Draft
Environmental Impact Report for the Nakano Project
Chula Vista, California
EIR22-001
SCH #2022060260

Prepared for
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List of Abbreviated Terms

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ADD	Assistant Deputy Director
ADT	average daily traffic
AFY	acre-feet per year
Alquist-Priolo	Alquist–Priolo Earthquake Fault Zoning Act
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMSL	above mean sea level
APE	Area of Potential Effect
ATCM	Airborne Toxic Control Measures
Basin Plan	San Diego Basin Plan
BAU	business as usual
BCME	Biological Construction Mitigation/Monitoring Exhibit
BI	Building Inspector
BMP	best management practice
BMPDM	Best Management Practice Design Manual
BMZ	Brush Management Zone
Bonta Memo	Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act Memorandum
C&D	Construction and Demolition
C&DD	Construction and Demolition Debris Recycling
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code

CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH_4	methane
CHSP	Community Health and Safety Plan
CLUP	Comprehensive Land Use Plan
CM	Construction Manager
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
County	County of San Diego
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CSVR	Consultant Site Visit Record
CVESD	Chula Vista Elementary School District
CVFD	Chula Vista Fire Department
CVMC	Chula Vista Municipal Code
CVPD	Chula Vista Police Department
CVPL	City of Chula Vista Public Library
CWA	Clean Water Act
dB	decibel
dB(A)	A-weighted decibels
DEHQ	Department of Environmental Health and Quality
DIF	Development Impact Fees
DPM	diesel particulate matter
DSD	Development Services Department
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESA	Environmental Site Assessment
ESD	Environmental Services Department
ESL	Environmentally Sensitive Lands
FAA	Federal Aviation Administration
FAHJ	Fire Authority Having Jurisdiction

FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FMZ	fuel modification zones
FPP	Fire Protection Plan
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
GC	Grading Contractor
Geocon	Geocon Inc.
GHG	greenhouse gas
GMO	Growth Management Ordinance
GMOC	Growth Management Oversight Commission
gpd	gallons per day
H&SC	Health and Safety Code
HAZWOPER	Hazardous Waste Operations & Emergency Response
HCFC	hydrochlorofluorocarbons
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HLIT	Habitat Loss and Incidental Take
HMBP	Hazardous Materials Business Plan
HOA	Homeowners Association
HRA	Health Risk Assessment
HRG	Historic Resources Guidelines
I-805	Interstate 805
IPCC	Intergovernmental Panel on Climate Change
ips	inches per second
JRMP	Jurisdictional Runoff Management Program
kV	kilovolt
LAFCO	Local Agency Formation Commission
LCD	Landscape Construction Documents
LDC	Land Development Code
L_{dn}	day–night average noise level
LEA	Local Enforcement Agency
L_{eq}	average sound level
L_{eq}	equivalent noise level over a given period
LMA	Local Mobility Analysis
L_{max}	maximum sound level
L_{min}	minimum sound level
LOI	Letter of Intent
LOMA	Letter of Map Amendment
LOS	Level of Service
LUT	Land Use and Transportation
MBTA	Migratory Bird Treaty Act

MHPA	Multi-Habitat Planning Area
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MLD	Most Likely Descendent
MMC	Mitigation Monitoring Coordination
MMRP	Mitigation Monitoring and Reporting Program
MMT CO_2e	million metric tons of carbon dioxide equivalent
MOU	Memorandum of Understanding
MPDP	Master Planned Development Permit
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MRZ-2	Mineral Resource Zone 2
MS4	Municipal Separate Storm Sewer System
MSCP	Multiple Species Conservation Program
MT CO_2e	metric tons of carbon dioxide equivalent
MTS	Metropolitan Transit System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSP	Nakano Specific Plan
NSR	noise-sensitive receptor
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OMCP	Otay Mesa Community Plan
OPLA-PRP	Omnibus Public Lands Act–Paleontological Resources Preservation
OS	Open Space
OSHA	Occupational Safety and Health Administration
Otay HU	Otay Hydrologic Unit
OVH MAD	Ocean View Hills Maintenance Assessment District
OVRP	Otay Valley Regional Park
OWD	Otay Water District
Pb	lead
PDF	Project Design Feature
PDP	Planned Development Permit
PFCs	perfluorocarbons
PFDIF	Public Facilities Development Impact Fee

PFFP	Public Facilities Finance Plans
PLDO	Park Lands Dedication Ordinance
PLWTP	Point Loma Wastewater Treatment Plant
PM	Particulate matter
PM_{10}	particulate matter with a diameter of 10 microns and less
$PM_{2.5}$	particulate matter with a diameter of 2.5 microns and less
Porter-Cologne Act	Porter-Cologne Water Quality Act of 1969
ppb	parts per billion
ppm	parts per million
ppv	peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
project	Nakano Project
PRS	Principal Restoration Specialist
QBM	Qualified Biological Monitor
RAQS	Regional Air Quality Strategy
RE	Resident Engineer
REC	recognized environmental conditions
RECON	RECON Environmental, Inc.
Regional Plan	San Diego Forward: The Regional Plan
RIC	Revegetation Installation Contractor
RMC	Revegetation Maintenance Contractor
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RRME	revegetation/restoration monitoring exhibit
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SCIC	South Coastal Information Center at San Diego State University
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDCRAA	San Diego County Regional Airport Authority
SDFC	San Diego Fire Code
SDFRD	San Diego Fire Rescue Department
SDG&E	San Diego Gas & Electric
SDIA	San Diego International Airport
SDMC	San Diego Municipal Code
SDPD	San Diego Police Department
SDUSD	San Diego Unified School District

SF_6	sulfur hexaflouride
SHMP	State Hazard Mitigation Plan
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_X	sulfur oxides
SUHSD	Sweetwater Union High School District
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCM	transportation control measures
TPA	Transit Priority Area
TPH	total petroleum hydrocarbon
TSG	Transportation Study Guidelines
TSM	Transportation Study Manual
U.S. EPA	U.S. Environmental Protection Agency
UD	Urban Design
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VAP	Voluntary Assistance Program
VMT	Vehicle Miles Traveled
VHFHSZ	very high fire hazard severity zone
VOC	volatile organic compounds
WMP	Waste Management Plan
WQIP	Water Quality Improvement Plan
WSCP	Water Shortage Contingency Plan

Executive Summary

S.1 Project Synopsis

This summary provides a brief synopsis of the Nakano Project (project), the results of the environmental analysis contained within this Environmental Impact Report (EIR), a summary of the alternatives to the project that were considered, and the areas of controversy and issues to be resolved by decision makers. This summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

S.1.1 Project Location and Setting

The project is located east of Interstate 805 (I-805), northwest of the 450 block of Dennery Road, and south of the Otay River in the City of Chula Vista. The project site is at the southern edge of the City of Chula Vista, bordered by the City of San Diego on the other three sides (west, south, and east). The project site is approximately 5.8 miles east of the Pacific Ocean and approximately 11 miles south of downtown San Diego.

The project site is currently vacant and was historically used for agricultural purposes. The majority of the project site is flat and consists of disturbed habitat and non-native grasslands, with a drainage located along the eastern boundary of the project site. Elevations within the project site range from 90 feet above mean sea level in the northern portion of the project site to 180 feet above mean sea level in the southern portion of the project site. I-805 is immediately adjacent to the project site to the west. North of the project site is the Otay River, with disturbed land located between the project parcel and the Otay River. Residential development within the City of San Diego's Ocean View Hills community is west and southwest of the project site. South of the project site are Kaiser Permanente Otay Mesa medical offices. The project site's main access is from Dennery Road in the City of San Diego.

S.1.2 Project Description

S.1.2.1 Development Summary

The project would develop up to 221 dwelling units consisting of detached condominiums, duplexes, and townhome dwelling units on a 23.77-acre parcel (Assessor Parcel Number 624-071-0200). While the site plan identifies a total of 215 units, consisting of 61 detached condominiums, 84 duplexes, and 70 townhome dwelling units, the environmental analysis assumes up to 221 units to account for potential changes in the unit mix. The project incorporates several pocket parks and publicly accessible trail connections to the Otay Valley River Park (OVRP). Parking, landscaping, drainage, and stormwater infrastructure and associated utility improvements are proposed. Project access would be via Dennery Road with right-in-only and right-out-only movements. A secondary emergency access only road would connect to the east through the adjacent residential community.

While there is only one proposed physical development proposal evaluated throughout the EIR, the agency responsible for project entitlements would vary depending on whether the site is annexed into the City of San Diego and the timing of annexation in relation to site development. To account for the various site development pathways, the following scenarios are considered throughout the EIR.

- No Annexation Scenario 1 assumes the project would stay in the City of Chula Vista and not be annexed into the City of San Diego. Local Agency Formation Commission (LAFCO) approval of out of agency service agreements for services and utilities from San Diego would be required. Under this scenario, the City of Chula Vista would issue grading and development permits for the project site; however, the City of San Diego would require a site development permit and grading permit for the off-site improvements associated with primary site access and secondary emergency only access.

- Annexation Scenario 2a assumes the site would be annexed into the City of San Diego. In this scenario, grading and development of the project site would be processed by the City of San Diego after the LAFCO reorganization process is complete.

- Annexation Scenario 2b assumes grading and site development would proceed prior to LAFCO reorganization. In this scenario, the City of Chula Vista would issue grading and development permits for the project site and City of San Diego would issue a grading permit for the off-site portions. Grading permits and recordation of a final map in the City of Chula Vista may proceed prior to approval of the LAFCO reorganization.

S.1.2.2 Discretionary Actions

The anticipated discretionary actions for the No Annexation Scenario include but are not limited to approval of entitlements by the City of Chula Vista including but not limited to a General Plan Amendment, Specific Plan, and Tentative Map, certification of the California Environmental Quality Act (CEQA) documents, and approval of the Will-Serve Agreements and easement vacations with the City of San Diego and LAFCO for utility service. The No Annexation Scenario also requires a grading permit and site development permit from the City of San Diego for the off-site improvements in the City of San Diego.

The anticipated discretionary actions under Annexation Scenarios would involve approval of entitlements by the City of Chula Vista including but not limited to a General Plan Amendment, Specific Plan, and Tentative Map. Following approval of City of Chula Vista entitlements, the City of San Diego would consider adoption of a pre-zoning ordinance, amendments to the City of San Diego General Plan and Otay Mesa Community Plan, approval of a Site Development Permit (under Annexation Scenario 2b for off-site portions of the project), among other actions. Under the Annexation Scenarios, both agencies would consider approval of an Annexation Agreement. Following action by both cities under the Annexation Scenarios, LAFCO would consider approval of a sphere of influence revision to detach the project site from the City of Chula Vista and Otay Water District and annex the project site to the City of San Diego.

A complete list of discretionary actions including the actions that would be required under all three scenarios is provided in the Project Description, Section 3.5.

S.1.3 Project Objectives

In accordance with CEQA Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the lead agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision makers in preparing findings and overriding considerations, if necessary. The project would implement the policies of both the City of San Diego and City of Chula Vista through implementation of the following objectives:

1. Develop underutilized property to provide housing in response to regional housing needs.
2. Achieve efficient provision of services through reorganization of the property through an application to the San Diego LAFCO to detach from the City of Chula Vista and Otay Water District and annex into the City of San Diego.
3. Provide a compact residential development pattern that is conducive to walking and bicycling.
4. Construct a variety of housing types at a density range that maximizes development potential consistent with the surrounding residential communities.
5. Provide amenities that contribute to the nearby OVRP recreational uses and community connectivity, including an overlook to the park and multi-modal connections.
6. Generate financial benefits to the local economy, through efficient provision of public services, providing workforce housing, and generating property tax and local jobs.

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

Table S-1 summarizes the significant impacts identified through the environmental analysis completed for the project. Table S-1 also identifies the mitigation measures that would reduce and/or avoid the environmental effects as feasible, with a conclusion as to whether the impact would be mitigated to below a level of significance or if impacts would remain significant and unavoidable. Further discussion of potential and anticipated environmental impacts is detailed in Chapter 4.0.

S.3 Areas of Controversy

During the Notice of Preparation comment period several commenters requested trail improvements for consistency with the OVRP Concept Plan. Comments were also raised related to the project's proximity to the Shinohara II burn ash site and potential flooding concerns due to site development in relation to the Otay River.

S.4 Issues to be Resolved by the Decision-Making Bodies

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

- Land Use and Planning (Annexation Scenario 2a only)
- Biological Resources (all scenarios)
- Geologic and Paleontological Resources (No Annexation Scenario and Annexation Scenario 2b)
- Greenhouse Gas Emissions (all scenarios)
- Health and Safety/Hazardous Materials (all scenarios)
- Historical Resources (all scenarios)
- Transportation (all scenarios)
- Tribal Cultural Resources (all scenarios)
- Hydrology and Water Quality (all scenarios)

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

- Land Use and Planning (Annexation Scenario 2a only)
- Greenhouse Gas Emissions (all scenarios)
- Transportation (Vehicle Miles Traveled) (all scenarios)

As the City of San Diego is a responsible agency for the project, the City of San Diego must also review and approve the associated Findings of Fact pursuant to CEQA Guidelines Section 15091 for the significant impacts identified in the EIR, as it relates to impacts and mitigation under the purview of the City of San Diego. City of San Diego Findings of Fact would be required for the following issues, depending on the scenario pursued as detailed below:

- Land Use and Planning – Annexation Scenario 2a only

- Biological Resources – Annexation Scenario 2a and off-site portions only for No Annexation Scenario and Annexation Scenario 2b.

- Greenhouse Gas Emissions – Annexation Scenario 2a only

- Health and Safety/Hazardous Materials – Annexation Scenario 2a and off-site portions only for No Annexation Scenario and Annexation Scenario 2b.

- Historical Resources – Annexation Scenario 2a and off-site portions only for No Annexation Scenario and Annexation Scenario 2b.

- Transportation – Annexation Scenario 2a only

- Tribal Cultural Resources – Annexation Scenario 2a and off-site portions only for No Annexation Scenario and Annexation Scenario 2b.

- Hydrology and Water Quality – Annexation Scenario 2a and off-site portions only for No Annexation Scenario and Annexation Scenario 2b.

Furthermore, the City of San Diego would also need to make a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 for the following impacts found to be significant and unavoidable in the EIR:

- Land Use and Planning (Annexation Scenario 2a only)
- Greenhouse Gas Emissions (all scenarios)
- Transportation (Vehicle Miles Traveled) (all scenarios)

S.5 Project Alternatives

The CEQA Guidelines Section 15126.6 requires that an EIR compare the effects of a "reasonable range of alternatives" to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. 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]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time while also taking into account economic, environmental, social, technological, and legal factors. In developing the alternatives to be addressed in this section, consideration was given to their ability to meet the basic objectives of the project and eliminate or substantially reduce significant environmental impacts. The following alternatives were identified to provide a reasonable range of alternatives.

