unavoidable.

Similar to the proposed CPU, the No Project Alternative would potentially expose new development to noise levels that exceed the City's Land Use–Noise Compatibility Guidelines. Traffic associated with buildout under the adopted Community Plan would increase noise levels along a number of roadway segments throughout the CPU area. Furthermore, development under the No Project Alternative would provide for new development in areas where noise levels could exceed the Land Use–Noise Compatibility Guidelines. Therefore, impacts associated with noise–land use compatibility would be significant and unavoidable under both the No Project Alternative and the proposed CPU.

Likewise, because new residential development may be exposed to exterior noise levels from aircrafts that exceed the Land Use–Noise Compatibility Guidelines, airport noise impacts would be significant and unavoidable under the No Project Alternative and the proposed CPU.

Future development under the proposed CPU and the No Project Alternative would be required to demonstrate compliance with the City's Noise Abatement and Control Ordinance (SDMC Section 59.5.0401 et seq.) to ensure noise compatibility between various land uses. The City regulates specific noise level limits allowable between land uses including the requirement for noise studies, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. Through enforcement of the Noise Abatement and Control Ordinance, stationary noise source impacts would be less than significant, similar to the proposed CPU.

Construction-related noise impacts would be significant and unavoidable under both the No Project Alternative and proposed CPU. While future development projects implemented under either the No Project Alternative and the proposed project would be required to comply with the City's Noise Abatement and Control Ordinance, there is a potential for the construction of future projects to expose existing sensitive receptors to significant construction noise levels resulting in significant unavoidable impacts.

Like the proposed CPU, groundborne vibration and noise impacts under the No Project Alternative would be significant and unavoidable because it cannot be guaranteed that vibration reduction measures (if required as determined on a project-by-project basis) would adequately minimize vibration levels to below a level of significance.

Overall, the No Project Alternative would result in similar impacts as the proposed CPU except that it would result in reduced noise impacts related to an increase in existing ambient traffic noise levels. Under the No Project Alternative, impacts related to land use compatibility (traffic noise exposure), airport noise, groundborne vibration and noise, and temporary construction noise would be significant and unavoidable, while impacts related to compliance with the City's Noise Abatement and Control Ordinance would be less than significant.

Public Services and Facilities

Implementation of the No Project Alternative would result in a lower residential population than estimated at buildout of the proposed CPU; therefore, this alternative would be expected to have fewer impacts related to public services and facilities than the proposed CPU.

Police and Fire Protection

Overall population growth under the No Project Alternative could contribute to the need for new police and fire facilities to maintain the San Diego Police Department and San Diego Fire Department's service ratio goal and ensure adequate fire protection. Construction of any new police and fire service facilities deemed necessary under the alternative could result in environmental impacts, but would be subject to existing regulations that would reduce impacts. However, as specific details regarding the construction and operation of new police and fire service facilities are not known at this time, this impact would be significant and unavoidable, although slightly less than the proposed CPU.

Park Facilities

Like the proposed CPU, there would be the need to build new parks and recreation facilities to serve the future population at buildout; however, the amount of new parkland needed would be less than

the proposed CPU, given the lower residential population growth. Similar to the proposed CPU, the development of future park and recreational facilities within the CPU area could offset the potential increased use of existing recreational facilities and their associated physical deterioration, but it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for recreation facilities.

Furthermore, this alternative would not include proposed CPU provisions to promote the creation of additional parks and recreation facilities and would result in less available parkland than the proposed project. Although the No Project Alternative would result in lower population growth than estimated at buildout of the proposed CPU, the availability of parkland under implementation of the No Project Alternative would not meet General Plan standards for parks and recreation facilities and a deficit of recreation facilities would continue to occur. Overall impacts related to parks and recreation facilities would be significant and unavoidable, similar to the proposed CPU, as specific details regarding the construction and operation of facilities needed to serve the community are not known at this time. Impacts related to the deterioration of parks and recreation facilities would also be significant and unavoidable as it cannot be ensured that impacts associated with the deterioration of neighborhood parks and recreational facilities would be mitigated to a less than significant level. However, impacts related to provision of new recreational facilities and deterioration of existing facilities would be slightly less under the No Project Alternative as potentially fewer facilities would need to be constructed.

Schools

As buildout of the No Project Alternative would result in lower residential population growth than that estimated at buildout of the proposed CPU, it would generate a smaller student population and thus have fewer impacts on school capacity than the proposed CPU. While San Diego Unified School District would collect fees from future development to fund school facilities, if needed, this impact would be significant and unavoidable under the No Project Alternative, although slightly less than the proposed CPU since impacts associated with the construction and operation of any future facility are not known at this time.

Libraries

Neither the proposed CPU nor the No Project Alternative proposes construction of new library facilities, though either would result in an increase in residents and an associated increased demand for library services. In the event that implementation of the No Project Alternative or proposed CPU results in the need for new or expanded library facilities, existing development regulations would serve to reduce potential environmental impacts associated with construction. However, as specific details regarding the construction and operation of new police and fire service facilities are not

known at this time, this impact would be significant and unavoidable, although slightly less than the proposed CPU.

Public Utilities

Implementation of the No Project Alternative would result in a lower population and development intensities than estimated at buildout of the proposed CPU. Implementation of the No Project Alternative would result in an increased water demand consistent with assumptions included in the regional water resource planning documents of the Public Utilities Department, San Diego County Water Authority, and Metropolitan Water District. Thus, impacts related to water supply would be less than significant and would likely be less than the proposed CPU.

The No Project Alternative could require the construction of additional stormwater, sewer, or water distribution infrastructure or communications systems as future development occurs. As specific details are currently unknown, physical impacts related to the construction of utilities infrastructure would be significant and unavoidable under the No Project Alternative, similar to the proposed CPU.

As with the proposed CPU, the No Project Alternative would not have any significant solid waste impacts but would not include proposed CPU policies that provide for efficiencies in solid waste management. Overall, the impact on solid waste management is less than significant, similar to the proposed CPU.

Transportation

The No Project Alternative would rely on the adopted Community Plan's land use designations and mobility network. Implementation of the No Project Alternative would not conflict with any adopted policies or plans addressing pedestrian, bicycle, transit, and roadway facilities; however, the adopted Community Plan does not contain policies and recommendations to provide for multimodal improvements to the extent of the proposed CPU. Thus, while impacts related to conflicts with adopted plans would be less than significant, they would be slightly greater compared to the proposed CPU.

The design of roadways in the Community Plan area under the proposed CPU and the No Project Alternative would be required to conform with federal, state, and City of San Diego's design criteria, which contain provisions to minimize roadway hazards. Compliance with these standards and designs to the satisfaction of the City of San Diego's City Engineer would avoid roadway hazards due to a design feature or incompatible uses. Impacts would be less than significant, similar to the proposed CPU.

Future development under the No Project Alternative would be required to obtain a Traffic Control Plan/Permit for any lane closures in the public right-of-way or driveway closures, which would ensure emergency access at all times. Site design of future development under the No Project Alternative would also be subject to emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Impacts would be less than significant and similar to the proposed CPU.

Under the No Project Alternative, Mira Mesa's office square footage would in aggregate increase by 83% (9,445,503 sf to 17,669,906 sf). With this increase in office square footage, and potentially increased number of drivers from outside the community, the Mira Mesa Total VMT generated by office uses is expected to increase under this alternative compared to Base Year conditions. As detailed in Appendix L, both the Resident VMT per Capita and Employee VMT per Employee during 2050 conditions under this alternative would be higher than the proposed project (12.6 versus 10.7 Resident VMT per Capita and 25.9 versus 23.3 Employee VMT per Employee).

The No Project Alternative would not create a significant transportation impact for its residential land uses as the VMT is under the 85 percent threshold (i.e. 15 percent below the Base Year regional average) at 82.1 percent when compared to the Base Year. Due to the large increase in office space and continued housing imbalance, the No Project Alternative would result in a significant impact for its employment land uses, such as commercial and industrial. Under this alternative as detailed in Appendix L, the Employee VMT per Employee is 90.1 percent of the Base Year regional average, which is higher than the 85 percent threshold; therefore, the employee uses are considered to have a significant transportation impact under the No Project Alternative. Similar to the proposed project, the total Mira Mesa VMT generated by retail uses under the No Project Alternative is expected to grow due to the increase in commercial retail square footage. This potential increase in VMT, although related to retail, is not regionally serving retail and therefore the increase in retail trips would result in short trips as they are anticipated to originate and end within the community. Therefore, VMT impacts associated with retail uses would be less than significant, and slightly reduced compared to the proposed CPU. For the same reasons discussed in Section 5.12, the transportation impact due to No Project Alternative employment uses would remain significant and unavoidable.

Visual Effects and Neighborhood Character

The No Project Alternative would be consistent with the existing land use designations and development regulations of the underlying zone classifications. Mira Mesa is primarily characterized by relatively flat topography atop a mesa with steep vegetated canyons. Although it sits atop a mesa, the adopted Community Plan does not designate any designated view corridors or scenic vistas. No

prominent or iconic visual landmarks occur in the community, and no designated scenic highways occur within or adjacent to the community. Thus, future development under the No Project Alternative would not result in a substantial obstruction of a vista or scenic view within the community, and impacts would be less than significant.

Future development under the No Project Alternative would be compatible with the existing urbanized nature of the community and would occur in accordance with adopted land use designations, and the development intensities and height and bulk regulations in the SDMC. Thus, future development would occur within the constraints of the existing urban framework and development pattern. Similar to the proposed CPU, impacts to neighborhood character under the No Project Alternative would be less than significant.

Similar to the proposed CPU, the No Project Alternative would result in less than significant impacts related to landform alteration because the developed portions of the community are generally level in topography and development of the vegetated canyons within the MHPA and steep hillsides is prohibited under the City's MSCP SAP and ESL Regulations. Light and glare impacts would also be less than significant given compliance with SDMC restrictions on light and glare, similar to the proposed CPU. Additionally, as with the proposed CPU, impacts related to the loss of distinctive or landmark trees would be less than significant because no designated distinctive or landmark trees or mature stands of trees occur within the CPU area.