S.5.1 No Project (No Development) Alternative

The No Project (No Development) Alternative would maintain the site as its current use as a vacant undeveloped site. Implementation of this alternative would not meet any of the project objectives as no development, and thus no change to the project site, would occur. As discussed in Section 9.2 and summarized in Table 9-1, all impacts would be less under this alternative compared to all project scenarios.

S.5.2 No Project (Development Under the Existing Plan) Alternative

This alternative would assume recreational use consistent with the City of Chula Vista Agricultural Zone (A-8) and Open Space (OS) General Plan designation. Under the City of Chula Vista General Plan, the Open Space (OS) designation allows passive recreation uses such as trails, staging areas, scenic overlooks, and picnic areas. Specific permitted uses within the A-8 zone include agriculture, single-family use, public parks, and mobile homes (subject to additional zoning provisions). This

alternative assumes the project site would be developed with a passive park, including roadway improvements to allow vehicular access to the site via Dennery Road and on-site parking primarily as trail staging for public access to the OVRP. Passive park improvements are assumed to include natural and landscaped open space areas including grass play areas, picnic areas with shade structures, and trail improvements. A secondary access road would not be required under this alternative. As discussed in Section 9.3 and summarized in Table 9-1, the No Project (Development under the Existing Plan) Alternative reduces significant impacts relative to the project associated with land use, biological resources, greenhouse gas, hazardous materials, prehistoric resources, water quality, and transportation to less than significant levels. All other impacts would be the same or similar compared to the project under all scenarios.

S.5.3 Reduced Unit Alternative

This alternative is a reduced residential project alternative including construction of up to 200 residential units, including ten percent low-income units. This unit count was selected because a project with 200 dwelling units or less would not require a secondary emergency only access road under the City of Chula Vista adopted fire code, which would reduce impacts to the drainage located along the eastern edge of the property. This alternative would be implemented by the City of Chula Vista and is based on the City of Chula Vista's adoption of International Fire Code 2021, Appendix D, Fire Apparatus Access Roads, Section D106 Multiple-Family Residential Developments, which states: "D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system." This project alternative would include similar park and recreational facilities: a pocket park and trail connections to the OVRP, locations for scenic overlooks, and playground space. Under this alternative, it is assumed the site would be developed pursuant to City of Chula Vista regulations and requirements. Off-site improvements north of the project site including remedial grading and implementation of OVRP trail system improvements within the City of Chula Vista would be required. The impacts of this alternative are compared to the impacts of the No Annexation Scenario and Scenario 2b and would be subject to City of Chula Vista standards. As discussed in Section 9.4 and summarized in Table 9-2, this alternative would result in a reduction of significant project impacts related to biological resources (wetlands), greenhouse gas, and vehicle miles traveled. All other impacts would be the same or similar compared to the project (No Annexation Scenario and Scenario 2b).

S.5.4 Reduced Footprint Wetland Impacts Reduction Alternative

This alternative would reduce project impacts to wetlands that would occur from construction of the proposed main entrance road from Dennery Road and a gated secondary emergency access road. To reduce project impacts to wetlands from the proposed access roadways, the access would be redesigned to include bridging over the wetlands. To allow for bridging to reduce wetland impacts, and to provide a 100-foot buffer around the wetland area, the development footprint would be reduced and shifted to the west. This alternative would retain the same number of units as the proposed project. The impacts of this alternative are compared to the impacts of the Annexation

Scenario 2a and would be subject to City of San Diego standards. As detailed in Section 9.5 and summarized in Table 9-3, this alternative would result in a reduction of significant project impacts related to biological resources (wetlands), historical resources (archaeology and human remains). All other impacts would be the same or similar compared to the project (Annexation Scenario 2a).

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Land Use and Planning			
Issue 1: Physically Divide an Established Community Would the project physically divide an established community?	The project would not physically divide an established community as no major expansion of roadways or infrastructure is needed to serve the project. Therefore, the project would not physically divide an established community and direct impacts would be less than significant. Each of the cumulative projects would include development within infill sites or vacant lands that would contribute to the build-out of existing communities or result in new planned communities. As a result, a cumulative impact related to physical division of a community would not occur.	No mitigation is required.	N/A
Issue 2: Land Use Plan Consistency Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Under the No Annexation Scenario and Annexation Scenario 2b, with the inclusion of noise walls specified in project design feature PDF-NOS-1 detailed in Chapter 3.0 Project Description, Section 3.6.1.a, the project would be consistent with the City of Chula Vista Noise Element. No conflicts with applicable land use plans or policies have been identified for the No Annexation Scenario or Annexation Scenario 2b. Direct impacts would be less than significant. The project, combined with other cumulative projects would not result in a cumulative impact related to land use plan consistency; the project has demonstrated that it would implement the applicable goals, policies, guidelines, and recommendations contained within the City of Chula Vista and City of San Diego General Plan and the Otay Mesa Community Plan and therefore, would not contribute to a cumulative impact.	No mitigation is required.	N/A
Issue 3: Consistency with Multiple Species Conservation Plans Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	The project site is designated as "Development Area Outside Covered Projects" (i.e., not designated a preserve or conservation area) and is not immediately adjacent to any 75% or 100% Conservation Areas. The off-site area associated with roadway improvements would remain in the City of San Diego and continue to be subject to the City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan. The project would be subject to the MSCP Conditions for Coverage for covered species, which is consistent between both Subarea Plans. No conflicts or inconsistencies have been identified with the City of Chula Vista Subarea Plan. Direct impacts would be less than significant. The project, like other cumulative projects demonstrates consistency with the Multiple Species Conservation Program Subarea Plans, including cumulative projects in the City of Chula Vista and City of San Diego. Cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Deviation or Variance This issue does not apply to the City of Chula Vista and therefore is only addressed under Annexation Scenario 2a.	N/A	N/A	N/A
Air Quality			
Issue 1: Air Quality Plan Implementation Would the project conflict with or obstruct implementation of the applicable air quality plan?	The project would not stimulate population growth or a population concentration or housing above what is assumed in local and regional land use plans, or projections made by regional planning authorities. Project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants. Therefore, the project would not conflict with or obstruct implementation of the Regional Air Quality Strategy, and direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 2: Air Quality Standards Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Construction and operational emissions would be less than the applicable City of Chula Vista significance thresholds for all criteria pollutants. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and direct impacts would be less than significant. The project would not contribute to existing air quality violations or result in regional emissions than would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards or result in a cumulatively considerable net increase in criteria pollutants. Cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 3: Sensitive Receptors Would the project expose sensitive receptors to substantial pollutant concentrations?	The project would not expose nearby sensitive receptors to substantial diesel particulate matter concentrations during construction or operation. The project would not negatively affect the level of service of intersections on or in proximity to the project site, and therefore would not result in a carbon monoxide (CO) hotspot. Direct and cumulative impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.	No mitigation is required.	N/A
Issue 4: Odor and Other Emissions Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Exposure to odors associated with project construction would be short term and temporary in nature. Residential projects are not generally associated with adverse odor. Therefore, direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 5: Air Movement The City of Chula Vista does not have an applicable threshold related to alterations of air movement.	N/A	N/A	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Biological Resources			
Issues 1 and 2: Sensitive Species and Habitats Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	<u>Sensitive Vegetation Communities and Land Cover Types</u> The No Annexation Scenario and Annexation Scenario 2b would result in direct impacts to 17.25 acres of sensitive upland vegetation communities within the project site and off-site road improvement areas. Impacts include 3.60 acres of Tier II vegetation communities (Diegan coastal sage scrubs) and 13.65 acres of Tier III vegetation communities (non-native grasslands). Direct impacts would be significant. Indirect impacts to sensitive vegetation communities adjacent to the development areas due to dust, erosion, and runoff generated by construction activities would be significant. <u>Special Status Plants</u> Direct impacts to San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike moss, and San Diego County viguiera would occur outside of conservation areas and/or the Multi-Habitat Planning Area and would not reduce the species' populations to below self-sustaining levels; therefore, impacts would be less than significant. Direct impacts to Otay tarplant, a narrow endemic under the City of San Diego MSCP Subarea Plan, would occur outside of conservation areas and/or the Multi-Habitat Planning Area. Impacts to the 14 individuals or 0.001 acre of Otay tarplant habitat within the off-site impact area within the City of San Diego would be significant. Indirect impacts to sensitive plants mapped adjacent to the project impact area including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss due to dust, erosion, and runoff generated by construction activities would be considered significant. <u>Special Status Wildlife Species</u> Impacts to Coopers hawk, western bluebird, orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, and western mastiff bat would be considered less than significant. Direct and indirect impacts to least Bell's vireo, coastal California gnatcatcher, burrowing owl, yellow-breasted chat, and yellow warbler would be significant. Due to their moderate potential to forage within the project impact areas direct impacts to foraging Crotch's bumble bee during construction would be significant. If the CDFW finds that the	<u>Sensitive Vegetation Communities and Land Cover Types</u> Significant impacts to 17.25 acres of sensitive upland vegetation communities would be mitigated through implementation of **BIO-CV-1** and as detailed in Table 4.3-3. Significant indirect impacts to sensitive habitat would be mitigated through implementation of **BIO-CV-2**, Biological Monitor and **BIO-CV-3**, Best Management Practices. <u>Special Status Plants</u> Impacts to 14 Otay tarplant individuals within off-site improvement areas in the City of San Diego would be mitigated at a 4:1 mitigation ratio as detailed in **BIO-SD-3**, Otay Tarplant Mitigation. Indirect impacts to special-status plant species including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss would be mitigated through implementation of mitigation measures **BIO-CV-2** and **BIO-CV-3**. <u>Special Status Wildlife Species</u> *Least Bell's Vireo* To mitigate for direct and indirect impacts to least Bell's vireo for on-site components mitigation measure **BIO-CV-5** shall be implemented by the City of Chula Vista. *Coastal California Gnatcatcher* Direct impacts to coastal California gnatcatcher would be mitigated through implementation of mitigation measures **BIO-CV-1** and **BIO-CV-4**. *Burrowing Owl* Direct impacts to burrowing owls would be addressed through habitat-based mitigation identified in **BIO-CV-1**. Indirect impacts to burrowing owls would be mitigated through implementation of **BIO-CV-6**, detailed below. *Yellow-Breasted Chat and Yellow Warbler* Impacts to yellow warbler and yellow-breasted chat nesting habitat would be mitigated through implementation of habitat-based mitigation detailed in **BIO-CV-1**. Additionally, impacts to yellow-breasted chat and yellow warbler	Implementation of the mitigation measures detailed in section 4.3.3.1.e would ensure that all direct, indirect, cumulatively significant impacts related to sensitive species and habitats under the No Annexation Scenario and Annexation Scenario 2b would be reduced to less than significant levels.