Relation to Project Objectives

The No Project Alternative would not meet most of the identified project objectives. Specifically, while the No Project Alternative would implement the adopted land use plan, it would not support the City's objective to establish mixed-use Urban Villages along major transit corridors with a range of housing types and employment uses within a pedestrian-oriented setting. The adopted Community Plan proposes future mixed-use development, but it would not provide housing, employment, and commercial uses in proximity to existing and proposed multimodal transportation network. The No Project Alternative would be inconsistent with the City's General Plan City of Villages strategy, and would not implement the City's CAP to the extent of the proposed CPU. For example, the No Project Alternative would not include the land use changes or transportation infrastructure to achieve the mobility strategies in the CAP, such as Measure 3.2, which aims to increase safe, convenient, and enjoyable transit use by upgrading transit stops where needed supporting regional transit connections. This Alternative would also not support Measure 3.5 of the CAP, which aims to reduce VMT with a focus on mixed-use development planning in transit-priority areas and more efficient pedestrian and bicycle access between existing and new development. The No Project Alternative would not support the project objective to provide parks, plazas, and promenades that promote a healthy, active community and opportunities for recreation. Under

implementation of the No Project Alternative, the availability of parkland for residents would not meet General Plan standards for parks and recreation facilities and a deficit of recreation facilities would continue to occur. Although the No Project Alternative would result in lower population growth than estimated at buildout of the proposed CPU, the No Project Alternative would not include proposed CPU policies 6.1 through 6.6 to encourage the development of new park facilities and the enhancement of existing park facilities.

The No Project Alternative includes some improvements to the transportation network, including streetscape improvements, but it would not include the robust transportation improvements proposed under the CPU, nor the improvements to community connectivity. This Alternative would not provide pedestrian facilities such as urban pathways, parks, paseos, complete streets, and mobility hubs to link land uses and activity centers throughout the community of Mira Mesa.

Under the No Project Alternative, sensitive natural resources would continue to be protected under the City's policies, regulations, and the MSCP Subarea Plan and VPHCP. This Alternative would therefore meet the project objective to preserve open space areas and important natural resources, including vernal pools, drainages, sensitive habitat, and steep slopes.

8.3 ALTERNATIVE 1 (MEDIUM DENSITY ALTERNATIVE)

8.3.1 DESCRIPTION

Compared to the proposed CPU, Alternative 1 would generally follow the same proposed land use pattern, but at a reduced residential density. The Alternative 1 (Medium Density Alternative) land use map is shown in Figure 8-1. At buildout, this alternative would result in an estimated 17,070 single family units and 33,465 multifamily units. Compared to the proposed CPU, Alternative 1 proposes the same amount of single family units and a reduction of 8,206 multi-family units, or a reduction of 19.7%.

Alternative 1 would reduce the residential density at each of the proposed Urban Villages along Mira Mesa Boulevard, including Mira Mesa Gateway, Mira Mesa Town Center, Plaza Sorrento, Pacific Heights Boulevard, and Barnes Canyon Road. The mixed-use areas under this alternative would provide opportunities for more people to live closer to a centrally located job center; however, Alternative 1 would have reduced new residential capacity compared to the proposed CPU. Alternative 1 would result in a similar buildout of all other land uses, such as industrial and commercial, compared to the proposed CPU. Alternative 1 would include all other policies, land use designations, and mobility improvements included in the proposed CPU, and would implement the General Plan's City of Villages Strategy to a lesser extent than the proposed CPU by retaining the Urban Villages at a lower residential density.

8.3.2 ANALYSIS OF ALTERNATIVE 1: MEDIUM DENSITY ALTERNATIVE

Air Quality and Odor

Under Alternative 1, residential development intensities would be reduced compared to the proposed CPU. Thus, criteria air pollutant emissions are anticipated to be less than those generated by the proposed project. Like the proposed CPU, Alternative 1 would increase development intensities compared with current conditions, and would generate future VMT that would be greater than anticipated with buildout of the adopted Community Plan. Thus, both Alternative 1 and the proposed CPU would conflict with implementation of the RAQS and SIP, resulting in a significant and unavoidable air quality impact related to consistency with the RAQS and SIP. Impacts associated with air quality standards would also be significant and unavoidable because the ability of future development to successfully implement actions required to reduce construction and/or operational emissions of criteria pollutants below applicable thresholds cannot be guaranteed at the programmatic level. Similar to the proposed CPU, impacts on sensitive receptors and the generation of substantial odors are considered to be less than significant.

Biological Resources

Like the proposed CPU, Alternative 1 would result in land use designation changes that would primarily affect existing developed land within the CPU area and no changes are proposed to the existing Open Space and MHPA. Therefore, Alternative 1 would result in similar impacts to biological resources as those anticipated under the proposed CPU. As with the proposed CPU, subsequent development under this alternative would be required to adhere to all applicable federal, state, and local regulations regarding the protection of biological resources, including the City's ESL Regulations, MSCP SAP, and VPHCP. Therefore, impacts to sensitive species, sensitive habitats, wetlands, wildlife movement, and conservation planning under Alternative 1 would be less than significant, the same as the proposed CPU.

Geology and Soils

Geologic impacts resulting from implementation of Alternative 1 would be similar to those of the proposed CPU. Potential impacts related to seismic and geologic hazards, or to the instability of geological units and soils would be avoided or reduced to less than significant through adherence to existing state and local regulations, including the CBC, SDMC, and other standards. Where required, site-specific project-level geotechnical investigations would be conducted to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. Similarly, project-level compliance with City-mandated grading requirements and compliance with applicable state and/or federal regulations would ensure that future grading and construction activities would avoid significant soil erosion impacts. Therefore,

development under Alternative 1 would have a less than significant impact related to seismic hazards, erosion and sedimentation, and geologic instability, similar to the proposed CPU.

Greenhouse Gas Emissions

Under Alternative 1, residential development intensities would be reduced compared to the proposed CPU. Thus, GHG emissions generated under Alternative 1 are anticipated to be less than those generated by the proposed CPU. Alternative 1 would include the same policies to implement the City's CAP and the General Plan's City of Villages strategy as the proposed CPU; however, the proposed CPU would allow for higher residential densities and more intensive mixed-use development within the village areas. Alternative 1 would not conflict with adopted plans or policies designed to reduce GHGs, and would result in a less than significant GHG impact overall. However, Alternative 1 would achieve the associated strategies and policies to a lesser extent than the proposed CPU.

Historical, Archaeological, and Tribal Cultural Resources

Like the proposed CPU, future development under Alternative 1 could result in an alteration of a historic building, structure, object, or site where an increase in density is proposed beyond the adopted Community Plan and current zoning. The regulatory framework combined with the proposed CPU policies and the SDMC that promote and provide for the identification and preservation of historical resources would reduce the program-level impact related to historical resources of the built environment. However, even after application of the existing regulatory framework contained in the Historical Resources Guidelines and Historical Resources Regulations, the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at this program level of analysis. Thus, potential impacts on historic structures, objects, or sites, would be significant and unavoidable.

As with the proposed CPU, future development under Alternative 1 has the potential to result in significant direct and/or indirect impacts to tribal cultural and archaeological resources. Implementation of future projects under this alternative would require adherence to all applicable guidelines for the protection of such resources. The extent of impacts on tribal cultural and archaeological resources resulting from implementation of this alternative would be similar to those identified for the proposed CPU. However, similar to the proposed CPU, while existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of tribal cultural and archaeological resources and human remains, it is not possible to ensure the successful preservation of all tribal cultural and archaeological resources. Thus, implementation of Alternative 1 would result in similar significant and unavoidable impacts related to tribal cultural and archaeological resources at the program level.

Hazards and Hazardous Materials

Impacts related to hazards and hazardous materials under Alternative 1 would be similar to those under the proposed CPU. As this alternative would accommodate lower population growth than the proposed CPU, there would be fewer people exposed to potential hazards. However, proposed land uses under Alternative 1 would be similar to the land uses under the proposed CPU (see Figure 8-1 of this PEIR). Federal, state, and local regulations, as well as CPU policies that serve to reduce impacts to a less than- significant level, would also reduce impacts for development under Alternative 1. As with the proposed CPU, future development would be subject to applicable state and City regulatory requirements related to fire hazards and prevention regulations, reducing wildfire-related impacts under this alternative to a less than significant level. Through the implementation of existing regulations and adherence to proposed CPU policies related to hazardous materials and waste sites, impacts to schools from hazardous materials, substances, or waste would be less than significant. This alternative would neither impair implementation of nor interfere with San Diego County's Emergency Operations Plan and thus, would have a less than significant impact. Compliance with existing regulations, including design standards related to emergency vehicle access in the SDMC and policies proposed in the CPU, would ensure that associated development would have a less than- significant impact on emergency evacuation or response plans. Adherence to federal and state regulations and local plan policies would reduce impacts related to hazardous materials sites to a less than significant level. Future development projects within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP, including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. All impacts under Alternative 1 would be less than significant and similar to those anticipated under the proposed CPU.

Hydrology and Water Quality

The land use pattern for Alternative 1 is generally the same as for the proposed CPU; however, there is likely to be less impervious areas under Alternative 1 due to reduced development intensity compared to the proposed CPU, which could result in less additional runoff generated compared to the proposed CPU. Future development under both Alternative 1 and the proposed CPU would be required to comply with the current federal, state, and local regulations related to runoff and water quality at the project level at the time specific development projects are proposed. Thus, impacts related to flooding and drainage patterns, flood hazard areas, water quality, and groundwater would be less than significant, and slightly less than the proposed CPU.

Land Use

Land use designations and policies associated with Alternative 1 would be consistent with SANDAG's 2050 Regional Plan goals to develop compact, walkable communities close to transit connections consistent with smart growth principles. This alternative would be consistent with and would implement the General Plan's City of Villages strategy, but to a lesser degree than the proposed CPU because of the reduced development intensity, particularly within the Urban Village areas. The land use framework of this alternative would also accommodate the development proposed in the CPU area's 3 Roots Mater Plan and Stone Creek Master Plan. Similar to the proposed CPU, this alternative would not conflict with the environmental goals, objectives, or guidelines of applicable land use plans and impacts would be less than significant.