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	candidacy is not warranted and the species is removed from the list of candidate species, then no avoidance measures shall be required. Direct impacts to Crotch's bumble bee foraging habitat would be significant. The project's direct impacts to biological resources combined with those associated with cumulative projects could result in a cumulatively significant impact to these biological resources. Therefore, cumulative biological impacts would be significant.	associated with construction activities occurring during the breeding and nesting season for this species for the on-site components would be mitigated through implementation of preconstruction nesting bird surveys as detailed in **BIO-CV-4**. *Crotch's Bumble Bee* Habitat based impacts to Crotch's bumble bee would be addressed by habitat-based mitigation identified in **BIO-CV-1**. Direct impacts to Crotch's bumble bee foraging individuals would be mitigation through implementation of preconstruction surveys and consultation as detailed in **BIO-CV-7.**	
Issue 3: Wetlands Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means?	Direct impacts to jurisdictional resources including direct impacts to a total of 0.40 acre of potential Regional Water Quality Control Board (RWQCB) wetland waters, California Department of Fish and Wildlife riparian, and City of Chula Vista wetlands as detailed in Table 4.3-6. Direct impacts to wetlands would be significant. Indirect impacts to jurisdictional resources during project operation would be avoided through incorporation of a wetland buffer to protect the function and values of the wetland as detailed in Chapter 3.0, Project Description, Section 3.6.2. However, during construction there is a potential for indirect impacts to wetland resources to occur which would be a significant impact. The project and all cumulative projects would be required to comply with applicable agency permit requirements related to wetland impacts, which would ensure no net loss of wetlands regionally. Cumulative impacts would be less than significant.	Mitigation requirements for direct impacts to jurisdictional resources are detailed in Table 4.3-7. Implementation of **BIO-CV-8**, Wetland Restoration, Credits and Permits and **BIO-CV-9**, HLIT Permit, would be required. Indirect impacts to wetlands would be mitigated through compliance with mitigation measures **BIO-CV-2** and **BIO-CV-3** which requires a biological monitor to be on-site during construction and implementation of best management practices (BMPs) during construction to ensure wetlands are protected from trash, pollutants, and disturbance.	With implementation of **BIO-CV-8** and **BIO-CV-9**, direct impacts to wetlands would be reduced to less than significant. With implementation of **BIO-CV-2** and **BIO-CV-3**, indirect impacts to wetlands during construction would be reduced to less than significant.
Issue 4: Wildlife Corridors and Nursery Sites Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	The project would not cause any loss of functionality of the Otay River wildlife corridor and direct impacts to wildlife corridors would be less than significant. Impacts related to wildlife corridors would be less than significant and would not contribute to a cumulative impact. Cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issues 5 and 6: Conflicts with Local Plans, policies or HCPs/NCCPs Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?	The project would be consistent with the provisions of the City of Chula Vista MSCP Subarea Plan and Habitat Loss and Incidental Take Ordinance. Thus, direct impacts would be less than significant. Impacts related habitat conservation plans, natural community conservation plan, or other approved local regional or state habitat conservation plan, or any local policies or ordinances would be less than significant and would not contribute to a cumulative impact for any local policies or ordinances. Cumulative impacts would be less than significant.	No mitigation is required.	N/A
Geologic and Paleontological Resources			
Issue 1: Geologic Hazards Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?	The project site is not underlain by an active fault and has an underlying geology that is not prone to liquefaction. Additionally, no landslide risk areas have been identified on or adjacent to the project site. Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and Infiltration Feasibility Condition Letter (see Appendix E-5) prepared for the project and compliance with applicable CBC regulations would ensure that direct impacts related to geologic hazards would be less than significant. Due to the localized nature of geology and soils, all projects would address potential impacts to geology and soils on a project-by-project basis consistent with the California Building Code, as potential geologic hazards and soil composition varies by site. Based on required compliance with applicable agency grading ordinance requirements and stormwater standards, cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 2: Erosion Would the project result in substantial soil erosion or loss of topsoil?	Adherence to the recommendations presented in the Storm Water Quality Management Plan prepared for the project (see Appendix N) along with the future Storm Water Pollution Prevention Plan and compliance with national and local regulations would ensure that direct and cumulative impacts related to soil erosion in No Annexation Scenario and Annexation Scenario 2b would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Unstable Geologic Units or Soils Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Does the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and the Infiltration Feasibility Condition Letter (see Appendix E-5) would ensure that direct and cumulative impacts related to expansive soils would be less than significant.	No mitigation is required.	N/A
Issue 4: Paleontological or Unique Geologic Features Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Impacts related to unique geology would be less than significant as no unique geology is present. Construction activity could uncover and potentially damage paleontological resources within the Pleistocene Alluvial Floodplain Deposits and the San Diego and/or Mission Valley Formation. Direct impacts would be significant. Individual projects would be required to mitigate for potential project level impacts to paleontological impacts. Cumulative development within the City of Chula Vista would be analyzed for consistency with City of Chula Vista General Plan policies that ensure protection and/or mitigation of paleontological resources. Therefore, cumulative impacts to paleontology would be less than significant.	To mitigate for direct impacts to paleontological resources, the project would be required to implement mitigation measure **GEO-CV-1 Paleontological Resources** which would require paleontological monitoring during construction.	Implementation of mitigation measure **GEO-CV-1** would ensure that a qualified paleontologist is onsite during grading and excavation to monitor- construction activity and inspect cuts for fossils and paleontological resources that may be uncovered. The mitigation measure requires steps to be taken should resources be discovered to collect, curate and/or preserve found resources. Through implementation of mitigation measure **GEO-CV-1**, significant direct impacts to paleontological resources would be reduced to less than significant levels.
Greenhouse Gas Emissions			
Issue 1: Greenhouse Gas (GHG) Emissions Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	GHG emissions analysis, by its nature, is a cumulative impact analysis. The project's total annual unmitigated GHG emissions would be approximately 2,676 metric tons of carbon dioxide equivalent per year. This emission level would not exceed the 3,000 metric tons of carbon dioxide equivalent. Residential/Commercial Screening Level. As project emissions would be less than the applicable screening level, the project would not generate GHG emissions that would have a direct or cumulative significant impact on the environment and GHG emissions impacts under the No Annexation scenario and Annexation Scenario 2b would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Conflicts with the CAP or other Plans or Policies Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	The project would be consistent with the measures and policy goals of the City of Chula Vista General Plan, San Diego Forward, and the 2008 and 2017 Scoping Plans. However, the project would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan Update for Achieving Carbon Neutrality. The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, therefore GHG impacts under the No Annexation Scenario and Annexation Scenario 2b would be significant. The project's significant impact combined with impacts resulting from projects similarly unable to meet Scoping Plan strategies would add to a cumulative GHG impact. The project would incrementally contribute to the existing significant cumulative GHG impact despite implementation of all feasible mitigation measures. Therefore, cumulative impacts related to GHG emissions would be significant.	The project would implement mitigation measures **GHG-CV-1** through **GHG-CV-6**.	Implementation of the project design features and mitigation measures would reduce the project's cumulative GHG emission impact. However, because the project would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan Update for Achieving Carbon Neutrality detailed in Table 4.5-10, it would not be consistent with the statewide GHG reduction goals required by Assembly Bill 1279, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation.
Health and Safety/Hazardous Materials			
Issue 1, 2, 3, and 4: Hazardous Materials Transport, Use and Disposal; Accidental Release; Emissions Near a School; Hazardous Materials Site Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? 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?	<u>Routine Use, Transport, and Disposal</u> The project would adhere to federal, state, and local regulations during construction activities, as well as General Plan policies focused on handling hazardous which would ensure that direct impacts relating to the transport, storage and disposal of hazardous materials would be less than significant. <u>Accidental Release</u> *Construction Activities* Accidental release associated with standard construction activities would be less than significant based on the typical particulate matter emissions associated with construction activities, the distance of construction activities to sensitive receptors and the short during of project construction. Grading within contaminated soils including on-site areas with pesticides and total petroleum hydrocarbon (TPH) occurring on-site and within the off-site remedial grading area could result in an accidental release of hazardous materials. However, as assessed by the County of San Diego Department of Environmental Health and Quality the levels of these contaminants are below regulatory thresholds for residential land uses which would be a less than significant impact. Although no burn ash was identified within the Nakano site or within areas of the Davies property proposed for remedial grading, the potential for burn ash to be released during grading would be a direct significant impact.	<u>Routine Use, Transport, and Disposal</u> No mitigation is required. <u>Accidental Release</u> To mitigate impacts related to the potential for burn ash to be encountered during site grading, **HAZ-CV-1 Community Health and Safety Plan** shall be implemented by the City of Chula Vista for grading within the City of Chula Vista. For any grading within the off-site improvement areas within the City of San Diego, implementation of **HAZ-SD-1** by the City of San Diego would be required. <u>Emissions near a School</u> No mitigation is required. <u>Hazardous Materials Site</u> Impacts related to potential burn ash being encountered during project construction activities would be mitigated through implementation of **HAZ-CV-1.**	Implementation of mitigation measure **HAZ-CV-1** requiring preparation of a Community Health and Safety Plan under the oversight of the County Local Enforcement Agency would ensure adverse impacts related to potential accidental release of burn ash during grading for the areas currently within the City of Chula Vista would be reduced to less than significant. Implementation of mitigation measure **HAZ-SD-1** requiring preparation of a Community Health and Safety Plan under the oversight of the City Local Enforcement Agency would ensure adverse impacts related potential accidental release of burn ash during grading of the off-site areas within the City of San Diego would be reduced to less than significant. Implementation of these mitigation measures would reduce direct impacts related to hazardous materials sites to less than significant.

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	Operational Activities Hazardous materials associated with residential projects would be limited to those used in landscaping, and household cleaning products, the accidental release of which would not trigger a significant health risk. Direct impacts related to project operational emissions would be less than significant. The adjacent freeway diesel particulate matter levels in addition to potential windblown burn ash coming from the adjacent Davies property would not pose a health risk to residents based on the results of the health risk assessments; however, this information was prepared for informational purposes only and does not contribute to the significance determination. <u>Emissions near a School</u> The project is not within a quarter-mile of an existing school and direct impacts associated with emission near a school would be less than significant. <u>Hazardous Materials Site</u> *Nakano Property Cleanup Program Site* The project site is listed in hazardous materials databases due to the County's Department of Environmental Health and Quality Voluntary Assistance Program application to initiate cleanup of contaminated soils prior to site development. As detailed in Section 4.6.3.1.b, Accidental Release, grading within contaminated soils including on-site areas with pesticides and TPH occurring on-site and within the off-site remedial grading area could result in an accidental release of hazardous materials. However, it was determined that these levels were below regulatory thresholds for residential uses, which would be a less than significant impact. While no burn ash has been identified on the Nakano site or off-site remedial grading areas, there is a potential risk that site grading could release burn ash which could result in a release of hazardous materials into the environment. This is a significant direct impact. No RECs or hazardous materials sites were identified within the off-site improvement areas within the City of San Diego; therefore, direct impacts related to hazardous materials sites within the off-site improvement area in the City of San Diego would be less than significant.		