Proposed CPU policies and actions included under this alternative would remain the same as the proposed CPU and would not conflict with the provisions of the City's MSCP SAP or VPHCP and would support the implementation of applicable requirements of the City's ESL Regulations, Biology Guidelines, VPHCP, and the MSCP SAP regarding the preservation, mitigation, acquisition, restoration, management, and monitoring of biological resources. Therefore, impacts would be less than significant under Alternative 1, similar to the proposed CPU. Subsequent development under this alternative and the proposed CPU would be required to adhere to all applicable federal, state, and local regulations regarding the protection of biological resources. Therefore, impacts on biological resources under Alternative 1 would be similar to those under the proposed CPU. Development under this alternative within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP, as well as associated Federal Aviation Administration and City requirements. Therefore, impacts related to conflicts with an adopted ALUCP would be less than significant, similar to the proposed CPU.

Like the proposed CPU, implementation of Alternative 1 would result in improved community connectivity because the CPU contains provisions that establish connectivity through the provision of a multimodal network to encourage pedestrian, bicycle, and transit use. Thus, buildout under Alternative 1 would not physically divide an established community and impacts would be less than significant, similar to the proposed CPU.

Noise

Noise impacts under Alternative 1 would be similar to the anticipated impacts of the proposed CPU because, similar to the proposed CPU, receptors residing in future development under Alternative 1 would experience ambient noise increases and traffic noise as the CPU area is further developed. Alternative 1 would result in lower development potential and would generate less average daily trips compared to the proposed CPU. Therefore, the increase in ambient noise levels would be

reduced compared to those of the proposed CPU but impacts would remain significant and unavoidable.

As with the proposed CPU, impacts associated with noise–land use compatibility and aircraft noise would be significant and unavoidable because, while some new development under either scenario may be able to adequately attenuate exterior noise, there could still be some new noise sensitive land uses that would experience ambient noise levels that exceed the applicable Land Use–Noise Compatibility Guidelines or ALUCP noise standards. Construction-related noise impacts would also be significant and unavoidable under both Alternative 1 and the proposed CPU. While all future projects under either scenario would be required to comply with the City's Noise Abatement and Control Ordinance, there is a potential for the construction of future projects to expose existing sensitive receptors to significant noise levels resulting in significant unavoidable impacts. Similarly, groundborne vibration and noise impacts under both Alternative 1 and the proposed CPU would be significant and unavoidable as proposed land uses may be exposed to substantial vibration from vibratory construction equipment operations associated with construction of individual future development projects within the CPU area. Through enforcement of the Noise Abatement and Control Ordinance of the SDMC Section 59.5.0401 et seq., impacts related to noise ordinance compliance (on-site noise sources) would be less than significant.

Overall, noise impacts related to ambient noise level increases, noise–land use compatibility, airport noise, temporary construction, and groundborne vibration would be significant and unavoidable, while impacts related to noise ordinance compliance would be less than significant, similar to the CPU project.

Public Services and Facilities

Police and Fire Protection

Impacts related to public services and facilities under Alternative 1 would be somewhat less than the anticipated impacts associated with the proposed CPU because this alternative would result in lower population growth than the proposed CPU. However, as with the proposed CPU, the population increase under this alternative could contribute to the need for new police and fire facilities to maintain the San Diego Police Department's and San Diego Fire Department's service ratio goal and ensure adequate fire protection. As specific details regarding the construction and operation of new future facilities are not known at this time, this impact would be significant and unavoidable under Alternative 1, although slightly less than the proposed CPU.

Park Facilities

Alternative 1 would include proposed CPU policies to develop new park and recreation facilities in the CPU area. Although Alternative 1 would result in lower population growth than estimated for the proposed project, existing and proposed new parkland introduced under this alternative may not satisfy General Plan standards for parks and recreation facilities. Thus, there may be a need for additional parkland to serve the community at buildout of this alternative, which may be attained through parkland included in new developments. Potential environmental impacts associated with the construction of new parks and recreation facilities would be reduced through compliance with existing regulations and adherence to proposed CPU policies. Environmental impacts resulting from construction of new or expanded recreational facilities would be identified during the project-level analysis. Nevertheless, since impacts associated with the construction and operation of future park facilities are not known at this time, impacts related to the provision of new park facilities resulting from Alternative 1 would be significant and unavoidable, although slightly less compared to the proposed project.

Under Alternative 1, physical deterioration of park facilities could occur. Like the proposed project, the development of future park and recreational facilities within the CPU area could offset the potential increased use of existing recreational facilities and their associated physical deterioration, but it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for recreation facilities. Thus, as it cannot be ensured that impacts associated with the deterioration of neighborhood parks and recreational facilities would be mitigated to a less-than-significant level, impacts resulting from implementation of Alternative 1 would be significant and unavoidable although slightly less than the proposed project.

Schools

Buildout of Alternative 1 would result in lower residential population growth than that estimated for the proposed project due to the reduced number of residential units available and thus, it would generate a smaller student population and result in lesser school capacity impacts than the proposed project. Nonetheless, as with the proposed project, residential population growth under Alternative 1 would likely generate students at a rate that would exceed the capacity of current school district facilities. While San Diego Unified School District would collect fees from future development to fund school facilities, if needed, this impact would be significant and unavoidable under Alternative 1, although slightly less due to lower student enrollment, than the proposed project since impacts associated with the construction and operation of any future facility are not known at this time.

Libraries

Neither Alternative 1 nor the proposed project proposes the construction of new library facilities, though both would result in an increase in residents and demand for library services. The construction of new library facilities or expansion of existing libraries would be subject to separate environmental review at the time such facilities are proposed, and existing regulations would serve to reduce potential environmental impacts associated with construction. The need for new or physically altered library facilities would be slightly less than the proposed CPU due to the lower population density and subsequent lower use of existing facilities. However, Alternative 1 would require new library facilities consistent with the City's General Plan standards, and would implement CPU policy 4.4 to support library expansion and/or a development of a new library as necessary to accommodate the growing community population. As such, impacts to libraries resulting from implementation of the alternative would be significant and unavoidable, as impacts associated with the construction and operation of any future facility are not known at this time.

Public Utilities

As projected buildout for Alternative 1 would be less than the proposed project, projected demand for public utilities would also be expected to be less than the proposed project. Therefore, as with the proposed project, impacts related to water supply for Alternative 1 would be less than significant, and less than the proposed project.

No new stormwater, sewer, or water distribution facilities or communications systems are proposed under Alternative 1 or the proposed project; however, the construction of these facilities may occur as future development occurs in the CPU area. As specific details are currently unknown, physical impacts related to the construction of utilities infrastructure would be significant and unavoidable under both Alternative 1 and the proposed project. Given the reduced projected buildout of Alternative 1 compared to the proposed project, this alternative would have the same (although somewhat reduced) less than significant impacts related to solid waste management.

Transportation

Implementation of Alternative 1 would not conflict with any adopted policies or plans addressing pedestrian, bicycle, transit, and roadway facilities because this alternative would provide the same policies and recommendations to provide for multimodal improvements as the proposed CPU. Thus, impacts related to conflicts with adopted plans would be less than significant, similar to the proposed project.

The design of roadways in the CPU area under the proposed project and Alternative 1 would be required to conform with federal, state, and City of San Diego's design criteria, which contain

provisions to minimize roadway hazards. Compliance with these standards and designs to the satisfaction of the City of San Diego's City Engineer would avoid roadway hazards due to a design feature or incompatible uses. Impacts would be less than significant, similar to the proposed project.

Future development under Alternative 1 would be required to obtain a Traffic Control Plan/Permit for any lane closures in the public right-of-way or driveway closures, which would ensure emergency access at all times. Site design of future development under Alternative 1 would also be subject to emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Impacts would be less than significant and similar to the proposed CPU.

Under this alternative, Mira Mesa's commercial square footage would in aggregate increase by 52% (15,109,851 sf to 22,922,816 sf). Similar to the proposed project, this substantial increase in commercial retail square footage would increase the Mira Mesa Total VMT generated by retail uses under the Medium Density Alternative compared to Base Year conditions. This potential increase in VMT, although related to retail, is not regionally serving retail and therefore the increase in retail trips would result in shorter trips, and therefore fewer VMT, as they are anticipated to originate and end within the community. Thus, impacts associated with retail VMT would be less than significant and slightly less than the proposed CPU.

As detailed in Appendix L, both the Resident VMT per Capita and Employee VMT per Employee during 2050 conditions under this alternative would be higher than the proposed project (11.4 versus 10.7 Resident VMT per Capita and 24.4 versus 23.3 Employee per Employee). The Medium Density Alternative would not create a significant impact for its residential land uses as the VMT is under the 85 percent threshold (i.e. 15 percent below the Base Year regional average) at 65.9 percent when comparing to the Base Year. Under this alternative the Employee VMT per Employee is 96.9 percent of the Base Year regional average, which is higher than the 85 percent threshold; therefore, the employee uses are considered to have a significant transportation impact under the Medium Density Alternative. For the same reasons discussed in Section 5.12, the transportation impact due to Medium Density Alternative employment would remain significant and unavoidable.

Visual Effects and Neighborhood Character

Potential impacts related to visual effects and neighborhood character under Alternative 1 would be similar to those anticipated under the proposed CPU. As with the proposed CPU, impacts related to scenic view obstruction would be significant and unavoidable under Alternative 1 due to the potential of future site-specific development to impact scenic overlooks proposed in the CPU. Future site-specific development projects implemented within the CPU area could result in new

obstructions to scenic view corridors from public viewing areas proposed in the CPU. Alternative 1 would retain the policies in the proposed CPU and would preserve the canyon and creek areas, maintaining the visual quality of the natural landscape.

Development intensities under Alternative 1 would be reduced compared to the proposed project, which would reduce the bulk and scale of development across the CPU area, particularly within the Urban Village areas. Similar to the proposed project, the existing character of the CPU area would be most subject to change in areas designated for development of Urban Villages. Implementation of Alternative 1 would alter the bulk and scale of these areas by allowing for an increase in housing density, new street connections, pedestrian and bicycle facilities, and new public spaces. However, Alternative 1 does not propose substantial changes to the development standards of these areas. Compliance with City development standards and proposed urban design policies under Alternative 1 would ensure that the proposed land use changes would not substantially alter the existing neighborhood character of the CPU area as a whole. Therefore, impacts under Alternative 1 would be less than significant on a program level.

Like the proposed project, impacts related to landform alteration would be less than significant because the CPU area is largely developed with existing urban land uses concentrated on the relatively flat areas of the mesa top that characterizes most of the CPU area. Areas with steep slopes that would require extensive grading are associated with canyons that are protected from further development under the MSCP SAP and ESL Regulations. Development under this alternative would include additional exterior light fixtures similar to the proposed project, but would have a less than significant impact on light and glare given adherence to proposed CPU policies encouraging lighting that is energy efficient and that minimizes light pollution and compliance with SDMC restrictions on light and glare.

No designated distinctive or landmark trees or mature stands of trees occur within the CPU area. Future development within the CPU area would be subject to CPU policies that promote the planting of new trees, as well as City Council Policy 900-19, which provides for the protection of street trees. Thus, impacts related to loss of distinctive or landmark trees would be less than significant, similar to the proposed project.

Relation to Project Objectives

Alternative 1 would meet most of the proposed project objectives despite the reduction in residential density. Alternative 1 would result in a similar buildout of all other land uses, such as industrial and commercial, and would include all other policies, land use designations, and mobility improvements included in the proposed project. This Alternative would therefore meet the proposed project's objectives to enhance employment areas, establish mixed-use villages along

major corridors, and provide housing, employment, and commercial uses in proximity to existing and proposed traffic. Growth under Alternative 1 would be focused in the Urban Villages identified in the CPU area, consistent with proposed project objectives, although provision of housing would be decreased under Alternative 1.

Alternative 1 would also be consistent with the proposed project's objectives to enhance community connectivity and identity by creating urban pathways, parks, paseos, promenades, complete streets, and mobility hubs to link land uses throughout the CPU area. Project objectives related to creation of a robust mobility system with multimodal transportation connections would also be met under Alternative 1.

8.4 ALTERNATIVE 2 (LOWEST DENSITY ALTERNATIVE)

8.4.1 DESCRIPTION

Compared to the proposed CPU, Alternative 2 would generally follow the same proposed land use pattern, but at a further reduced residential density. The Alternative 2 (Lowest Density Alternative) land use map is shown in Figure 8-2 of this PEIR. At buildout, this alternative would result in an estimated 17,070 single family units and 29,220 multi-family units. Compared to the proposed CPU, Alternative 2 proposes the same amount of single-family units and a reduction of 12,451 multifamily units (29.9%).

Alternative 2 would reduce the residential density at each proposed Urban Village along Mira Mesa Boulevard, including Mira Mesa Gateway, Mira Mesa Town Center, Plaza Sorrento, Pacific Heights Boulevard, and Barnes Canyon Road. The mixed-use areas under this alternative would provide opportunities for more people to live closer to a centrally-located job center; however, Alternative 2 would have reduced new residential capacity compared to the proposed CPU. Alternative 2 would result in a similar buildout of all other land uses, such as industrial and commercial, compared to the proposed CPU. Alternative 2 would include all other policies, land use designations, and mobility improvements included in the proposed project, and would implement the General Plan's City of Villages Strategy to a lesser extent than the proposed CPU by retaining the Urban Villages at a lower residential density.

8.4.2 ANALYSIS OF ALTERNATIVE 2: LOWEST DENSITY ALTERNATIVE

Air Quality and Odor

Under Alternative 2, development intensities would be reduced compared to the proposed project. Thus, criteria air pollutant emissions are anticipated to be less than those generated by the proposed project. Like the proposed project, Alternative 2 would result in greater development

intensities, and would generate future VMT that would be greater than buildout of the adopted Community Plan. Thus, both Alternative 2 and the proposed project would conflict with implementation of the RAQS and SIP, resulting in a significant and unavoidable air quality impact related to consistency with the RAQS and SIP. Impacts associated with air quality standards would also be significant and unavoidable because the ability of future development to successfully implement actions required to reduce construction and/or operational emissions of criteria pollutants below applicable thresholds cannot be guaranteed at the programmatic level. Similarly, like the proposed project, impacts to sensitive receptors are considered to be less than significant. Similar to the proposed project, Alternative 2 would not introduce land uses that would generate substantial odor during operations, and impacts associated with odors would be less than significant.

Biological Resources

Like the proposed project, Alternative 2 would result in land use designation changes that would primarily affect existing developed land within the CPU area. Therefore, Alternative 2 would result in similar impacts to biological resources as those anticipated under the proposed project. As with the proposed project, subsequent development under this alternative would be required to adhere to all applicable federal, state, and local regulations regarding the protection of biological resources, including requirements of the City's ESL Regulations, MSCP SAP, and VPHCP. Therefore, impacts to sensitive species, sensitive habitats, wetlands, wildlife movement, and conservation planning under Alternative 2 would be less than significant, the same as the proposed project.

Geology and Soils

Geologic impacts resulting from implementation of Alternative 2 would be similar to those of the proposed project. Potential impacts related to seismic and geologic hazards, or to the instability of geological units and soils would be avoided or reduced to less than significant through adherence to existing state and local regulations, including the CBC, SDMC, and other standards. Where required, site-specific geotechnical investigations would be conducted to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. Similarly, project-level compliance with City-mandated grading requirements and compliance with applicable state and/or federal regulations would ensure that future grading and construction activities would avoid significant soil erosion impacts. Therefore, development under Alternative 2 would have a less than significant impact related to seismic hazards, erosion and sedimentation, and geologic instability, similar to the proposed project.

Greenhouse Gas Emissions

Under Alternative 2, development intensities would be reduced compared to the proposed project. Thus, GHG emissions generated under Alternative 2 are anticipated to be less than those generated by the proposed project. Alternative 2 would include the same policies to implement the City's CAP and the General Plan's City of Villages strategy as the proposed CPU; however, the proposed project would allow for higher residential densities and more intensive mixed-use development within the urban village areas. Thus, although Alternative 2 would not conflict with adopted plans or policies designed to reduce GHGs and would result in a less than significant GHG impact overall, it would achieve the associated strategies and policies to a lesser extent than the proposed project.

Historical, Archaeological, and Tribal Cultural Resources

Like the proposed project, future development under Alternative 2 could result in an alteration of a historic building, structure, object, or site where an increase in density is proposed beyond the adopted Community Plan and current zoning. Although Alternative 2 proposes a lower residential density than the proposed CPU, the anticipated footprint of development for proposed land uses would remain relatively the same. The regulatory framework combined with the proposed CPU policies and the SDMC that promote and provide for the identification and preservation of historical resources would reduce the program-level impact related to historical resources of the built environment. However, even after application of the existing regulatory framework contained in the Historical Resources Guidelines and Historical Resources Regulations, the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at this program level of analysis. Thus, potential impacts to historic structures, objects, or sites, would be significant and unavoidable.

As with the proposed project, future development under Alternative 2 has the potential to result in significant direct and/or indirect impacts to tribal cultural and archaeological resources. Implementation of future projects under this alternative would require adherence to all applicable guidelines for the protection of such resources. The extent of impacts to tribal cultural and archaeological resources resulting from implementation of this alternative would be similar to those identified for the proposed project. However, similar to the proposed project, while existing regulations, the SDMC, and proposed CPU policies would provide for the regulation and protection of tribal cultural and archaeological resources and human remains, it is not possible to ensure the successful preservation of all tribal cultural and archaeological resources. Thus, implementation of Alternative 2 would result in similar significant and unavoidable impacts related to tribal cultural and archaeological resources at the program level.

Hazards and Hazardous Materials

Impacts associated with hazardous and hazardous materials under Alternative 2 would be similar to those under the proposed project. As this alternative would accommodate lower population growth than the proposed project, there would be fewer people exposed to potential hazards. However, proposed land uses under Alternative 2 would be similar to the land uses under the proposed project (see Figure 8-2 of this PEIR). Federal, state, and local regulations, as well as CPU policies that serve to reduce impacts to a less than significant level, would also reduce impacts for development under Alternative 2. As with the proposed project, future development would be subject to applicable state and City regulatory requirements related to fire hazards and prevention regulations, reducing wildfire-related impacts under this alternative to a less than significant level. Through the implementation of existing regulations and adherence to proposed CPU policies related to hazardous materials and waste sites, impacts to schools from hazardous materials, substances, or waste would be less than significant. This alternative would neither impair implementation of, nor interfere with, San Diego County's Emergency Operations Plan and thus, would have a less-than-significant impact. Compliance with existing regulations, including design standards related to emergency vehicle access in the SDMC, and policies proposed in the CPU would ensure that associated development would have a less-than-significant impact on emergency evacuation or response plans. Adherence to federal and state regulations and local plan policies would reduce impacts related to hazardous materials sites to a less than significant level. Future development projects within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP, including safety compatibility and airspace protection criteria, as well as applicable sections of the SDMC. All impacts under Alternative 2 would be less than significant and similar to those anticipated under the proposed project.

Hydrology and Water Quality

The land use pattern for Alternative 2 is generally the same as for the proposed project, and thus, would have similar rates of storm water runoff as compared to the proposed project. Future development under both Alternative 2 and the proposed project would be required to comply with the current federal, state, and local regulations related to runoff and water quality at the project level at the time specific development projects are proposed. Thus, impacts related to flooding and drainage patterns, flood hazard areas, water quality, and groundwater would be less than significant, and similar to the proposed project.

Land Use

Land use designations and policies associated with Alternative 2 would be consistent with SANDAG's 2050 Regional Plan goals to develop compact, walkable communities close to transit connections

and consistent with smart growth principles. This alternative would also be consistent with and implement the General Plan's City of Villages strategy but to a lesser degree than the proposed project because of the reduced development intensity, particularly within the Urban Village areas. The land use framework of this alternative would also accommodate the development proposed in the CPU area's 3 Roots Master Plan and proposed Stone Creek Master Plan. Similar to the proposed project, this alternative would not conflict with the environmental goals, objectives, or guidelines of applicable land use plans, and impacts would be less than significant.