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	Shinohara II Burn Site The Shinohara II burn site is listed in regulatory databases due to its history as a burn site; however, the site has been subject to remediation through site capping in order to contain contaminants. Due to the site remediation and capping, impacts related to the capped Shinohara II burn site would be less than significant. *Kaiser Foundation Health Plan, Inc.* Impacts related to the closed Kaiser Foundation Health Plan, Inc. site would be less than significant. Through implementation of the mitigation measures, the project would reduce potentially significant impacts to less than significant levels and ensure the project's incremental contribution to a cumulative release of hazardous materials would be less than significant.		
Issue 5: Airport Safety Hazard For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	The project is outside of Brown Field safety compatibility areas; therefore, would not result in an airport safety hazard to future residents. Therefore, the project's incremental contribution to a cumulative impact would be less than significant.	No mitigation is required	N/A
Issue 6: Emergency Plans Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	Through the project's incorporation of adequate primary and secondary emergency access roadways and implementation of the project's Evacuation Plan, the project would not impair or interfere with an existing emergency response or evacuation plan. The project would not result in inadequate emergency access and would be in compliance with the applicable agency fire code requirements for emergency ingress and egress. Therefore, the project would not contribute to cumulative impacts related to implementation of or interfere with an adopted emergency response plan or emergency evacuation plan.	No mitigation is required.	N/A
Issue 7: Wildland Fires Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	The project is designed to protect against wildland fires. The project has been designed to include fire protection features consistent with City of Chula Vista Fire Code, Chapter 7a Fire Code requirements, in addition to safety features that exceed code requirements detailed in Chapter 3.0, Project Description, Section 3.6.2. Incorporation of all project design features including construction materials, site access and fire apparatus support, fuel modification zones, and water systems would ensure direct impacts associated with wildfire hazards would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	All cumulative projects would be required to meet minimum fire fuel modification and/or clearing requirements applicable to their location and would be reviewed by fire district having jurisdiction to ensure adherence to all relevant fire safety standards. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.		
Historical Resources			
Issue 1: Prehistoric/Historic Resources Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Based on the results of the record search and surveys of the project site, implementation of the project would not result in impacts to built environment historical resources, as the on-site foundations did not meet the criteria for eligibility for the National Register of Historic Places or the California Register of Historic Resources. Direct impacts to potentially buried archaeological resources associated with grading within the project site and off-site improvement areas within the City of San Diego including the primary access road and trenching within Dennery Road could occur. A potentially significant impact to unknown prehistoric/archaeological resources could result during ground disturbance. Therefore, direct impacts to historical resources would be significant. The project's incremental contribution to cumulative impacts to historic resources would be less than significant. The project's incremental contribution to cumulative archaeological resources impacts would be less than significant.	The project would implement mitigation measure **HIST-CV-1 Archaeological Monitoring**.	The incorporation of archaeological and Native American monitoring during grading would ensure adverse impacts to unknown potentially significant buried prehistoric resources would be reduced to less than significant. The presence of an archaeological and Native American monitor during ground disturbing activities would allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated. If significant resources are recovered, implementation of a Research Design and Data Recovery Program would ensure significant resources are treated properly to reduce significant direct impacts to less than significant.
Issue 2: Human Remains Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?	Although it is not expected that human remains would be located on the project site, there is a potential for buried human remains to be disturbed by grading and construction activities. Therefore, direct impacts associated with human remains would be potentially significant. The project, in addition to all cumulative projects, would be required to implement mitigation measures to ensure cumulative impacts related to human remains would be less than significant.	The project would implement mitigation measure **HIST-CV-2** Discovery of Human Remains.	The project would implement mitigation measure **HIST-CV-2** which would ensure all applicable provisions of Public Resources Code Section 5097.98, CEQA Section 15064.5, and Health and Safety Code Section 7050.5 are implemented during earth-disturbing activities. Implementation of the mitigation measure as outlined above would reduce potential direct impacts related to human remains to less than significant.
Issue 3: Religious/Sacred Uses The City of Chula Vista does not have a specific threshold related to religious/sacred uses; therefore, this issue is not discussed further for the No Annexation Scenario. Refer to Section 4.10 of the DEIR for discussion of tribal cultural resources.	N/A	N/A	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Noise			
Issue 1: Ambient Noise Levels Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of Chula Vista's noise level limits. Temporary construction noise would be less than significant. The project would not result in a direct or cumulative noise increase of more than 3 decibels. Therefore, the project would result in less than significant direct and cumulative impacts related to traffic noise. Property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits. Direct and cumulative noise impacts due to on-site noise sources would be less than significant.	No mitigation is required.	N/A
Issue 2: Groundborne Vibration Would the project generate excessive groundborne vibration or groundborne noise levels?	Construction-related groundborne vibration levels are not anticipated to exceed the annoyance threshold of 0.1 inch per second (ips) peak particle (PPV) velocity or the building damage thresholds of 0.3 to 0.5 ips PPV at the nearest structure. Once operational, the project would not be a source of groundborne vibration. Direct construction and operational groundborne vibration impacts would be less than significant. There are no adjacent sites that could be developed concurrent with the project that could create a cumulative construction noise impact. Therefore, the project's incremental contribution to cumulative construction noise impacts would be less than significant.	No mitigation is required.	N/A
Issue 3: Airport Noise For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	The project site is located outside of the 55 community noise equivalent level future aviation noise contour. Direct and cumulative impacts from aviation overflight noise exposure would be considered less than significant.	No mitigation is required.	N/A
Transportation			
Issue 1: Transportation System Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	The project would be consistent with relevant mobility plans and policies. Direct impacts would be less than significant. The project along with all cumulative projects would undergo a consistency analysis with applicable transportation system plans and policies to ensure cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Vehicle Miles Traveled Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?	Even with the application of project design features for transportation and GHG emissions, in addition to GHG mitigation measures, project vehicle miles travelled (VMT) impacts would not be reduced below the 85th percentile mean VMT per capita. Direct impacts would be significant. At the project level, the project would be unable to reduce VMT impacts to a less than significant level. Therefore, the project's contribution to traffic/VMT in the surrounding area, combined with that of the projects in the cumulative study area, would be cumulatively significant.	Mitigation measures for GHG emissions detailed in Chapter 4.5 (Sections 4.5.3.2.d and 4.5.4.1.d) would support VMT reductions (see **GHG-CV-1/GHG-SD-1**), implementing a commute trip reduction program (**GHG-CV-2/GHG-SD-2**), and providing bicycles to residents (**GHG-CV-3/GHG-SD-3**). Other feasible mitigation measures were explored including application of the City of San Diego's Mobility Choices Ordinance (see Section 4.9.2.4.e). Considering the project trips would be distributed to City of San Diego roadways, payment of the City of San Diego Active Transportation In Lieu Fee would be a feasible method of further reducing impacts. The project would implement **TRA-CV-1**.	Even with implementation of project design features, GHG mitigation measures and **TRA-CV-1**, direct and cumulative impacts related to VMT would be significant. Implementation of **TRA-CV-1** would be used to fund VMT reducing infrastructure projects throughout the City of San Diego. Although impacts would remain significant after implementation of mitigation, this conclusion would be consistent with the Findings and Statement of Overriding Considerations that were adopted with the Complete Communities: Housing Solutions and Mobility Choices Program EIR, which evaluated implementation of the City of San Diego's fee program for VMT impacts. Although the project site is not currently located within the City of San Diego, participation in the City of San Diego fee program would ensure all feasible mitigation is applied supporting implementation of appropriate City of San Diego improvements that are intended to facilitate VMT reductions.
Issue 3: Hazards due to a Design Feature Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	The project does not include any design elements that would increase road hazards. Impacts would be less than significant. The project would not result in hazards due to design features. Similarly, all cumulative projects would undergo transportation review to ensure compliance with roadway design standards to ensure cumulative impacts related to this issue would be less than significant.	No mitigation is required.	N/A
Issue 4: Emergency Access Would the project result in inadequate emergency access?	The project includes emergency access that would meet all City of Chula Vista and City of San Diego road standards and would be consistent with the requirements of the Fire Protection and Evacuation Plans (see Appendices I and J, respectively). Therefore, the project would not result in inadequate emergency access. Impacts would be less than significant. Project compliance with the applicable agency fire code requirements for emergency ingress and egress would ensure cumulative impacts related to emergency access would be avoided. Therefore, the project would not contribute to cumulative impacts related to policy consistency, hazardous design features, or emergency access.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Tribal Cultural Resources			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	The area is considered sensitive for potential tribal cultural resources (buried cultural resources and/or subsurface deposits). Therefore, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Impacts would be considered significant. Cumulative projects would be reviewed for potential tribal cultural resources through tribal consultation as required in per AB 52 and SB 18, and project-level review. Where applicable, Native American monitoring would be required during grading to mitigate potentially significant direct impacts to tribal cultural resources. Therefore, the project's incremental contribution to cumulative impacts to tribal cultural resources would be less than significant.	Implementation of mitigation measure **HIST-CV-1** within the project site and remedial grading area within the City of Chula Vista, requires Native American monitoring during ground disturbance activities consistent with the results of tribal consultation.	The project would implement mitigation measure **HIST-CV-1**, which would require Native American monitoring during ground disturbance. Implementation of the mitigation measure **HIST-CV-1** would ensure appropriate treatment in the event of discovery of tribal cultural resources, reducing potential direct impacts related to tribal cultural resources to less than significant.
Aesthetics			
Issue 1: Scenic Vistas/Scenic Views Would the project have a substantial adverse effect on a scenic vista?	The project site is not located within any designated scenic roadway or vista; however, it is located within the viewshed of the Otay River Valley. Due to intervening topography and existing landscaping along Interstate 805, the project would not alter views of the Otay River Valley from motorists along Interstate 805 or Dennery Road. Therefore, direct visual impacts associated with the project's effect on a scenic vista would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project. Therefore, cumulative visual impacts would be less than significant.	No mitigation is required.	N/A
Issue 2: Scenic Resources Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	The project site is not located within any designated scenic roadway or vista; however, it is located within the viewshed of the Otay River, which is considered a scenic resource. The project would not alter visibility of, or any physical aspect related to, the Otay River. Development regulations relating to height and bulk would ensure the project would not alter views toward the Otay River and would not detract from the scenic resource of the Otay River Valley. Therefore, direct impacts to scenic resources resulting from site development would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	Impacts to scenic resources within the off-site areas within the City of San Diego would be less than significant in the context of the City of San Diego's Significance Determination Thresholds. No distinctive or landmark trees would be removed within the off-site improvement areas in the City of San Diego and adverse direct impacts related to landform alteration in the off-site improvement areas would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project and there would be less than significant cumulative impacts.		
Issue 3: Visual Character In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point).	The project would not degrade the existing visual quality of the area, including views of the Otay River and Otay Valley Regional Park. Additionally, through compliance with the Specific Plan development regulations, landscape and grading plans, and architectural design guidelines, the project would fit the pattern and character of the surrounding land uses. Direct impacts relating to visual character would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project and there would be less than significant cumulative impacts.	No mitigation is required.	N/A
Issue 4: Light or Glare Would the project cause a substantial light or glare which would adversely affect daytime or nighttime views in the area?	The project would include outdoor lighting typical of residential developments that would be shielded downward. No substantial light sources are proposed that could adversely affect day or nighttime views. Direct impacts from lighting and glare would be less than significant. All cumulative projects would also be required to comply with jurisdictional development standards pursuant to the applicable agency's municipal code. Through compliance regulations applicable for all cumulative projects, cumulative light and glare impacts would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Hydrology and Water Quality			
Issue 1: Water Quality Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<u>Temporary Construction Activities</u> The project would implement project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water quality standards including the National Pollutant Discharge Elimination System (NPDES) permit and, Construction General Permit, and City of San Diego General Plan policies, plans and standards; however, due to the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a significant direct impact to water quality. <u>Long Term Operations</u> The project would implement project-specific site design, source control, treatment control BMPs consistent with all relevant federal, regional, and local water quality standards including the NPDES permit and Construction General Permit and City of Chula Vista and City of San Diego General Plan policies, San Diego Municipal Code (SDMC), Chula Vista Stormwater Ordinance, Drainage Design Manual and Stormwater Standards Manual. Water quality impacts associated with post construction operation of the project would be less than significant. Through implementation of the mitigation measure, under all scenarios, the project would reduce potentially significant direct impacts to less than significant levels and ensure the project's incremental contribution to a cumulative impact on water quality would be less than significant.	To mitigate impacts associated with water quality impacts associated with the accidental release of burn ash under the No Annexation Scenario and Annexation Scenario 2b, implementation of mitigation measure **HAZ-CV-1**, as detailed in Section 4.6.3.1.d, would be required by the City of Chula Vista for those portions of the project site within Chula Vista. To mitigate impacts associated with water quality impacts associated with grading within the off-site improvement areas within the City of San Diego, implementation of **HAZ-SD-1** by the City of San Diego would be required.	Additionally, implementation of mitigation measure **HAZ-CV-1** requiring preparation and approval of a Community Safety Plan prior to ground disturbing activities within the City of Chula Vista would ensure potential release relating to burn ash would be less than significant. Implementation of **HAZ-SD-1** requiring preparation and approval of a Community Safety Plan prior to ground disturbing activities within the off-site improvement areas within the City of San Diego would ensure potential release relating to burn ash would be less than significant.
Issue 2: Groundwater Would the project substantially decrease ground water supplies or interfere substantially with ground water supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	The San Diego Basin Plan designates beneficial uses for all surface and groundwaters in the San Diego Region. Groundwater recharge is not identified as a beneficial use for waters within the Otay Hydrologic Unit. Construction activities would not extend below the groundwater table, and no impacts to groundwater quality would result due to treatment of runoff in stormwater BMPs. Additionally, the project would connect to public water system and not utilize groundwater. Therefore, direct and cumulative impacts to groundwater would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Drainage Patterns Would the project substantially alter the existing drainage pattern of the site or area; including through the alteration of the course of a stream or river, in a manner, which would: o Result in substantial erosion or siltation on – or off-site. o Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on – or off-site. o Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. o Impede or redirect flood flows.	Project construction and operation would not substantially alter existing drainage patterns resulting in erosion or siltation, increased rates of runoff, exceed storm water capacity, or impedance of flood flows. The project includes construction, site design, source control, and structural pollutant control measures, including two biofiltration basins and a modular wetland unit in combination with a detention vault. Storm water runoff flows would be slowed, treated, and released to the Otay River. The project's Storm Water Quality Management Plan has demonstrated compliance with all federal, regional, and local regulations to ensure that the project complies with the Municipal Separate Storm Sewer System Permit and provides adequate drainage facilities to support the project. Direct and cumulative impacts related to drainage patterns would be less than significant.	No mitigation is required.	N/A
Issue 4: Release of Pollutants due to Flood Hazard, Tsunami, or Seiche Zone In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	The project site is outside of the Federal Emergency Management Agency (FEMA) 100-year floodplain but is located within a dam inundation zone. While in proximity to potential inundation risk from failure of the Upper and Lower Otay Dam, through state-mandated routine inspections, the risk of dam failure is low. Further, the residential project would not introduce any significant source of pollutants on-site that would be released in the event of inundation; therefore, direct and cumulative impacts associated with the release of pollutants as a result of inundation would be less than significant.	No mitigation is required.	N/A
Issue 5: Conflict with Water Quality Plans Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	The project would be consistent with all relevant water quality control plans. Direct and cumulative impacts related to conflicts or obstruction with such plans would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Public Services and Facilities			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: • Fire protection? • Police protection? • Schools? • Parks? • Other public facilities?	No physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed. All physical impacts associated with on-site parks are addressed throughout this EIR. Therefore, the project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries and direct impacts would be less than significant. No physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed, not required as a result of project implementation. Therefore, the project's incremental contribution to cumulative impacts related to public services and facility construction would be less than significant.	No mitigation is required.	N/A
Utilities and Sewer Systems			
Issue 1: Need for construction or expansion of facilities Would the project require or result in the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	The project would require the construction of water pipeline connections on and off-site with Dennery Road to serve the project. The off-site pipeline connections would be placed adjacent to existing pipes within Dennery Road. The grading and trenching effort associated with installation of off-site utility connections in Dennery Road have been evaluated throughout Chapter 4.0 of the EIR, where applicable. No additional expansion of facilities for water, wastewater treatment, storm water/drainage, electric power, natural gas, or telecommunications would occur. Direct impacts would be less than significant. As physical impacts related to the provision of utilities and service systems would be localized and would be addressed on a project-by-project basis, these impacts would not combine to result in a cumulative impact. Therefore, cumulative impacts related to the physical impacts associated with installation of utilities and services would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Sufficient Water Supply Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	Water would be provided by City of San Diego facilities; therefore, demand is evaluated against City of San Diego water supply projections. Although the project would result in water demand not accounted for in the City of San Diego's 2020 UWMP, the City of San Diego has indicated availability to serve the project (see Appendix R). The project's water demand equates to a fraction of the overall water demand anticipated in the City of San Diego service area and would be accommodated in the City's overall anticipated growth over the five-year planning horizon since the water demand is not site specific. The project would not conflict with the City of San Diego's future water demand projections or per capita water use targets. Direct impacts relating to water supply would be less than significant. The project combined with cumulative projects is not anticipated to result in a cumulative impact on water supply. Therefore, the project's incremental contribution to cumulative impacts related to water supply would be less than significant.	No mitigation is required.	N/A
Issue 3: Wastewater Treatment Capacity Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve project's projected demand in addition to the provider's existing commitments?	Sewer would be provided by City of San Diego facilities; therefore, demand is evaluated against City of San Diego water supply projections. There is adequate sewer facility capacity in the City of San Diego Otay Valley Trunk Sewer to serve the project. Direct impacts would be less than significant. The project's incremental contribution to cumulative impacts related to new or improved wastewater facilities would not be cumulatively considerable and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 4: Solid Waste Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Would the project Comply with federal, state, and local management and reduction statutes and regulation related to solid waste.	The implementation of a WMP, and the inclusion of adequate waste, organics, and recycling storage in garages, would ensure that the overall waste produced by the project would be reduced sufficiently to comply with State waste reduction targets and City of Chula Vista General Plan waste reduction and recycling goals. Direct impacts to solid waste would be less than significant. Through the application of design features, and regulatory compliance including recycling, the project's incremental contribution to cumulative impacts related to solid waste would not be cumulatively considerable and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Wildfire			
Issue 1: Emergency Plans Would the proposed project substantially impair an adopted emergency response plan or emergency plan?	Implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-1 Summary of Environmental Analysis Results – No Annexation Scenario and Annexation Scenario 2b			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Pollutants from Wildfire Due to slope, prevailing winds, and other factors, would the proposed project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	With the proposed fuel management and fire protection features incorporated into the project design, the project would not exacerbate wildfire risks; therefore, direct impacts related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant. All cumulative projects located within both the City of San Diego and the City of Chula Vista would be required to meet minimum fire fuel modification and/or clearing requirements applicable to their location and would be reviewed by fire district having jurisdiction to ensure adherence to all relevant fire safety standards. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.	No mitigation is required.	N/A
Issue 3: Infrastructure Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	The project would not exacerbate wildfire as a result of infrastructure improvements. Direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 4: Flooding or Landslides Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	The project would not change drainage patterns nor leave soils exposed in a manner that would result in post-fire flooding or slope instability. Direct impacts would be less than significant. All cumulative projects would be required to adhere to all fire regulations and district requirements. Therefore, cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Land Use and Planning			
Issue 1: Physically Divide an Established Community Would the proposal physically divide an established community?	The project would not physically divide an established community as no major expansion of roadways or infrastructure is needed to serve the project. Therefore, the project would not physically divide an established community and direct impacts would be less than significant. Each of the cumulative projects would include development within infill sites or vacant lands that would contribute to the build-out of existing communities or result in new planned communities. As a result, a cumulative impact related to physical division of a community would be less than significant.	No mitigation is required.	N/A
Issue 2: Land Use Plan Consistency Would the project result in a conflict with the environmental goals, objectives, and recommendations of the community plan in which it is located? Would the project result in land uses which are not compatible with an adopted airport Comprehensive Land Use Plan (CLUP)?	Under Annexation Scenario 2a, the City of San Diego would require implementation of project design feature PDF-NOS-SD-1 to ensure consistency with the City of San Diego Noise Element. No conflicts or inconsistencies have been identified with any City of San Diego General Plan Land Use Element, Otay Mesa Community Plan, or Local Agency Formation Commission land use plans or policies. Additionally, no conflicts or inconsistencies would occur related to the OVRP Concept Plan or the Brown Field Airport Land Use Compatibility Plan (ALUCP). However, as discussed in Section 4.1.4.2.b, the project would conflict with goals, objectives and policies contained within the City of San Diego General Plan Housing Element that requires housing to be consistent with the City of San Diego's CAP. Additionally, as detailed in Section 4.5, although the project would include PDF-GHG-1 through PDF-GHG-9, and would implement mitigation measures **GHG-SD-1** through **GHG-SD-6**, the project would remain inconsistent with the Housing Element and CAP resulting in environmental impacts that would not be reduced to below a level of significance. Therefore, direct impacts related to consistency with the CAP and CAP related Housing Element goals would be considered significant. It is noted that while all project's within the cumulative project area would similarly be required to comply with the City's CAP consistency regulations and implement requirements related to housing, cumulative land use policy consistency related to GHG would be cumulatively significant.	The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6**, in addition to project design features (PDF-GHG-1 through PDF-GHG-9).	While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the City of San Diego CAP. As a result, the project would not be consistent with City of San Diego General Plan Housing Element Goal 5. No additional mitigation measures are available to further reduce the significance of this impact; the direct and cumulative impacts associated with land use plan consistency would remain significant and unavoidable.

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Consistency with Multiple Species Conservation Program Subarea Plan Would the project conflict with the provisions of the City of San Diego's Multiple Species Conservation Program Subarea Plan or other approved local, regional or state habitat conservation plan?	A Subarea Plan amendment would be processed after annexation to include the project site as part of the City of San Diego MSCP Subarea Plan area. As the conditions of coverage for covered species is consistent between both the City of Chula Vista and City of San Diego plans, and neither plan designates the project site or adjacent area as conservation or preserve land, there would be no conflict with the City of San Diego MSCP Subarea Plan. Therefore, the project site would be equally protected under both Subarea Plans and the transfer of the project site from the City of Chula Vista MSCP Subarea Plan to the City of San Diego MSCP Subarea Plan would be consistent with the conservation goals of the MSCP Subregional Plan. In addition, the project would not impact any City of San Diego MHPA. Direct impacts would be less than significant. The project, like other cumulative projects demonstrates consistency with the Multiple Species Conservation Program Subarea Plans, including cumulative projects in the City of Chula Vista and City of San Diego. Cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 4: Deviation or Variance Would the project require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?	The requested SDMC deviations would not result in an adverse effect to any environmental issue or sensitive resource, and they would not result in a physical impact on the environment. Direct impacts would be less than significant. The requested deviations would not result in an adverse effect to any environmental issue or sensitive resource, and they would not result in a physical impact on the environment. As the project, under the Annexation Scenario 2a would not result in significant direct impacts associated with the proposed deviations, the project would not contribute to a cumulative impact for this issue.	No mitigation is required.	N/A
Air Quality			
Issue 1: Air Quality Plan Implementation Would the project conflict with or obstruct implementation of the applicable air quality plan?	Regional air quality plans is inherently a cumulative analysis. The project would not result in impacts to air quality plan implementation based on the significance thresholds identified in Chapter 4.2 Air Quality. The project would not stimulate population growth or a population concentration or housing above what is assumed in local and regional land use plans, or projections made by regional planning authorities. Additionally, the project would not exceed the construction and operational screening thresholds established by the City of San Diego. Therefore, the project would not conflict with or obstruct implementation of the RAQS, and direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Air Quality Standards Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?	Construction and operational emissions would be less than the applicable City of San Diego significance thresholds for all criteria pollutants. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and direct impacts would be less than significant. The project would not contribute to existing air quality violations or result in regional emissions than would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards or result in a cumulatively considerable net increase in criteria pollutants.	No mitigation is required.	N/A
Issue 3: Sensitive Receptors Would the project expose sensitive receptors to substantial pollutant concentrations?	The project would not expose nearby sensitive receptors to substantial DPM concentrations during construction or operation. The project would not negatively affect the level of service of intersections on or in proximity to the project site and therefore would not result in a CO hotspot. Although it was not a factor assessed as part of the significance of impacts, an HRA (Appendix C) consistent with the City of San Diego General Plan Policy LU-I.14, was prepared for the project. The project would not exacerbate environmental hazards caused by vehicle traveling on the I-805 freeway. Therefore, this HRA was prepared for informational purposes only and does not contribute to the significance determination. Direct and cumulative impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.	No mitigation is required.	N/A
Issue 4: Odor and Other Emissions Would the project result in the creation of objectionable odors affecting a substantial number of people?	Based on the significance threshold identified above, exposure to odors associated with project construction would be short term and temporary in nature. Residential projects are not generally associated with adverse odor. Therefore, direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 5: Air Movement Would the project result in substantial alteration of air movement in the area of the project?	Structures would be placed within an undeveloped site that is set at a lower elevation than the residential uses to the east of I-805. Due to the fact that the project would not result in structures greater than 30 feet in height and the orientation of the buildings in relation to the surrounding area, no changes to air movement are anticipated. No substantial alteration of air movement would occur. Direct and cumulative impacts relating to substantial alternations of air movement would be less than significant.	No mitigation is required.	N/A
Biological Resources			
Issues 1 and 2: Sensitive Species and Habitats Would the project result in a substantial adverse impact, either directly or through	<u>Sensitive Vegetation Communities and Land Cover Types</u> Annexation Scenario 2a would result in direct impacts to 17.25 acres of sensitive upland vegetation communities within the project site and off-site improvement areas. Impacts include 3.60 acres of Tier II	<u>Sensitive Vegetation Communities and Land Cover Types</u> Impacts to a total of 17.25 acres of sensitive upland vegetation communities under Annexation Scenario 2a would be mitigated by implementation of **BIO-SD-1**,	Implementation of mitigation measures discussed in Section 4.3.2.2.d would ensure that all significant direct and cumulative impacts related to sensitive species and habitats under

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
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? Would the project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	vegetation communities (Diegan coastal sage scrub) and 13.65 acres of Tier IIIB vegetation communities (non-native grasslands). Direct impacts would be significant. <u>Special Status Plants</u> Direct impacts to 14 Otay tarplant individuals within the City of San Diego off-site improvement area would be significant. Indirect impacts to special-status plant species including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss would be significant. <u>Special Status Wildlife Species</u> Impacts to Coopers hawk, western bluebird, orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, and western mastiff bat would be considered less than significant under Annexation Scenario 2a. Removal of 0.28 acre of foraging and nesting habitat would result in a significant direct impact to least Bell's vireo. Significant indirect impacts to least bell's vireo may occur due to noise generation if construction activities are conducted during this species' breeding season of March 15 to September 15. Removal of 3.60 acres of foraging and nesting habitat outside the MHPA would result in significant direct impacts to coastal California gnatcatcher. Indirect impacts to coastal California gnatcatcher would be less than significant since the indirectly impacted habitat is outside of the MHPA and any 75% or 100% Conservation Areas. Due to project impacts to habitat with moderate potential for burrowing owl foraging, direct and indirect impacts to burrowing owl would be significant. Direct impacts to yellow warbler and yellow-breasted chat nesting habitats would be significant within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista due to their potential to nest within the southern willow scrub and mule fat scrub habitats. Direct impacts to foraging Crotch's bumble bee during construction would be significant within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista due to their	consistent with City of San Diego biology guidelines, detailed in Table 4.3-5. To mitigate for indirect impacts to sensitive habitat, mitigation measure **BIO-SD-2** would be implemented by the City of San Diego. <u>Special Status Plants</u> Impacts to 14 individuals of Otay tarplant located in the City of San Diego off-site improvement areas would be mitigated at a 4:1 mitigation ratio as detailed in **BIO-SD-3**. Indirect impacts to special-status plant species including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss would be mitigated through implementation of mitigation measures **BIO-SD-2**, Biological Resource Protection During Construction. <u>Special Status Wildlife Species</u> *Least Bell's Vireo* Direct impacts to least Bell's vireo habitat would be mitigated through wetland habitat mitigation measures described in **BIO-SD-7**. To mitigate for indirect impacts to least Bell's vireo under Annexation Scenario 2a, mitigation measures **BIO-SD-4**, Avian Protection Requirements and **BIO-SD-5**, Direct Impact Avoidance and Noise restrictions for Least Bell's Vireo, would be implemented by the City of San Diego. *Coastal California Gnatcatcher* Direct impacts to coastal California gnatcatcher would be mitigated through upland habitat mitigation measures described in **BIO-SD-1** and implementation of Avian Protection Requirements detailed in **BIO-SD-4**. *Burrowing Owl* Impacts to burrowing owl foraging habitat would be reduced to less than significant through implementation of habitat-based mitigation identified in **BIO-SD-1**. Potential direct and indirect impacts to burrowing owl during	Annexation Scenario 2a would be reduced to less than significant levels.

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	moderate potential to forage within the project impact area. Impacts to Crotch's bumble bee nesting habitat would be less than significant, as habitat on the site has no to low potential for nesting Crotch's bumble bee. Due to their moderate potential to forage within the project impact areas direct impacts to foraging Crotch's bumble bee during construction would be significant. Direct impacts to Crotch's bumble bee foraging habitat would be significant. The project's direct impacts to biological resources combined with those associated with cumulative projects would result in a cumulatively significant impact to these biological resources.	construction would be mitigated through implementation of mitigation measures **BIO-SD-4**, Avian Protection Requirements and **BIO-SD-6**, Burrowing Owl Preconstruction Survey and Avoidance in the City of San Diego. *Yellow-Breasted Chat and Yellow Warbler* Impacts to yellow warbler and yellow-breasted chat nesting habitat would be mitigated through implementation of habitat-based mitigation detailed in **BIO-SD-1**. Potential impacts associated with construction activities occurring during the breeding and nesting season for this species would be mitigated through implementation of **BIO-SD-4**, Avian Protection Requirements. *Crotch's Bumble Bee* Direct impact avoidance for Crotch's bumble bee shall be implemented to avoid potential impacts to Crotch's bumble bee during construction should this species be a state candidate for listing or state listed as threatened or endangered at the time of project construction as detailed in **BIO-SD-1** (habitat-based mitigation for foraging habitat). Direct impacts to Crotch's bumble bee foraging individuals would be mitigation through implementation of preconstruction surveys and consultation as detailed in **BIO-SD-7.**	
Issue 3: Wetlands Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?	Annexation Scenario 2a would result in direct impacts to jurisdictional resources including direct impacts to a total of 0.40 acre of potential USACE/RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands as detailed in Table 4.3-6. Direct impacts to wetlands would be considered significant. Indirect impacts to jurisdictional resources during project operation would be avoided through incorporation of a wetland buffer to protect the function and values of the wetland as detailed in Chapter 3.0, Project Description, Section 3.6.2. However, during construction there is a potential for indirect impacts to wetland resources to occur which would be a significant impact. The project and all cumulative projects would be required to comply with applicable agency permit requirements related to wetland impacts, which would ensure no net loss of wetlands regionally.	The project would result in direct impacts to jurisdictional resources including a total of 0.40 acre of potential RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands. Implementation of mitigation measure **BIO-SD-8** providing mitigation ratios at 2:1 for all wetland types for a total mitigation requirement of 0.80 acre of wetland (restoration and creation) as detailed in Table 4.3-7. A Conceptual Wetland Mitigation and Long-term Management Plan has been prepared and is included in Attachment 13 of the Biological Resources Report. Additionally, as detailed in mitigation measure **BIO-SD-9** and **BIO-SD-10**, the remaining lands between the development footprint and the property boundary (15.16 acres) will be placed in a covenant of easement. These lands would not be used towards mitigation and would be protected from future development. Long-term management of the wetlands within the covenant of easement would be	With implementation of **BIO-SD-8**, **BIO-SD-9**, and **BIO-SD-10** direct and cumulative impacts to wetlands would be reduced to less than significant. With implementation of **BIO-SD-2**, indirect impacts to wetlands during construction would be reduced to less than significant.

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
		managed by the Homeowners Association in accordance with the Long-term Management Plan for the On-site Wetlands at the Nakano Project (see Attachment 15 of the Biological Resources Report). Indirect impacts to jurisdictional resources in the City of San Diego would be avoided through compliance with mitigation measure **BIO-SD-2**, Biological Resource Protection During Construction.	
Issue 4: Wildlife Corridors and Nursery Sites Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?	The project would not cause any loss of functionality of the Otay River wildlife corridor; therefore, direct impacts to wildlife corridors would be less than significant. Impacts related to wildlife corridors would be less than significant and would not contribute to a cumulative impact.	No mitigation is required.	N/A
Issues 5 and 6: Conflicts with Local Plans, policies or HCPs/NCCPs Result in a conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region; Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects; Result in a conflict with any local policies or ordinances protecting biological resources; or introduce invasive species of plants into natural open space area.	The project would be consistent with the provisions of the City of San Diego MSCP Subarea Plan and the City of Chula Vista's Habitat Loss and Incidental Take regulations. Thus, direct impacts would be less than significant. Impacts related habitat conservation plans, natural community conservation plan, or other approved local regional or state habitat conservation plan, or any local policies or ordinances would be less than significant and would not contribute to a cumulative impact.	No mitigation is required.	N/A
Geologic and Paleontological Resources			
Issue 1: Geologic Hazards Would the project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and the Infiltration Feasibility Condition Letter (see Appendix E-5) prepared for the project and compliance with applicable SDMC and CBC regulations would ensure that direct impacts related to geologic hazards would be less than significant. Based on required compliance with applicable agency grading ordinance requirements, stormwater standards, and project specific geotechnical conditions, cumulative impacts would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Erosion Result in a substantial increase in wind or water erosion of soils, either on or off the site?	Adherence to BMPs required for NPDES requirements in addition to SDMC requirements for erosion control and slope stabilization under Annexation Scenario 2a would ensure direct and cumulative impacts related to soil erosion would be less than significant.	No mitigation is required.	N/A
Issue 3: Unstable Geologic Units or Soils N/A	The City of San Diego's initial study questions do not address expansive soils or soils capable of supporting septic tanks; however, the analysis provided for the No Annexation Scenario and Annexation Scenario 2b would be the same for Annexation Scenario 2a. Direct and cumulative impacts would be less than significant.	N/A	N/A
Issue 4: Paleontological or Unique Geologic Features Would the project: 1) Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit? 2) Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?	No impacts related to unique geology would occur as no unique geology is present. Compliance with the SDMC and the City of San Diego General Grading Guidelines for Paleontological Resources contained within Appendix P of the Land Development Manual would ensure adverse direct impacts to paleontological resources during construction would be less than significant. Individual project compliance with the SDMC would ensure that project specific significant impacts to paleontological resources would be less than significance. Therefore, cumulative impacts to paleontology would be less than significant.	No mitigation is required.	N/A
Greenhouse Gas Emissions			
Issue 1: Greenhouse Gas Emissions Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	GHG emissions analysis, by its nature, is a cumulative impact analysis Under Annexation Scenario 2a, the project would implement the City of San Diego's CAP Consistency Regulations and proposed project design features. However, because the project would not be consistent with the growth projections used in the development of the CAP, cumulative GHG impacts would be significant.	The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6**, in addition to project design features (PDF-GHG-1 through PDF-GHG-9).	The project would implement **GHG-SD-1** through **GHG-SD-6** to reduce the project's GHG emission impact. The project would also implement the City of San Diego's CAP Consistency Regulations. However, per the City of San Diego's CAP threshold guidance, a project that would generate more emissions than planned for in the City' of San Diego CAP would result in a significant impact with regards to GHG. The site is not currently within the City of San Diego and therefore the associated GHG emissions were not accounted for in the City of San Diego CAP. As such, the project would be required to achieve net zero emissions in order to not increase emissions beyond the level assumed in the CAP. All feasible mitigation has been implemented as further detailed in the Greenhouse Gas Emissions Technical Report (see Appendix G). While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
			zero emissions and therefore would not be consistent with the CAP, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation.
Issue 2: Conflicts with the CAP or other Plans or Policies Would the project conflict with the City of San Diego's Climate Action Plan or an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?	Under Annexation Scenario 2a, the project would implement the City of San Diego's CAP Consistency Regulations. However, because the project would not be consistent with the land use assumptions used in the development of the CAP, it would not be consistent with the CAP and GHG impacts related to GHG reduction plans and policies would be significant. The project's significant impact combined with impacts resulting from projects similarly unable to meet Scoping Plan strategies would add to a cumulative GHG impact. The project would incrementally contribute to the existing significant cumulative GHG impact despite implementation of all feasible mitigation measures. Therefore, cumulative impacts related to GHG emissions would be significant.	The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** described in Section 4.5.3.2.d.	While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the CAP, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation.
Health and Safety/Hazardous Materials			
Issue 1, 2, 3, and 4: Hazardous Materials Transport, Use and Disposal; Accidental Release; Emissions Near a School; Hazardous Materials Site Result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? 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? Expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?	<u>Handling, Storage and Treatment</u> The project would adhere to federal, state, and local regulations during construction and operation activities which would ensure that direct and cumulative impacts relating to the handling, storage and treatment of hazardous materials would be less than significant. <u>Exposure to Toxic Substance</u> Recognized environmental conditions (RECs) were discovered on-site near a pesticide storage area and within the off-site remedial grading area north of the project site. Absent the removal or remediation of the on-site RECs in accordance with regulations, construction activities in the vicinity of the RECs could release hazardous materials into the environment. However, the levels of these contaminants are below regulatory thresholds for residential uses and release would result in a less than significant direct and cumulative impact. <u>Emissions near a School</u> The project would not result in hazardous emissions within a quarter-mile of an existing school; therefore, impacts associated with emission near a school would be less than significant. <u>Hazardous Materials Site</u> Hazardous materials within the project site include burn ash that could extend into the off-site remedial grading area. Grading within	<u>Handling, Storage and Treatment</u> Impacts would be less than significant. No mitigation is required. <u>Exposure to Toxic Substances</u> To mitigate for impacts associated exposure to toxic substances during grading and construction under Annexation Scenario 2a, the City of San Diego would be required to implement mitigation measures **HAZ-SD-1**. <u>Emissions near a School</u> Impacts would be less than significant. No mitigation is required. <u>Hazardous Materials Site</u> Impacts related to potential burn ash being encountered during project construction activities would be mitigated through implementation of **HAZ-SD-2.**	Implementation of mitigation measure **HAZ-SD-1**, requiring preparation and approval of a Community Safety Plan prior to ground disturbance and under the oversight of the City of San Diego Local Enforcement Agency, would ensure potential release relating to burn ash would be less than significant.