Proposed CPU policies and actions included under this alternative would remain the same and would not conflict with the provisions of the City's MSCP SAP or VPHCP and would support the implementation of applicable requirements of the City's ESL Regulations, Biology Guidelines, VPHCP, and MSCP SAP regarding the preservation, mitigation, acquisition, restoration, management, and monitoring of biological resources. Therefore, impacts would be less than significant under Alternative 2, similar to the proposed project. Subsequent development under this alternative and the proposed project would be required to adhere to all applicable federal, state, and local regulations regarding the protection of biological resources. Therefore, impacts associated with conflicts of an approved habitat conservation plan would be less than significant and similar to those under the proposed project. Development under this alternative within the CPU area would be subject to the requirements of the MCAS Miramar ALUCP as well as associated Federal Aviation Administration and City requirements. Therefore, impacts related to conflicts with an adopted ALUCP would be less than significant, similar to the proposed project.

Like the proposed project, implementation of Alternative 2 would result in improved community connectivity because the CPU contains provisions that establish connectivity through the provision of a multimodal network to encourage pedestrian, bicycle, and transit use. Thus, buildout under Alternative 2 would not physically divide an established community and impacts would be less than significant, similar to the proposed project.

Noise

Noise impacts under Alternative 2 would be similar to the anticipated impacts of the proposed project because, similar to the proposed project, future development under Alternative 2 would experience ambient noise increases and traffic noise as the CPU area is further developed. Alternative 2 would result in lower development potential and would generate less average daily trips compared to the proposed project. Therefore, the increase in ambient noise levels would be reduced compared to those of the proposed project but impacts would remain significant and unavoidable.

As with the proposed project, impacts associated with noise–land use compatibility and aircraft noise would be significant and unavoidable because, while some new development under either scenario may be able to adequately attenuate exterior noise, there could still be some new noise sensitive land uses that would experience ambient noise levels that exceed the applicable Land Use–Noise Compatibility Guidelines or ALUCP noise standards. Construction-related noise impacts would also be significant and unavoidable under both Alternative 2 and the proposed project. While all future projects under either scenario would be required to comply with the City's Noise Abatement and Control Ordinance (SDMC Section 59.5.0401 et seq.), there is a potential for the construction of future projects to expose existing sensitive receptors to significant noise levels resulting in significant unavoidable impacts. Similarly, groundborne vibration and noise impacts under both Alternative 2 and the proposed project would be significant and unavoidable as proposed land uses may be exposed to substantial vibration from vibratory construction equipment operations associated with construction of individual future development projects within the CPU area. Through enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts related to noise ordinance compliance (on-site noise sources) would be less than significant.

Overall, noise impacts related to ambient noise level increases, noise–land use compatibility, airport noise, temporary construction, and groundborne vibration would be significant and unavoidable, although slightly less than the proposed project. Impacts related to noise ordinance compliance would be less than significant, similar to the proposed project.

Public Services and Facilities

Police and Fire Protection

Impacts to public services and facilities under Alternative 2 would be somewhat less than the anticipated impacts associated with the proposed project because this alternative would result in lower population growth than the proposed project. However, as with the proposed project, the population increase under this alternative could contribute to the need for new police and fire facilities to maintain the San Diego Police Department's and San Diego Fire Department's service ratio goal and ensure adequate fire protection. As specific details regarding the construction and operation of new future facilities are not known at this time, this impact would be significant and unavoidable under Alternative 2, although slightly less than the proposed project.

Park Facilities

Alternative 2 would include proposed CPU policies to develop new park and recreation facilities in the CPU area. Although Alternative 2 would result in lower population growth than estimated for the proposed project, existing and proposed new parkland introduced under this alternative may not satisfy General Plan standards for parks and recreation facilities. Thus, there may be a need for

additional parkland to serve the community at buildout of this alternative, which may be attained through parkland included in new developments. Potential environmental impacts associated with the construction of new parks and recreation facilities would be reduced through compliance with existing regulations and adherence to proposed CPU policies. Environmental impacts resulting from construction of future new or expanded recreational facilities would be identified during the project-level analysis. Nevertheless, since impacts associated with the construction and operation of future park facilities are not known at this time, impacts related to the provision of new park facilities resulting from Alternative 2 would be significant and unavoidable, although slightly less compared to the proposed project.

Under Alternative 2, physical deterioration of park facilities could occur. Like the proposed project, the development of future park and recreational facilities within the CPU area could offset the potential increased use of existing recreational facilities and their associated physical deterioration, but it is unknown to what extent these potential future facilities would be able to accommodate increases in demand for recreation facilities. Thus, as it cannot be assured that impacts associated with the deterioration of neighborhood parks and recreational facilities would be mitigated to a less-than-significant level, impacts resulting from implementation of Alternative 2 would be significant and unavoidable although slightly less than the proposed project.

Schools

Buildout of Alternative 2 would result in lower residential population growth than that estimated for the proposed project due to the reduced amount of residential units available and thus, it would generate a smaller student population and result in fewer school capacity impacts than the proposed project. Nonetheless, as with the proposed CPU, residential population growth under Alternative 2 would likely generate students at a rate that would exceed the capacity of current school district facilities. While San Diego Unified School District would collect fees from future development to fund school facilities, if needed, this impact would be significant and unavoidable under Alternative 2, although slightly less than the proposed project since impacts associated with the construction and operation of any future facility are not known at this time.

Libraries

Neither Alternative 2 nor the proposed project propose the construction of new library facilities, though both would result in an increase in residents and demand for library services. The construction of new library facilities or expansion of existing libraries would be subject to separate environmental review at the time such facilities are proposed, and existing regulations would serve to reduce potential environmental impacts associated with construction. Nevertheless, impacts to libraries resulting from implementation of the alternative would be significant and unavoidable,

although slightly less than the proposed project, as impacts associated with the construction and operation of any future facility are not known at this time.

Public Utilities

As projected buildout for Alternative 2 would be less than the proposed project, projected demand for public utilities would also be expected to be less than the proposed project. Therefore, as with the proposed project, impacts related to water supply for Alternative 2 would be less than significant, and less than the proposed project.

No new stormwater, sewer, or water distribution facilities or communications systems are proposed under Alternative 2 or the proposed project; however, the construction of these facilities may occur as future development occurs in the CPU area. As specific details are currently unknown, physical impacts related to the construction of utilities infrastructure would be significant and unavoidable under both Alternative 2 and the proposed project. Given the reduced projected buildout of Alternative 2 compared to the proposed project, this alternative would have the same (although somewhat reduced) less than significant impacts related to solid waste management.

Transportation

Implementation of Alternative 2 would not conflict with any adopted policies or plans addressing pedestrian, bicycle, transit, and roadway facilities because this alternative would provide the same policies and recommendations to provide for multimodal improvements as the proposed CPU. Thus, impacts related to conflicts with adopted plans would be less than significant, similar to the proposed project.

The design of roadways in the CPU area under the proposed project and Alternative 2 would be required to conform with federal, state, and City of San Diego's design criteria, which contain provisions to minimize roadway hazards. Compliance with these standards and designs to the satisfaction of the City of San Diego's City Engineer would avoid roadway hazards due to a design feature or incompatible uses. Impacts would be less than significant, similar to the proposed project.

Future development under Alternative 2 would be required to obtain a Traffic Control Plan/Permit for any lane closures in the public right-of-way or driveway closures, which would ensure emergency access at all times. Site design of future development under Alternative 2 would also be subject to emergency access requirements of the City's Fire Code and review by the San Diego Fire-Rescue Department to ensure adequate emergency access during operation of any given project. Impacts would be less than significant and similar to the proposed CPU.

Under this alternative, Mira Mesa's commercial square footage would increase in a similar fashion as described for prior alternatives. Similar to the proposed project, this increase in commercial retail square footage would increase the Mira Mesa Total VMT generated by retail uses under Alternative 2 compared to Base Year conditions. This potential increase in VMT, although related to retail, is not regionally serving retail and therefore the increase in retail trips would result in short trips as they are anticipated to originate and end within the community. Thus, impacts associated with retail VMT would be less than significant and slightly less than the proposed CPU.

Similar to the proposed project and other alternatives, the Lowest Density Alternative would likely not create a significant impact for its residential land uses. However, for similar reasons as the proposed project, this alternative would likely result in a significant VMT impact related to employment. For the same reasons discussed in Section 5.12, the transportation impact due to the Lowest Density Alternative's employment uses would remain significant and unavoidable.

Visual Effects and Neighborhood Character

Potential impacts to visual effects and neighborhood character under Alternative 2 would be similar to those anticipated under the proposed project. As with the proposed project, impacts related to scenic view obstruction would be significant and avoidable under Alternative 2 due to the potential for future site-specific development that may impact the proposed scenic overlooks within the CPU area. Future development projects implemented within the CPU area could result in new obstructions to view corridors from public viewing areas. Alternative 2 would retain the policies in the proposed CPU and would preserve the canyon and creek areas, maintaining the visual quality of the natural landscape.

Development intensities under Alternative 2 would be reduced compared to the proposed project, which would reduce the bulk and scale of development across the CPU area, particularly within the Urban Village areas. Similar to the proposed project, the existing character of the CPU area would be most subject to change in areas designated for development of Urban Villages. Implementation of Alternative 2 would alter the bulk and scale of these areas by allowing for increase in housing density, new street connections, pedestrian and bicycle facilities, and new public spaces. However, the CPU does not propose substantial changes to the development standards of these areas. Compliance with City development standards and CPU urban design policies would ensure that the proposed land use changes would not substantially alter the existing neighborhood character of the CPU area as a whole. Therefore, impacts under Alternative 2 would be less than significant on a program level.

Like the proposed project, impacts related to landform alteration would be less than significant because the CPU area is largely developed with existing urban land uses concentrated on the

relatively flat areas of the mesa top that characterizes most of the CPU area. Areas with steep slopes that would require extensive grading are associated with canyons that are generally protected from further development under the MSCP SAP and ESL regulations. Development under this alternative would include additional exterior light fixtures similar to the proposed project, but would have a less than significant impact on light and glare given adherence to proposed CPU policies encouraging lighting that is energy efficient and that minimizes light pollution and compliance with SDMC restrictions on light and glare.

No designated distinctive or landmark trees or mature stands of trees occur within the CPU area. Future development within the CPU area would be subject to CPU policies that promote the planting of new trees, as well as City Council Policy 900-19, which provides for the protection of street trees. Thus, impacts related to loss of distinctive or landmark trees would be less than significant, similar to the proposed project.