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	these areas could result in an accidental release of hazardous materials, resulting in a significant direct impact. Through implementation of the mitigation measures, the project would reduce potentially significant impacts to less than significant levels and ensure the project's incremental contribution to a cumulative release of hazardous materials would be less than significant.		
Issue 5: Airport Safety Hazard Would the project result in a safety hazard for people residing or working in a designated airport influence area? Would the project result in a safety hazard for people residing or working within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted ALUCP?	The project is outside of Brown Field safety compatibility areas; therefore, would not result in an airport safety hazard to future residents. Direct impacts related to airport safety would be less than significant. Therefore, the project's incremental contribution to a cumulative impact would be less than significant.	No mitigation is required.	N/A
Issue 6: Emergency Plans Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	Through the project's incorporation of adequate primary and secondary emergency access roadways and implementation of the project's Evacuation Plan, the project would not impair or interfere with an existing emergency response or evacuation plan. Direct impacts would be less than significant. The project would not result in inadequate emergency access and would be in compliance with the City of San Diego fire code requirements for emergency ingress and egress. Therefore, the project would not contribute to significant cumulative impacts.	No mitigation is required.	N/A
Issue 7: Wildland Fires 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 project is designed to protect against wildland fires. The project has been designed to include fire protection features consistent with the City of San Diego's brush management regulations and the San Diego Fire Rescue Department Fire Code requirements, in addition to safety features that exceed code requirements detailed in Chapter 3.0, Project Description, Section 3.6.2. With incorporation of all project design features, direct impacts would be less than significant. All cumulative projects located within both the City of San Diego and the City of Chula Vista would be required to meet minimum fire fuel modification and/or clearing requirements applicable to their location and would be reviewed by fire district having jurisdiction to ensure adherence to all relevant fire safety standards. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Historical Resources			
Issue 1: Prehistoric/Historic Resources Would the project result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic archaeological site (including an architecturally significant building), structure, or object or site?	Based on the results of the record search and surveys of the project site, implementation of the project would not result in impacts to known historical (built environment) resources. Additionally, impacts to traditional cultural property would be less than significant as none exist on-site. A potentially significant impact to unknown prehistoric/archaeological resources could result during on-site grading and grading within the City of San Diego off-site components including the primary access road and trenching within Dennery Road for installation of a water pipeline. Therefore, direct impacts to historical resources associated with potential discovery of buried archaeological remains would be significant. Implementation of project specific mitigation measures would ensure the project's incremental contribution to cumulative impacts to historic resources would be less than significant.	The project would implement mitigation measure **HIST-SD-1** Archaeological and Native American Monitoring.	The incorporation of archaeological and Native American monitoring (**HIST-SD-1**) during on-site grading and off-site improvements within the City of San Diego for the primary access road and water pipeline installation in Dennery Road would ensure adverse impacts to unknown potentially significant buried prehistoric resources would be reduced to less than significant. The presence of an archaeological and Native American monitor during ground disturbing activities would allow for the identification of buried resources to occur so that work can stop and any resources be evaluated. The measure details appropriate handling and treatment of artifacts and specifies curation requirements and a monitoring report. Implementation of this measure during construction would ensure potential direct impacts to archeological resources reduced to less than significant.
Issue 2: Human Remains Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?	The project would adhere to Public Resources Code Section 5097 relating to the protection of Native American burial sites. Through regulatory compliance direct impacts associated with the discovery of human remain would be less than significant. The project, in addition to all cumulative projects, would be required to comply with regulatory procedures in the unlikely event of the discovery of human remains during project grading. Compliance with these regulations would ensure cumulative impacts related to human remains would be avoided.	No mitigation is required.	N/A
Issue 3: Religious/Sacred Uses Would the project result in any impact to existing religious or sacred uses within the potential impact area?	No religious or sacred uses have been identified within the project area; thus, project direct and cumulative impacts to religious or sacred uses would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Noise			
Issue 1: Ambient Noise Levels Result or create a significant increase in the existing ambient noise levels. Exposure of people to noise levels which exceed the City's adopted noise ordinance or are incompatible with the Noise Element land use noise compatibility guidelines.	Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of San Diego's noise level limits. Temporary construction noise would be less than significant. The project would not result in a direct or cumulative noise increase of more than 3 decibels. Therefore, the project would result in less than significant direct and cumulative impacts related to traffic noise. Property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits. Direct and cumulative noise impacts due to on-site noise sources would be less than significant.	No mitigation is required.	N/A
Issue 2: Groundborne Vibration Would the project generate excessive groundborne vibration or groundborne noise levels?	Construction-related groundborne vibration levels are not anticipated to exceed the annoyance threshold of 0.1 ips PPV or the building damage thresholds of 0.3 to 0.5 ips PPV at the nearest structure. Once operational, the project would not be a source of groundborne vibration. Direct construction and operational groundborne vibration impacts would be less than significant. There are no adjacent sites that could be developed concurrent with the project that could create a cumulative construction noise impact. Therefore, the project's incremental contribution to cumulative construction noise impacts would be less than significant.	No mitigation is required.	N/A
Issue 3: Airport Noise Result in land uses which are not compatible with aircraft noise levels as defined by an adopted airport Comprehensive Land Use Plan.	No conflicts or inconsistencies would occur related to the OVRP Concept Plan or the Brown Field ALUCP. Direct and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Transportation			
Issue 1: Transportation System Would the project conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities?	With the inclusion of both on- and off-site road improvements in addition to proposed pedestrian, bicycle, and trail connections supporting alternative modes of transportation, the project would not conflict with any plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The project along with all cumulative projects would undergo a consistency analysis with applicable transportation system plans and policies and the applicable jurisdiction would ensure project-level policy consistency to avoid a cumulative impact.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Vehicle Miles Traveled Would the project result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual?	Even with the application of California Air Pollution Control Officers (CAPCOA) reduction measure (T-4), GHG related PDFs, and payment of the City of San Diego Active Transportation In Lieu Fee and application of the Mobility Choices Ordinance including the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101. et seq., impacts would be significant. At the project level, the project would be unable to reduce VMT impacts to a less than significant level. Therefore, the project's contribution to VMT in the surrounding area, combined with that of the projects in the cumulative study area, would be cumulatively significant.	The project would implement **TRA-SD-1** requiring payment of the City of San Diego Active Transportation In Lieu Fee as a feasible method of further reducing impacts.	Notwithstanding implementation of **TRA-SD-1**, direct and cumulative VMT Impacts would remain significant and unavoidable. This conclusion would be consistent with the Findings and Statement of Overriding Considerations that were adopted with the Complete Communities: Housing Solutions and Mobility Choices Program EIR, which evaluated implementation of the City of San Diego's fee program for VMT.
Issue 3: Hazards due to a Design Feature Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	The project does not include any design elements that would increase road hazards. Direct and cumulative Impacts would be less than significant.	No mitigation is required.	N/A
Issue 4: Emergency Access Would the project result in inadequate emergency access?	The project includes emergency access that would meet all City of San Diego road standards and would be consistent with the requirements of the projects' Fire Protection and Evacuation Plans (see Appendices I and J, respectively). Therefore, the project would not result in inadequate emergency access. Direct impacts would be less than significant. Project compliance with the applicable agency fire code requirements for emergency ingress and egress would ensure cumulative impacts related to emergency access would be avoided. Therefore, the project would not contribute to cumulative impacts.	No mitigation is required.	N/A
Tribal Cultural Resources			
A substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in	The area is considered sensitive for potential tribal cultural resources (buried cultural resources and/or subsurface deposits). Therefore, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Direct impacts would be considered significant. Cumulative projects would be reviewed for potential tribal cultural resources through tribal consultation as required in per AB 52 and SB 18, and project-level CEQA review. Where applicable, Native American monitoring would be required during grading to mitigate potentially significant direct impacts to tribal cultural resources. Therefore, the project's incremental contribution to cumulative impacts to tribal cultural resources would be less than significant.	Consistent with the requests of the tribes during consultation and to ensure the protection of tribal cultural resources, **HIST-SD-1** would be required to reduce potential impacts to tribal cultural resources. Mitigation measure **HIST-SD-1** requires Native American monitoring during ground disturbance activities.	The project would implement mitigation measure **HIST-SD-1**, which would require Native American monitoring during ground disturbance. Implementation of the mitigation measure **HIST-SD-1** would ensure appropriate treatment in the event of discovery of tribal cultural resources, reducing potential impacts related to tribal cultural resources to less than significant.

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
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?			
Aesthetics			
Issue 1: Scenic Vistas/Scenic Views Would the project result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan?	The project site is not located within any designated scenic roadway or vista; however, it would be visible from a public trail within the OVRP. The project would not result in any adverse change to views of the Otay River for trail users and would not block view of the Otay River from any surrounding viewpoints. Due to intervening topography and existing landscaping along I-805, the project would not alter views of the Otay River from motorists along I-805 or Dennery Road. Therefore, direct impacts associated with the project's effect on a scenic vista would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project and there would be less than significant cumulative impacts.	No mitigation is required.	N/A
Issue 2: Scenic Resources Would the project result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan?	The project would not result in the loss of any distinctive or landmark trees; therefore, no impact related to a loss of any distinctive or landmark tree(s) or stand of mature trees as identified in the Otay Mesa Community Plan would occur. The project would not result in grading within steep slopes in excess of the allowances in the City of San Diego's Environmentally Sensitive Lands regulations. However, site grading would require manufactured slopes in excess of 10 feet. Proposed manufactured slopes are designed to follow existing landforms and retaining walls are incorporated to minimize grading to the extent feasible. Proposed slope locations generally follow the existing contours and topography of the project site. Therefore, per the City of San Diego significance thresholds, the project would not result in substantial	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	alteration to the existing landforms and direct impacts would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project and there would be less than significant cumulative impacts.		
Issue 3: Visual Character Would the project result in the creation of a negative aesthetic site or project? Would the project result in project bulk, scale, materials, or style which would be incompatible with surrounding development? Would the project result in substantial alteration to the existing planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area? Note: for substantial alteration to occur, new development would have to be of a size, scale, or design that would markedly contrast with the character of the surrounding area.	Implementation of the project would not severely contrast with the surrounding neighborhood character, would not result in the loss of any community identification symbol, would not be highly visible, and would not have a negative visual appearance. The development would be consistent with adjacent residential development and would be designed consistent with the project's Design Guidelines and base zoning that ensures compatibility with height, scale, and bulk of buildings. While a range of building types are proposed, the Design Guidelines would result in a compatible theme across the development. Therefore, the project would not create a negative aesthetic and direct impacts associated with neighborhood character, architecture, and development features would be less than significant. Proposed development would not substantially block views of any identified public resources from a public viewing area. None of the cumulative projects are in visual proximity to the project and there would be less than significant cumulative impacts.	No mitigation is required.	N/A
Issue 4: Light or Glare Would the project cause a substantial light or glare which would adversely affect daytime or nighttime views in the area?	Through compliance with the SDMC and Design Guidelines to be adopted by the City of San Diego under Annexation Scenario 2a, the project would not introduce substantial sources of day or nighttime lighting. Additionally, the project does not incorporate any features that would be characterized as creating a substantial new source of glare that would adversely affect daytime or nighttime views in the area. Therefore, direct impacts associated with light and glare would be less than significant. All cumulative projects would also be required to comply with jurisdictional development standards pursuant to the applicable agency's municipal code. Through compliance regulations applicable for all cumulative projects, cumulative light and glare impacts would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Hydrology and Water Quality			
Issue 1: Water Quality Would the proposal result in an increase in pollutant discharge to receiving waters during or following construction, or discharge identified pollutants to an already impaired water body? What short-term and long-term effects would the proposal have on local and regional water quality and what types of pre- and post-construction Best Management Practices (BMPs) would be incorporated into the project to preclude impacts to local and regional water quality?	The project would implement project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water quality standards including the NPDES permit and, Construction General Permit, and City of Chula Vista General Plan policies, plans and threshold standards; however due to the burn ash identified on the Davies property, pollutants could be released during construction and runoff into surface water, resulting in a significant direct impact to water quality. The project would implement project-specific site design, source control, treatment control BMPs consistent with all relevant federal, regional, and local water quality standards including the NPDES permit and CGP and City of San Diego General Plan policies, SDMC, Drainage Design Manual and Stormwater Standards Manual. Notwithstanding regulatory and policy compliance, due to the RECs on-site and within the Davies property, and burn ash identified on the Davies property, pollutants could be released during construction and runoff into surface water, resulting in a significant impact to water quality. Through implementation of the mitigation measure, under all scenarios, the project would reduce potentially significant direct impacts to less than significant levels and ensure the project's incremental contribution to a cumulative impact on water quality would be less than significant.	To mitigate impacts associated with the accidental release of burn ash, implementation of mitigation measure **HAZ-SD-1** would be required by the City of San Diego.	Implementation of mitigation measure **HAZ-SD-1** requiring preparation and approval of a Community Safety Plan prior to ground disturbing activities would ensure potential release relating to burn ash would be less than significant.
Issue 2: Groundwater Result in decreased aquifer recharge**.** There may be significant impacts on hydrologic conditions and well-water supplies because the area available for aquifer recharge is reduced. When a subsurface water source fails to be recharged by rainfall, its volume will be reduced. Reduced groundwater elevation can affect landholders who are dependent on well water, vegetation, and surface water replenishment. In addition, if a project would result in extraction of water from an aquifer, impacts on hydrologic conditions would be significant if there would be a net deficit in the aquifer volume or a reduction in the local groundwater table.	The project would connect to public water system and not utilize groundwater. Groundwater recharge would not be adversely affected due to depth of groundwater, the existing slow rate of infiltration on site; BMP detention design would prevent infiltration on-site per study recommendations. Therefore, direct and cumulative impacts to groundwater would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Drainage Patterns Would the project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes? Would the project result in substantial increase in impervious surfaces and associated increased runoff?	Project construction and operation would not substantially alter existing drainage patterns resulting in erosion or siltation, increased rates of runoff, exceeded storm water capacity, or impedance of flood flows. The project includes construction, site design, source control, and structural pollutant control measures, including two biofiltration basins and a Modular Wetland Unit in combination with a detention vault. Storm water runoff flows would be slowed, treated, and released via sheet flow just north of the Otay River. The project would adhere to all federal, regional, and local regulations, including the City of San Diego Drainage Design Manual and SDMC regulations ensure that the project complies with the Municipal Separate Storm Sewer System Permit. Direct and cumulative impacts related to drainage patterns would be less than significant.	No mitigation is required.	N/A
Issue 4: Release of Pollutants due to Flood Hazard, Tsunami, or Seiche Zone Impose flood hazards on other properties or development, or result in substantial changes to stream flow velocities or quantities; or Impose flood hazards on other properties or development, or be proposed to develop wholly or partially within the 100-year floodplain identified on the FEMA maps.	The project site is outside of the FEMA 100-year floodplain but is located within a dam inundation zone. While in proximity to potential inundation risk from failure of the Upper and Lower Otay Dam, through state-mandated routine inspections, the risk of dam failure is low. The project would not increase flow velocity or quantities that would affect other properties and direct and cumulative impacts related to flooding would be less than significant.	No mitigation would be required.	N/A
Issue 5: Conflict with Water Quality Plans Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	The project would be consistent with all relevant water quality control plans. Direct and cumulative impacts related to conflicts or obstruction of such plans would be less than significant.	No mitigation would be required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Public Services and Facilities			
Does the project conflict with the community plan in terms of the number, size, and location of public service facilities? If so, are there direct impacts from construction of proposed new public service facilities needed to serve the project?	No physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed. All physical impacts associated with on-site parks are addressed throughout this EIR. Therefore, the project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries and direct impacts would be less than significant. The project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries. Therefore, the project's incremental contribution to cumulative impacts related to public services and facility construction would be less than significant.	No mitigation would be required.	N/A
Utilities and Sewer Systems			
Issue 1: Need for construction or expansion of facilities Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts with regard to the following utilities: natural gas, communication systems, water; sewer; and solid waste disposal? *Would the proposal:* Result in the use of excessive amounts of fuel or energy (e.g. natural gas)? Result in the use of excessive amounts of power? Use of excessive amounts of water? Landscaping which is predominantly non-drought resistant vegetation?	The project would require the construction of water, sewer, electrical power, and communication systems, to serve the project. Additional drainage and stormwater facilities would be constructed. Physical impacts associated with utility improvements are addressed throughout Chapter 4.0 of this EIR. No additional expansion of facilities for wastewater treatment, solid waste, storm water/drainage, electric power, natural gas, or telecommunications would occur that could result in physical impacts. Direct impacts would be less than significant. The project would not result in excessive use of fuel, energy, or power. The project is proposed as an all-electric development and would include electric vehicle charging and other design features to support reductions in fuel use and energy efficiency. Direct impacts would be less than significant. As physical impacts related to the provision of utilities and service systems would be localized and would be addressed on a project-by-project basis, these impacts would not combine to result in a cumulative impact. Therefore, cumulative impacts related to the physical impacts associated with installation of utilities and services would be less than significant.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Sufficient Water Supply Would the project use of excessive amounts of water? Would the project include landscaping which is predominantly non-drought resistant vegetation?	Although the project would result in a greater water demand compared to the land uses included in existing plans, the project demonstrates consistency with the City of San Diego Landscape Regulations pertaining to water efficient landscaping and irrigation systems. Additionally, compliance with current building and plumbing codes would ensure excessive amounts of potable water are not used. Therefore, direct impacts relating to water supply would be less than significant. The project combined with cumulative projects is not anticipated to result in a cumulative impact on water supply. The project's incremental contribution to cumulative impacts related to water supply would be less than significant.	No mitigation is required.	N/A
Issue 3: Wastewater Treatment Capacity Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts (sewer)?	There is adequate sewer facility capacity to serve the project. Direct impacts would be less than significant. The project's incremental contribution to cumulative impacts related to new or improved wastewater facilities would not be cumulatively considerable and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Issue 4: Solid Waste Would the proposed project have an effect upon, or result in a need for new or altered solid waste facilities?	The implementation of a WMP, compliance with City of San Diego construction and demolition debris ordinance, along with the provision of adequate bin storage space in garages would ensure that the overall waste produced by the project would be reduced sufficiently to comply with waste reduction targets. Direct impacts related to solid waste would be less than significant. Through the application of design features, and regulatory compliance including recycling, the project's incremental contribution to cumulative impacts related to solid waste would not be cumulatively considerable and cumulative impacts would be less than significant.	No mitigation is required.	N/A
Wildfire			
Issue 1: Emergency Plans Would the proposed project impair implementation of an adopted emergency response plan or emergency evacuation plan?	Implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Direct impacts would be less than significant. Implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Cumulative projects would also be required to address adequacy of emergency response; therefore, no cumulative impact related to emergency response would occur.	No mitigation is required.	N/A

Table S-2 Summary of Environmental Analysis Results – Annexation Scenario 2a			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 2: Pollutants from Wildfire Due to slope, prevailing winds, and other factors, would the proposed project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	With the proposed fuel management and fire protection features incorporated into the project design, the project would not exacerbate wildfire risks; therefore, direct impacts related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant. All cumulative projects located within both the City of San Diego and the City of Chula Vista would be required to meet minimum fire fuel modification and/or clearing requirements applicable to their location and would be reviewed by fire district having jurisdiction to ensure adherence to all relevant fire safety standards. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.	No mitigation is required.	N/A
Issue 3: Infrastructure Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	The project would not exacerbate wildfire as a result of infrastructure improvements. Direct impacts would be less than significant. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.	No mitigation is required.	N/A
Issue 4: Flooding or Landslides Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	The project would not change drainage patterns nor leave soils exposed in a manner that would result in post-fire flooding or slope instability. Direct impacts would be less than significant. Adherence to all fire regulations and district requirements for cumulative projects would ensure cumulative wildfire impacts would be less than significant.	No mitigation is required.	N/A

Chapter 1.0
Introduction

This Environmental Impact Report (EIR) addresses the potential environmental effects of the proposed Nakano project (project) and has been prepared by the City of Chula Vista, in coordination with the City of San Diego in compliance with the California Environmental Quality Act (CEQA) and Guidelines (Public Resources Code, Section 21000 et seq. and California Code of Regulations, Title 14, Section 15000, et seq.). This EIR is prepared to address the requirements for both the City of Chula Vista and the City of San Diego, as the project may be annexed into the City of San Diego. Accordingly, the EIR addresses a No Annexation Scenario, where the project stays in Chula Vista and two Annexation Scenarios with the site annexed into the City of San Diego. Annexation Scenario 2a is the scenario where the grading and development permits are issued by the City of San Diego after annexation. The No Annexation Scenario and Annexation Scenario 2b are similar in that the City of Chula Vista would issue all grading and construction permits for the portions of the project within Chula Vista and the City of San Diego would issue a grading permit for the off-site areas within the City of San Diego. The difference between these two scenarios is in the No Annexation Scenario, the project site would stay in the City of Chula Vista. In Annexation Scenario 2b, the project site would be annexed into the City of San Diego after site development. To accommodate these scenarios in this EIR, this document includes an evaluation of impacts according to the regulations, standards, and thresholds of both agencies.

The project includes the development of up to 221 residential units on a 23.77-acre parcel currently in the City of Chula Vista surrounded by City of San Diego jurisdiction on the west, south and east. Project access would be from the City of San Diego's Dennery Road. In addition to the residential component, the project would include recreational amenities including parks and trails. Public trail access would be provided through the site to provide a connection to the Otay Valley Regional Park. The project components under the No Annexation Scenario and the Annexation Scenarios are generally the same, with variations described in Chapter 3.0. The discretionary actions required to implement the project would depend on which scenario proceeds.

1.1 EIR Purpose and Intended Uses

The EIR is informational in nature and is intended for use by City of Chula Vista and City of San Diego decision makers, and other agencies including but not limited to the Local Agency Formation Commission (LAFCO) and the Otay Water District. The EIR is for use by the public in evaluating the potential environmental effects, mitigation measures, and alternatives of the project. The EIR evaluates three scenarios including a No Annexation Scenario and two Annexation Scenarios. The analysis of these scenarios would allow each city to rely on this EIR to approve the entitlements needed to develop the project under either jurisdiction. This EIR is also intended for use by LAFCO in the Annexation Scenario for the jurisdictional and service area reorganizations that would be necessary.

By recognizing the environmental impacts of the project, decision makers will have an understanding of the physical and environmental changes that would accompany the approval of the project. The EIR includes recommended mitigation measures that would be applicable to each scenario (Annexation and No Annexation Scenarios) which, when implemented, would lessen or avoid significant effects of the project on the environment, when feasible. Alternatives to the project are presented that could further reduce or avoid significant impacts associated with the project.

1.2 EIR Legal Authority

1.2.1 Lead Agency

The City of Chula Vista 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 that has the principal responsibility and authority for carrying out or approving the project. Both the City of San Diego and the City of Chula Vista have a substantial claim to be the lead agency but have entered a cooperative Memorandum of Understanding approved on December 7, 2021, designating the City of Chula Vista as the lead agency with the City of San Diego as a responsible agency. The Memorandum of Understanding specifies that the project shall be developed in accordance with the general plans and local ordinances of both the City of Chula Vista and the City of San Diego, as the Specific Plan Area is intended to be annexed into the City of San Diego. As such, this EIR analyzes the project under both City of Chula Vista and City of San Diego codes and regulations.

As Lead Agency, the City of Chula Vista Development Services Department conducted a preliminary review of the project and determined that this EIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City of Chula Vista.

1.2.2 Responsible and Trustee Agencies

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

Implementation of the project would require consultation with the following Responsible and Trustee Agencies, as described below.

City of San Diego: The City of San Diego is a responsible agency with approval authority over certain actions under the Annexation Scenarios, as well as the easement vacations, grading permits and other actions related to the site access roadways under all scenarios. Refer to Section 3.5 for more details.

U.S. Fish and Wildlife Service: Acting under the federal Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) is responsible for ensuring that any action authorized, funded, or carried

out by a federal agency (such as the U.S. Army Corps of Engineers [USACE]) is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Accordingly, the USFWS would provide input to the USACE as part of the Section 404 process.

Within areas covered by the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan, including the project site, the role of the USFWS is limited with respect to species covered under the Subarea Plan. For species covered by the Subarea Plan, the USFWS has granted take authorization for listed species to the City of Chula Vista in accordance with the requirements of the MSCP Implementing Agreement, executed between the City of Chula Vista, the USFWS, and the California Department of Fish and Wildlife (CDFW) in 1997.

For projects that are consistent with the Chula Vista and/or San Diego MSCP Subarea Plan, the relevant local agency has authority to grant permits for take of covered species and a separate permit is not required from the wildlife agencies. For listed species not included on the MSCP covered species list, the wildlife agencies retain permit authority.

California Department of Fish and Wildlife: The CDFW has jurisdiction over sensitive wildlife that is held in trust for the people of California. The CDFW would be a Trustee Agency for the project, as sensitive wildlife is located on-site and in the project vicinity. The CDFW has the authority to reach an agreement with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, pursuant to Section 1600 et seq. of the California Fish and Game Code. The CDFW generally evaluates information gathered during preparation of the environmental documentation, and attempts to satisfy their permit concerns in these documents.

San Diego Local Agency Formation Commission: San Diego LAFCO is a responsible agency with discretionary approval over reorganization of jurisdictional and district boundaries. The San Diego LAFCO's regulatory and planning intent is to fulfill the Legislature's regional growth management priorities outlined under the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Sections 56000–57550).

U.S. Army Corps of Engineers: The USACE has jurisdiction over development in or affecting the navigable waters of the U.S., pursuant to two federal laws, the Rivers and Harbors Act of 1889 and the Clean Water Act, as amended. Projects that include potential dredge or fill impacts to waters of the U.S. are subject to Section 404 of the Clean Water Act. Aggregate impacts to waters of the U.S. (defined as direct fill or indirect effects of fill) greater than one-half acre require a permit. All permits issued by the USACE are subject to consultation and/or review by the USFWS and the U.S. Environmental Protection Agency. The project may not have any USACE jurisdictional waters based on recent legislative changes pertaining to USACE regulatory authority.

Otay Water District: The Otay Water District is a responsible agency due to the site's location within the Otay Water District boundaries. Under the Annexation Scenarios, the Otay Water District would need to approve a LAFCO resolution to detach the site from the district boundaries. Under the No Annexation Scenario, the Otay Water District would be required to approve a LAFCO out of service agreement with the City of San Diego.

Federal Aviation Administration Part 77 Determination: The project site lies within the Federal Aviation Administration (FAA) Noticing Area for the Brown Field Municipal Airport. The project may

require FAA review of obstruction evaluation criteria contained in the Federal Code of Regulations, Title 14, FAA Part 77 (Obstruction Evaluation/Airport Airspace Analysis) prior to construction.