Relation to Project Objectives

Alternative 2 would meet most of the proposed project objectives despite the reduction in residential density. Alternative 2 would result in a similar buildout of all other land uses, such as industrial and commercial, and would include all other policies, land use designations, and mobility improvements included in the proposed project. This Alternative would therefore meet the proposed project's objectives to enhance employment areas, establish mixed-use villages along major corridors, and provide housing, employment, and commercial uses in proximity to existing and proposed traffic. Growth under Alternative 2 would be focused in the Urban Villages identified in the CPU area, consistent with proposed project objectives. However, Alternative 2 would implement the General Plan's City of Villages Strategy to a lesser extent than the proposed CPU by retaining the Urban Villages at a lower residential density.

Alternative 2 would also be consistent with the proposed project's objectives to enhance community connectivity and identity by creating urban pathways, parks, paseos, promenades, complete streets, and mobility hubs to link land uses throughout the CPU area. Project objectives related to creation of a robust mobility system with multimodal transportation connections would also be met under Alternative 2.

8.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) requires the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that if the No Project Alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified.

Table 8-1 summarizes the alternatives' overall environmental impacts for each environmental topic analyzed in Sections 8.2, 8.3, and 8.4. The No Project Alternative would have the least number of significant impacts, making it the environmentally superior alternative; however, per the referenced CEQA Guidelines, another environmentally superior alternative must be identified. Alternatives 1 and 2 each have the same number of significant impacts. Both Alternatives 1 and 2 would result in six reduced significant impacts, eleven equal significant impacts, and no increased significant impacts compared to the proposed project (but still significant and unavoidable). Although the impacts are similar for both alternatives, Alternative 1 is anticipated to result in greater GHG emissions reductions compared to Alternative 2 as it implements the City's CAP strategies and General Plan to a greater extent than Alternative 2. Based on a comparison of the alternatives' overall environmental impacts and their ability to meet the proposed project's objectives, Alternative 1 is considered the environmentally superior alternative.

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Draft Alternative Land Use

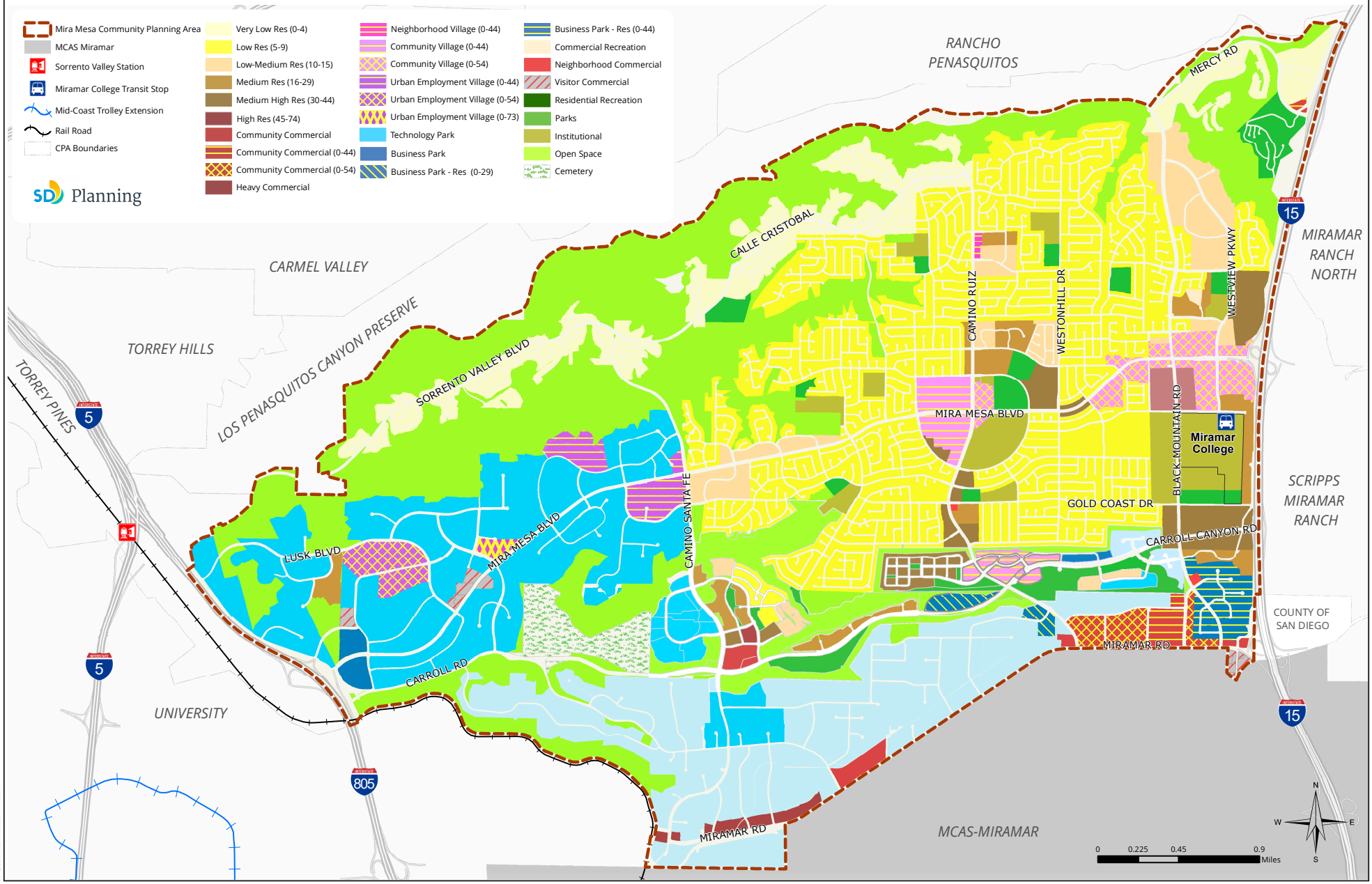

FIGURE 8-1

Medium Density Alternative

Mira Mesa Community Plan Update PEIR

SD Planning

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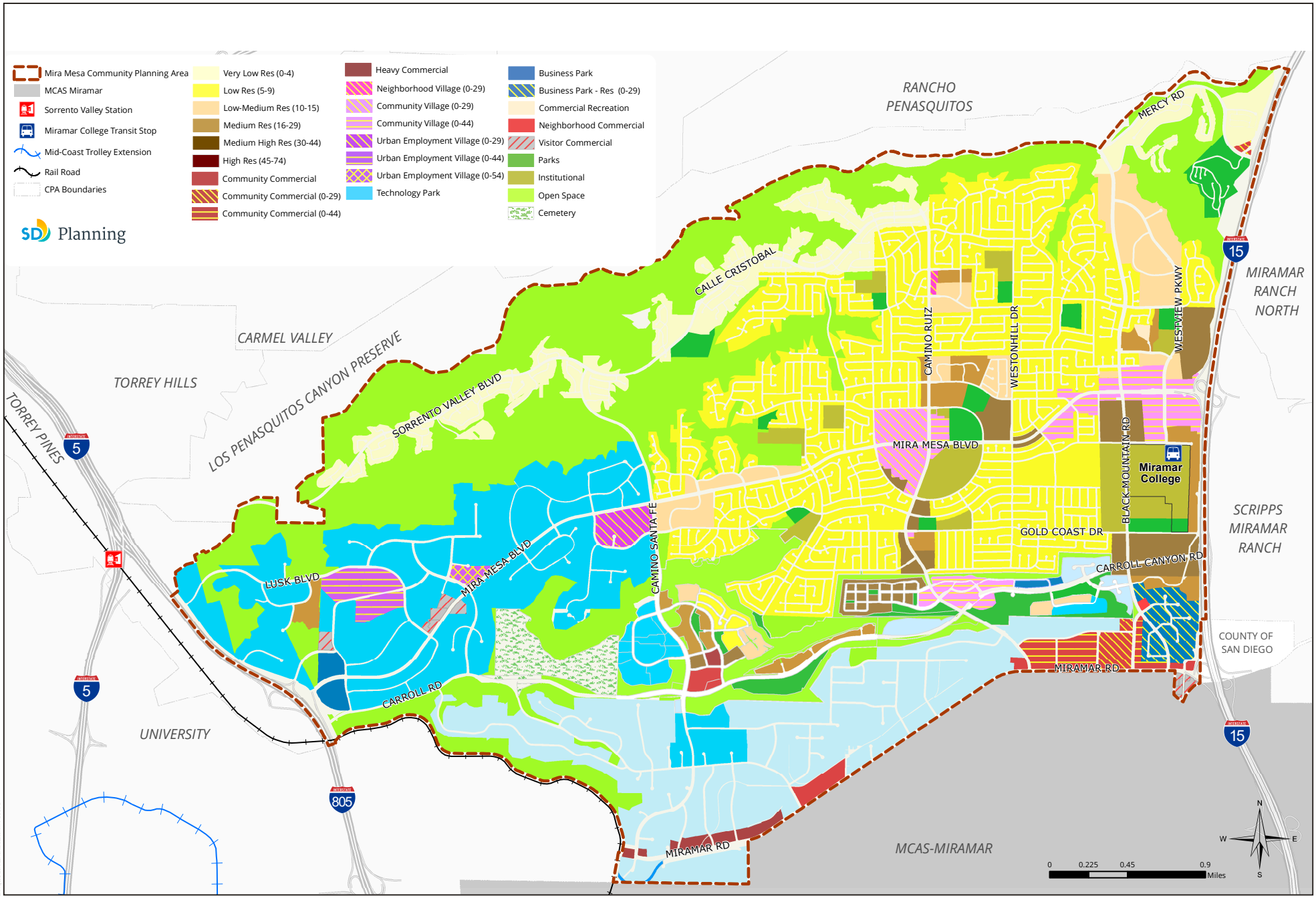

FIGURE 8-2

Lowest Density Alternative

Mira Mesa Community Plan Update PEIR

SD Planning

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9.0 REFERENCES CITED

EXECUTIVE SUMMARY

None.

1 INTRODUCTION

City of San Diego. 1997. Multiple Species Conservation Program Subarea Plan. March 1997.

City of San Diego. 2017. Vernal Pool Habitat Conservation Plan. October 2017.

City of San Diego. 2008. Program Environmental Impact Report for the General Plan. December 2008.

City of San Diego. 2020. City of San Diego General Plan Housing Element FY2021–FY2029. June 2020.

City of San Diego. 2021. City of San Diego General Plan. Adopted in 2008, most recently updated December 2021. https://www.sandiego.gov/planning/programs/genplan.

City of San Diego. 2022a. California Environmental Quality Act Significance Determination Thresholds. December 2020.

City of San Diego. 2022b. City of San Diego Municipal Code.

City of San Diego. 2022c. City of San Diego Climate Action Plan.

2 ENVIRONMENTAL SETTING

Beier, P. and S. Loe. 1992. A checklist for evaluating impacts to wildlife movement corridors. Wildl. soc. bull. 20: 434-440.

CARB (California Air Resources Board). 2016. Ambient Air Quality Standards. https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf?_ga=2.80113745.757457248.1562881014-Mmay 127567563.1558669873.

CARB. 2019. “California Greenhouse Gas Emission Inventory—2019 Edition.” August 12, 2019. Accessed December 2021. http://www.arb.ca.gov/cc/inventory/data/data.htm.

CARB. 2020. Hot Spots Analysis and Reporting Program. https://ww2.arb.ca.gov/our-work/programs/hot-spots-analysis-reporting-program/about. Accessed 21 April 2020.

CAL FIRE (California Department of Forestry and Fire Protection). 2022. Fire Hazard Severity Zone View. Accessed June 2022. https://egis.fire.ca.gov/FHSZ/.

Calflora. 2022. Calflora, online information on wild California plants. Accessed June 2022.

CalRecycle (California Department of Resources Recycling and Recovery). 2022. SWIS Facility/Site Search. Accessed June 2022. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search.

CDMG (California Division of Mines and Geology). 2002. California Department of Conservation, Division of Mines and Geology Open File Report 96-08, U.S. Department of the Interior, U.S. Geological Survey Open File Report 96-706 Probabilistic Seismic Hazard Assessment for the State of California, Appendix A: Fault Source Parameters, 1996, revised in 2002.

CGS (California Geological Survey) 2010. Fault Activity Map of California. http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html#.

CDFW (California Department of Fish and Wildlife). 2022. Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento. Accessed 2022.

City of San Diego 2008. City of San Diego Seismic Safety Study. https://www.sandiego.gov/sites/default/files/legacy/development-services/industry/hazards/pdf/seismicstudy.pdf.

City of San Diego. 2017. City of San Diego Vernal Pool Habitat Conservation Plan. October 2017.

City of San Diego. 2018. Draft Existing Conditions Community Atlas – Mira Mesa Community Plan Update. August 2018.

City of San Diego 2020a. The City of San Diego Climate Action Plan 2020 Annual Report Appendix. Appendix for 2020 Annual Report. sandiego.gov.

City of San Diego 2020b. San Diego Fire-Rescue Department Responses, Annual Unit Statistics, Calendar Year 2020. https://www.sandiego.gov/sites/default/files/cy20-station-responses.pdf.

City of San Diego. 2021. City of San Diego General Plan. Adopted in 2008, most recently updated December 2021. https://www.sandiego.gov/planning/programs/genplan.

City of San Diego 2022. Fire-Rescure Department, Fire Stations. Accessed May 2022. https://www.sandiego.gov/fire/about/firestations.

CNPS (California Native Plant Society). 2022. Electronic Inventory of Rare and Endangered Vascular Plants of California from http://www.rareplants.cnps.org/. Accessed June 2022.

County of San Diego. 2018. County of San Diego Operational Area Emergency Operations Plan.

FEMA (Federal Emergency Management Agency). 2019. Flood Insurance Study – San Diego County, California and Incorporated Areas. Federal Emergency Management Agency. Revised December 2019.

HELIX (HELIX Environmental Planning, Inc.). 2019. GIS data from 3Roots San Diego Project Biological Technical Report.

Hirabayashi, C. K., T.K. Rockwell, S.G. Wesnousky, M.W. Sterling, F. Surez-Vidal. 1996. A Neotectonic Study of the San Miguel-Vallecitos Fault, Baja California, Mexico, Bulletin of the Seismological Society of America, Vol. 86.

Jepson. 2022. Jepson eFlora. Accessed on May 2022. https://ucjeps.berkeley.edu/eflora/

Kahle, J. E., P.A. Bodin, G.J. Morgan. 1984, Preliminary Geologic Map of the California-Baja California Border Region.

Kennedy, M.P. and S.S. Tan. 2008. Geologic Map of the San Diego 30' x 60' Quadrangle, California. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/rgm/RGM_003/RGM_003_San_Diego_2008_Plate1of2.pdf.

NOAA (National Oceanic and Atmospheric Administration). 2019. Local Climatological Data Annual Summary with Comparative Data. San Diego, California (KSAN). https://www.ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/quality-controlled-local-climatological-data-qclcd.

NatureServe. 2022. NatureServe Explorer: an online encyclopedia of life. Accessed June 2022. http://www.natureserve.org/explorer/.

Parsons. 2009. Final Site Inspection Report, Linda Vista Valley Auxiliary Field, San Diego California. March.

RECON Environmental, Inc. 2015. GIS data from Stone Creek Master Plan Biological Technical Report.

Risk Assessment & Management Group. 2019. Groundwater Closure Document. Sunflower Properties. 9775 Distribution Avenue, San Diego, California. March 19.

RWQCB (Regional Water Quality Control Board). 2021. The Water Quality Control Plan for the San Diego Basin. As amended on September 1, 2021.

Ryan, H. F., J.F. Conrad, C.K. Paul, M. McGann. 2012. Slip Rate on the San Diego Trough Fault Zone, Inner California Borderland and the 1986 Oceanside Earthquake Swarm Revisited, Bulletin of the Seismological Society of America, Vol. 102.

SANDAG (San Diego Association of Governments). 2021. Data surfer. https://datasurfer.sandag.org/download/sandag_estimate_2020_cpa_mira-mesa.pdf.

SanGIS (San Diego Geographic Information Source). 2020. GIS data layers from the Regional Data Warehouse.

SDRWQCB (San Diego Regional Water Quality Control Board). 2013. Order No. R9-2013-0001: National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region, NPDES Permit No. CAS 0109266. May 2013 (amended November 2015).

SDUSD (San Diego Unified School District). 2022. Mira Mesa Cluster School Council. https://sandiegounified.org/a-to-_z_index/clusters/mira_mesa_cluster_school_council.

SCS Engineers. 2016. Subsurface Assessment and Remedial Action Work Plan. VAP Case Number H02503-001. 8655 Commerce Avenue, San Diego, California. August 12.

SDAPCD (San Diego Air Pollution Control District). 2016. Air Quality Planning. https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning.html. Accessed June 2019.

SDAPCD. 2021. 5-Year Air Quality Summary Annual Report. https://www.sdapcd.org/content/dam/sdapcd/documents/monitoring/5-Year-Air-Quality.pdf.

SDAPCD. 2022. Attainment Status. http://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html.

SDG&E. 2020. 2020 Power Content Label. https://www.energy.ca.gov/filebrowser/download/3894.

Terracon. 2019. Vapor Mitigation System and Second Quarter 2019 Operation and Maintenance. Alid – Mira Mesa. 6755 Mira Mesa Boulevard, San Diego, California. July 15.

Tremor, S., D. Stokes, W. Spencer, J. Diffendorfer, H. Thomas, S. Chivers, and P. Unitt. 2017. San Diego County Mammal Atlas.

USFWS (U.S. Fish and Wildlife Service). 2022. Carlsbad Fish and Wildlife Office: Species Occurrence Data. https://www.fws.gov/carlsbad/GIS/CFWOGIS.html. Accessed June 2022

Unitt, Phillip. 2004. San Diego County Bird Atlas.

USEPA (U.S. Environmental Protection Agency). 2015. Nonattainment Areas for Criteria Pollutants (Green Book). https://www.epa.gov/green-book/green-book-data-download.

USEPA. 2020. Carbon Monoxide (1971) Designated Area/ State Information. https://www3.epa.gov/airquality/greenbook/cbtc.html. Accessed 19 April 2020.

3 PROJECT DESCRIPTION

City of San Diego. 2022. Draft Mira Mesa Community Plan Update.

4 REGULATORY FRAMEWORK

CARB (California Air Resources Board). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles.

CARB. 2008. CARB Initial Scoping Plan. https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm.

CARB. 2011. Supplement to the AB 32 Scoping Plan Functional Equivalent Document. June.

CARB. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework.

CARB. 2016. Ambient Air Quality Standards. https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf?_ga=2.80113745.757457248.1562881014- Mmay 127567563.1558669873.

CARB. 2017a. California Zero-Emission Vehicle Rules. https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program.

CARB 2017b. California's 2017 Climate Change Scoping Plan. https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.

CBSC (California Building Standards Commission). 2019. 2019 Edition of California Green Building Standards Code (CALGreen). July.

City of San Diego 1994. Carroll Canyon Master Plan. December.

City of San Diego. 2008a. City of San Diego General Plan Conservation Element. March.

City of San Diego. 2008b. City of San Diego General Plan Urban Design Element. March.

City of San Diego. 2013. City of San Diego Bicycle Master Plan. December.

City of San Diego. 2015a. City of San Diego General Plan Noise Element. Updated June 2015.

City of San Diego. 2015b. City of San Diego General Plan Mobility Element. Updated June 2015.

City of San Diego. 2017. Vernal Pool Habitat Conservation Plan. October 2017.

City of San Diego 2018. San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended February 2018.

City of San Diego. 2020. City of San Diego General Plan Housing Element FY2021–FY2029. June.

City of San Diego. 2021. City of San Diego General Plan Public Facilities, Services, and Safety Element. Updated December 2021.

City of San Diego. 2022. City of San Diego Climate Action Plan. August.

County of San Diego. 2022. Hazardous Materials Division. Accessed May 2022. https://www.sandiegocounty.gov/content/sdc/deh/hazmat.html.

SDAPCD (San Diego Air Pollution Control District). 2016. Air Quality Planning. https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning.html.

SANDAG (San Diego Association of Governments). 2021. San Diego Forward: The Regional Plan. December.

USEPA (United States Environmental Protection Agency). 2016. NAAQS Table. 20 December. https://www.epa.gov/criteria-air-pollutants/naaqs-table.

5 ENVIRONMENTAL ANALYSIS

5.1 AIR QUALITY

CARB (California Air Resources Control Board). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. https://ww3.arb.ca.gov/ch/handbook.pdf.

CARB. 2020. Hot Spots Analysis and Reporting Program. https://ww2.arb.ca.gov/our-work/programs/hot-spots-analysis-reporting-program/about.

Caltrans (California Department of Transportation). 2017. Quantitative Particulate Matter Hot-Spot Analysis Best Practices Guidebook. June. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/f0006994-pm-hot-spot-best-practices-guidebook-a11y.pdf.

City of San Diego 2020a. California Environmental Quality Act Significance Determination Thresholds.

City of San Diego. 2020b. Mira Mesa Community Plan. Last Amended September 2020. Accessed at https://www.sandiego.gov/sites/default/files/miramesa042611c.pdf.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program, Risk Assessment Guidelines. February.

South Coast Air Quality Management District. 2006. Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. October.

5.2 BIOLOGICAL RESOURCES

Calflora. 2022. Calflora, online information on wild California plants. Accessed June 2022.

CDFW (California Department of Fish and Wildlife). 2022a Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento. Accessed June 2022.

CDFW. 2022b State and Federally Listed Endangered, Threatened, and Rare Plants of California from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline. Accessed June 2022.

CDFW. 2022c. State and Federally Listed Endangered and Threatened Animals of California from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline. Accessed June 2022.

CNPS (California Native Plant Society). 2022 Electronic Inventory of Rare and Endangered Vascular Plants of California from http://www.rareplants.cnps.org/. Accessed June 2022.

City of San Diego. 1997 Multiple Species Conservation Program, City of San Diego MSCP Subarea Plan available at https://www.sandiego.gov/sites/default/files/legacy/planning/programs/mscp/pdf/subareafullversion.pdf.

City of San Diego. 2018. San Diego Municipal Code, Land Development Code, Biology Guidelines. https://www.sandiego.gov/sites/default/files/amendment_to_the_land_development_manual_biology_guidelines_february_2018_-_clean.pdf.

City of San Diego. 2019. Revised Final City of San Diego Vernal Pool Habitat Conservation Plan. https://www.sandiego.gov/sites/default/files/vphcp_revised_final.pdf.

City of San Diego. 2022a. MHPA Interactive Map. https://webmaps.sandiego.gov/portal/apps/webappviewer/index.html?id=d77da895df084249b1ae7a2c10794470

City of San Diego 2022b. VPHCP Interactive Map. https://webmaps.sandiego.gov/portal/apps/webappviewer/index.html?id=d04d9b6e46fc43cf998f46d9018c04e3

County of San Diego. 1992. County of San Diego Final Multiple Species Conservation Plan: MSCP Plan. https://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/SCMSCP/FinalMSCPProgramPlan.pdf.

Helix (Helix Environmental Planning Inc.). 2019. GIS data from 3Roots San Diego Project Biological Technical Report.

RECON (RECON Environmental Inc.). 2015 GIS data from Stone Creek Master Plan Biological Technical Report.

SanGIS (San Diego Geographic Information Source). 2022. GIS data layers from the Regional Data Warehouse

SDNHM (San Diego Natural History Museum). 2022. San Diego County Plant Atlas available at https://www.sdnhm.org/science/botany/projects/plant-atlas/.

Tremor, S., D. Stokes, W. Spencer, J. Diffendorfer, H. Thomas, S. Chivers, and P. Unitt. 2017. San Diego County Mammal Atlas.

USDA (United States Department of Agriculture). 2022. Soil Survey Staff, Natural Resources Conservation Service, United States. Oil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. http://soils.usda.gov/technical/classification/osd/index.html. Accessed June 2022.

USFWS (United States Fish and Wildlife Service). 2022a. Carlsbad Fish and Wildlife Office: Species Occurrence Data. Accessed June 2022. https://www.fws.gov/carlsbad/GIS/CFWOGIS.html.

USFWS. 2022b. Critical Habitat Portal. Accessed June 2022.https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

USFWS. 2022c. National Wetlands Inventory. Accessed June 2022. https://www.fws.gov/wetlands/.

Unitt, P.A. 2004. San Diego County Bird Atlas. San Diego Natural History Museum. San Diego, California

5.3 GEOLOGY AND SOILS

City of San Diego. 2018. Guidelines for Geotechnical Reports. 2018. https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/geoguidelines.pdf.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

County of San Diego. 2017. Multi-Jurisdictional Hazard Mitigation Plan. October 2017. https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/HazMit/2018/2018%20Hazard%20Mitigation%20Plan.pdf.

Division of Safety of Dams. 2021. Dams Within Jurisdiction of the State of California Listed Alphabetically by County. September 2021. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Division-of-Safety-of-Dams/Files/Publications/Dams-Within-Jurisdiction-of-the-State-of-California-Listed-Alphabetically-by-County-September-2021.pdf.

5.4 GREENHOUSE GAS EMISSIONS

City of San Diego. 2020. The City of San Diego Climate Action Plan 2020 Annual Report Appendix. Appendix for 2020 Annual Report (sandiego.gov).

City of San Diego. 2022a. City of San Diego Climate Action Plan. https://www.sandiego.gov/sites/default/files/climate-_action-plan-updated-draft.pdf.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

SANDAG. 2021. 2021 Regional Plan. https://sdforward.com/mobility-planning/2021-regional-plan.

5.5 HISTORICAL, ARCHAEOLOGICAL, AND TRIBAL CULTURAL RESOURCES

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

5.6 HAZARDS AND HAZARDOUS MATERIALS

CAL FIRE (California Department of Forestry and Fire Protection). 2009. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL Fire. June 11, 2009. https://osfm.fire.ca.gov/media/5969/san_diego.pdf.

County of San Diego. 2017. Multi-Jurisdictional Hazard Mitigation Plan. October 2017. https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/HazMit/2018/2018%20Hazard%20Mitigation%20Plan.pdf.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

County of San Diego. 2018. County of San Diego Operational Area Emergency Operations Plan.

5.7 HYDROLOGY AND WATER QUALITY

City of San Diego. 1997 Multiple Species Conservation Program, City of San Diego MSCP Subarea Plan available at https://www.sandiego.gov/sites/default/files/legacy/planning/programs/mscp/pdf/subareafullversion.pdf.

City of San Diego. 2021a. Stormwater Standards Manual. Effective Date February 2016; revised May 2021. Accessed May 2, 2022. https://www.sandiego.gov/sites/default/files/sws_manual_may_2021_update.pdf.

City of San Diego 2021b. 2020 Urban Water Management Plan. June 2021. Accessed May 2, 2022. https://www.sandiego.gov/sites/default/files/city_of_san_diego_2020_uwmp_final_6_29_2021_send.pdf.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

FEMA (Federal Emergency Management Agency). 2012. FEMA Flood Insurance Rate Map. Accessed April 2022. https://msc.fema.gov/portal/search?AddressQuery=mira%20mesa#searchresultsanchor.

RWQCB (Regional Water Quality Control Board). 1994. Water Quality Control Plan for the San Diego Basin (9), with amendments effective on or before September 1, 2021.

RWQCB. 2021. The Water Quality Control Plan for the San Diego Basin. As amended on September 1, 2021.

5.8 LAND USE

City of San Diego. 2017. City of San Diego Vernal Pool Habitat Conservation Plan.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

5.9 NOISE

Caltrans (California Department of Transportation). 2013. Transportation and Construction Vibration Guidance Manual. September.

City of San Diego 2021. City of San Diego Parks Master Plan.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

DOT (United States Department of Transportation). 2006. Federal Highway Administration (FHWA) Highway Construction Noise Handbook. Prepared by U.S. Department of Transportation Research and Innovative Technology Administration. Prepared for FHWA Office of Natural and Human Environment. FHWA-HEP-06-015. Final Report. August.

5.10 PUBLIC SERVICES AND FACILITIES

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022. https://www.sandiego.gov/sites/default/files/sdtceqa.pdf.

SDUSD (San Diego Unified School District). 2022. Estimated Number of Students Generated Based on the Potential Future Housing Capacity of the Proposed Mira Mesa Community Plan Update. August.

5.11 PUBLIC UTILITIES

CalRecycle (California Department of Resources Recycling and Recovery). 2019. Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

5.12 TRANSPORTATION

City of San Diego. 2006. Pedestrian Master Plan. December.

City of San Diego. 2013. City of San Diego Bicycle Master Plan. December.

City of San Diego. 2020. Transportation Study Manual. September.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

SANDAG. 2010. San Diego Regional Bike Plan. April.

San Diego Institute of Transportation Engineers. 2013. Vehicle Miles Traveled Calculations Using The SANDAG Regional Travel Demand Model https://www.sandag.org/uploads/publicationid/publicationid_1795_16802.pdf. May.

5.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

6 CUMULATIVE EFFECTS

None.

7 OTHER MANDATORY DISCUSSION AREAS

CAL FIRE (California Department of Forestry and Fire Protection). 2009. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL Fire. June 11, 2009. https://osfm.fire.ca.gov/media/5969/san_diego.pdf.

City of San Diego. 2007. City of San Diego General Plan Program Environmental Impact Report. September.

City of San Diego. 2021. City of San Diego General Plan. Adopted in 2008, most recently updated December 2021. https://www.sandiego.gov/planning/programs/genplan.

City of San Diego. 2022. California Environmental Quality Act Significance Determination Thresholds. August 2022.

DOC (Department of Conservation). 2017. Update Of Mineral Land Classification: Portland Cement Concrete-Grade Aggregate In The Western San Diego County Production-Consumption Region, California. https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_240-MLC-Report.pdf.

DOC. 2022. California Important Farmland Finder. Accessed May 2022. https://maps.conservation.ca.gov/DLRP/CIFF/.

8 ALTERNATIVES

CAL FIRE (California Department of Forestry and Fire Protection). 2009. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL Fire. June 11, 2009. https://osfm.fire.ca.gov/media/5969/san_diego.pdf.

City of San Diego. 2020. Mira Mesa Community Plan. Last Amended September 2020. Accessed at https://www.sandiego.gov/sites/default/files/miramesa042611c.pdf.

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