Native American Heritage Commission: The City of Chula Vista completed consultation with the Native American Tribes consistent with the requirements of Assembly Bill 52 and Senate Bill 18. Tribes who are traditionally and culturally affiliated with the geographic area of the project were invited to consult regarding potential impacts to tribal cultural resources. Responses were received from the Viejas Band of Kumeyaay Indians, the Campo Band of Kumeyaay Indians, the Jamul Indian Village, and the San Pasqual Band of Diegueño Mission Indians requesting consultation on the project. During tribal consultation, none of the Tribes identified any known tribal cultural resources on the project site but requested that Native American monitors be present during ground disturbance activities.

San Diego Gas and Electric: San Diego Gas and Electric easements are located on-site and certain easements are proposed to be vacated pursuant to Section 66434(G) of the Subdivision Map Act, as detailed in Section 3.7.6.

1.3 EIR Scope and Content and Format

1.3.1 Scope

The scope of analysis for this EIR was determined by the City of Chula Vista as a result of initial project review and consideration of comments received in response to a Notice of Preparation (NOP) circulated between May 5 and June 4, 2022, for the project. The City of Chula Vista's NOP, associated responses, and comments made during the review period are included in Appendix A of this EIR. Comment letters received during the NOP scoping process included comments by the City of San Diego, County of San Diego, the Native American Heritage Commission, the Otay Valley Regional Park Citizens Advisory Committee, and a concerned citizen. Issues that were raised included requests for the project to be consistent with the Otay Valley Regional Park Concept Plan and a desire for trail connections and amenities. Comments were also raised related to the project's proximity to the Shinohara II burn ash site and potential flooding concerns due to site development. The comments received during the NOP scoping period were reviewed and considered during the drafting of this EIR.

Through these scoping activities, the project was determined to have the potential to result in the following significant environmental impacts:

- Land Use and Planning
- Air Quality
- Biological Resources
- Geologic and Paleontological Resources
- Greenhouse Gas Emissions
- Health and Safety/Hazardous Materials
- Historical Resources
- Noise
- Transportation
- Tribal Cultural Resources
- Aesthetics
- Hydrology and Water Quality
- Public Services and Facilities
- Utilities and Sewer Systems
- Wildfire

1.3.2 Type of EIR

This EIR has been prepared as a Project EIR, as defined in Section 15161 of the CEQA Guidelines. In accordance with CEQA, this Project EIR examines the environmental impacts of a specific development project and focuses on the physical changes in the environment that could result from the project.

1.3.3 EIR Content

The intent of this EIR is to determine whether implementation of the project would have a significant effect on the environment through analysis of the issues identified during the scoping process (see Section 1.3.1 above). Pursuant to CEQA Guidelines Section 15126, all phases of the project are considered in this EIR when evaluating its potential impacts on the environment, including the planning, acquisition, development, and operation phases. Impacts are identified as direct or indirect, short-term or long-term, and assessed on a "plan-to-ground" basis. The "plan-to-ground" analysis addresses the changes or impacts that would result from implementation of the project compared to existing conditions.

1.3.4 EIR Format

1.3.4.1 Organization

The format and order of contents of this EIR are described below:

- **Executive Summary.** Provides a summary of the EIR, a brief description of the project, identification of areas of controversy, and inclusion of a summary table identifying significant impacts, mitigation measures, and a conclusion of impact significance after mitigation. A summary of the analyzed project alternatives and a comparison of the potential impacts of the alternatives with those of the project are also provided.

- **Chapter 1.0, Introduction.** Contains an overview of the purpose and intended uses of the EIR; Lead, Responsible, and Trustee Agencies; and the CEQA environmental review process. It also provides a discussion of the scope and format of the EIR.

- **Chapter 2.0, Environmental Setting.** Provides a description of the project's regional context, location, and existing physical characteristics and existing land use. The relationship to relevant plans are also provided in this section.

- **Chapter 3.0, Project Description.** Provides a detailed discussion of the project, including background, objectives, key project features, and environmental design considerations. The discretionary actions required to implement the project are included.

- **Chapter 4.0, Environmental Analysis.** Provides a detailed evaluation of potential environmental impacts for several environmental issues. Under each issue area in Chapter 4.0, Environmental Analysis, this EIR includes a description of the existing conditions and

regulatory framework relevant to each environmental topic. The regulatory framework includes local regulations for both the City of Chula Vista and the City of San Diego. Following the regulatory framework is the discussion of each environmental issue topic. The analysis of each issue is provided for the No Annexation Scenario and Annexation Scenario 2b followed by the analysis for Annexation Scenario 2a. For each issue topic, the applicable threshold(s) of significance for each agency is provided. Each issue topic is evaluated to determine impacts associated with implementation of the project; a summary of the significance of any project impacts; recommendations for mitigation measures and mitigation monitoring and reporting, as appropriate, for each significant issue area, and a discussion of significance of the impact after mitigation, if applicable.

- **Chapter 5.0, Significant Unavoidable Environmental Effects/Irreversible Changes.** Discusses the significant unavoidable environmental effects of the project, including those that can be mitigated but not reduced to below a level of significance. This chapter also describes the potentially significant irreversible changes that may be expected with development of the project and addresses the use of nonrenewable resources during its construction and operational life.

- **Chapter 6.0, Growth Inducement.** Evaluates the potential influence the project may have on economic or population growth within the project area as well as the region, either directly or indirectly.

- **Chapter 7.0, Cumulative Impacts.** Identifies the impact of the project in combination with other planned and future development in the vicinity.

- **Chapter 8.0, Effects Found Not to Be Significant.** Identifies all the issues determined in the scoping and preliminary environmental review process to be not significant and briefly summarizes the basis for these determinations.

- **Chapter 9.0, Alternatives.** Provides a description of alternatives to the project, including Alternatives Considered but Rejected, a No Project (No Development) Alternative, No Project (Development Under the Existing Plan) Alternative, Reduced Units Alternative, and Reduced Footprint Wetland Impact Reduction Alternative.

- **Chapter 10.0, Mitigation Monitoring and Reporting Program.** Documents all the mitigation measures identified in the EIR and required as part of the project. Both a Mitigation Monitoring and Reporting Program for Annexation Scenario 2a and a Mitigation Monitoring and Reporting Program for the No Annexation Scenario and Annexation Scenario 2b are provided.

- **Chapter 11.0, References Cited.** Lists all the reference materials cited in the EIR.

- **Chapter 12.0, Individuals and Agencies Consulted.** Identifies all the individuals and agencies contacted during preparation of the EIR.

- **Chapter 13.0, Certification.** Identifies the individuals responsible for the preparation of the EIR.

1.3.4.2 Technical Appendices

Technical appendices, used as a basis for much of the environmental analysis in the EIR, have been summarized in the EIR and are available for review at the City of Chula Vista, Development Services Department located at 276 Fourth Avenue, Chula Vista, California, 91910.

1.3.4.3 Incorporation by Reference

As permitted by CEQA Guidelines Section 15150, this EIR has referenced several technical studies and reports, including the City of Chula Vista General Plan Update EIR (State Clearinghouse #88052511) and the City of San Diego Complete Communities: Housing Solutions and Mobility Choices Program EIR (State Clearinghouse #2019060003). Information from these documents has been briefly summarized in this EIR, where applicable, and their relationship to this EIR described. These documents are included in Chapter 11.0, References Cited, and are hereby incorporated by reference. These environmental documents can be accessed at the following links:

- City of Chula Vista General Plan Update EIR: https://www.chulavistaca.gov/home/showpublisheddocument/436/635397496756070000

- City of San Diego Complete Communities: Housing Solutions and Mobility Choices Program EIR: https://www.sandiego.gov/sites/default/files/final_peir_for_complete_communities_housing_solutions_and_mobility_choices.pdf

1.4 EIR Process

The EIR review process occurs in two basic stages. The first stage is the Draft EIR, which offers the public the opportunity to review and comment on the document. The second stage is the Final EIR, which provides the basis for approving the project.

1.4.1 Draft EIR

In accordance with Sections 15085 and 15087 (a) (1) of the CEQA Guidelines, upon completion of the Draft EIR a Notice of Completion is filed with the State Office of Planning and Research and notice of availability of the Draft EIR issued in a newspaper of general circulation in the area.

The Draft EIR is distributed for review to the public and interested and affected agencies for the purpose of providing 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" (Section 15204, CEQA Guidelines).

This Draft EIR and all related technical studies are available for review during the public review period at the offices of the City of Chula Vista, Development Services Department, located at 276 Fourth Avenue, Building B, Chula Vista, California, 91910.

1.4.2 Final EIR

Following public review of the Draft EIR, the City of Chula Vista will provide written responses to comments per CEQA Guidelines Section 15088 and will consider all comments in making its decision to certify the Final EIR. Responses to the comments received during public review and Findings of Fact will be prepared and compiled as part of the Final EIR.

The culmination of this process is a public hearing where the Chula Vista City Council will determine whether to certify the Final EIR as being complete and in accordance with CEQA. The Final EIR will be available at least 14 days prior to the first scheduled hearing. The City of San Diego will thereafter adopt discretionary actions and would be required to adopt their own Statement of Overriding Considerations and other CEQA Findings prior to taking action on the project.

Chapter 2.0
Environmental Setting

2.1 Regional Setting

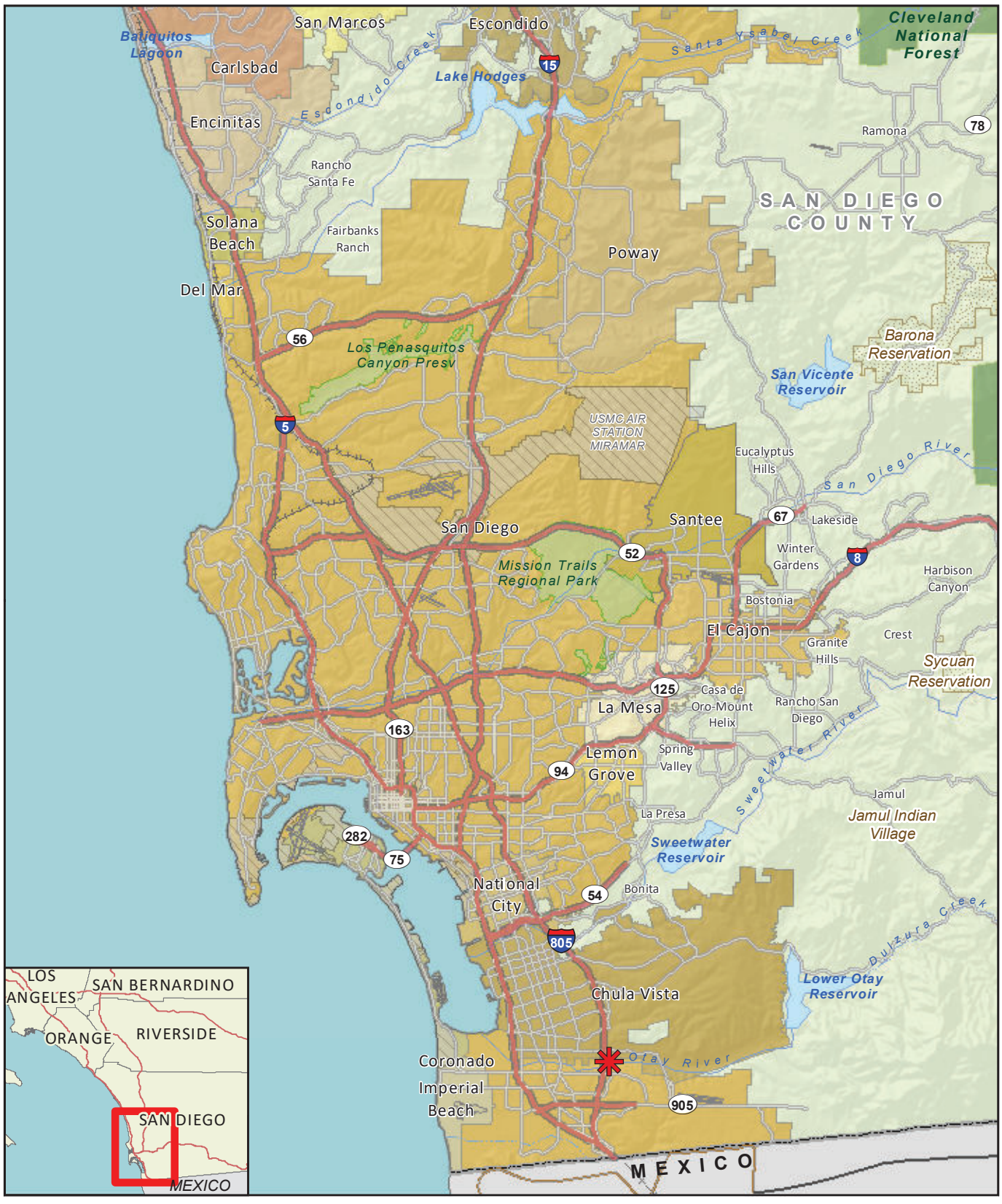
The Nakano Project (project) is located at the southern boundary of the City of Chula Vista and is surrounded on three sides by land in the City of San Diego. The City of Chula Vista is an incorporated city approximately 12 miles south and southeast of the downtown area of the City of San Diego and 4 miles north of the Otay Mesa border crossing via the State Route 125 toll road. The City of Chula Vista encompasses approximately 50 square miles, with National City and County of San Diego (County) lands forming its northern boundary and the lands just south of the Otay River roughly demarcating the City of Chula Vista's southern boundary. Directly south of the City of Chula Vista is land in the City of San Diego's Otay Mesa and Otay Mesa-Nestor communities. The City of Chula Vista's eastern boundary extends to San Miguel and Jamul Mountains.

The City of San Diego land area covers nearly 332 square miles (not including water bodies) and is in the southwestern corner of California, within San Diego County. The Pacific Ocean provides both the City of San Diego and the County's western boundary, and Mexico is immediately adjacent to the City of San Diego and the County to the south. The southern portion of the City of San Diego is bordered on the north by the City of Chula Vista, on the east by unincorporated portions of San Diego County, to the south by the City of Tijuana, Mexico, and to the west by the City of Imperial Beach.

2.2 Project Location

The approximately 23.77-acre project parcel is east of Interstate 805 (I-805), northwest of the 450 block of Dennery Road, and south of the Otay River in the City of Chula Vista. The project site is located at the southern edge of the City of Chula Vista, bordered by the City of San Diego on the other three sides (west, south, and east). The project site is approximately 5.8 miles east of the Pacific Ocean and approximately 11 miles south of downtown San Diego. Additionally, the project site is approximately 3.2 miles north of the San Ysidro Port of Entry to Mexico.

Refer to Figures 2-1 through 2-3 for the regional location, project location in relation to jurisdictional boundaries, and project location on an aerial photograph, respectively.



Project Location

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FIGURE 2-1
Regional Location

Image Source: Nearmap (flown: April 2022)

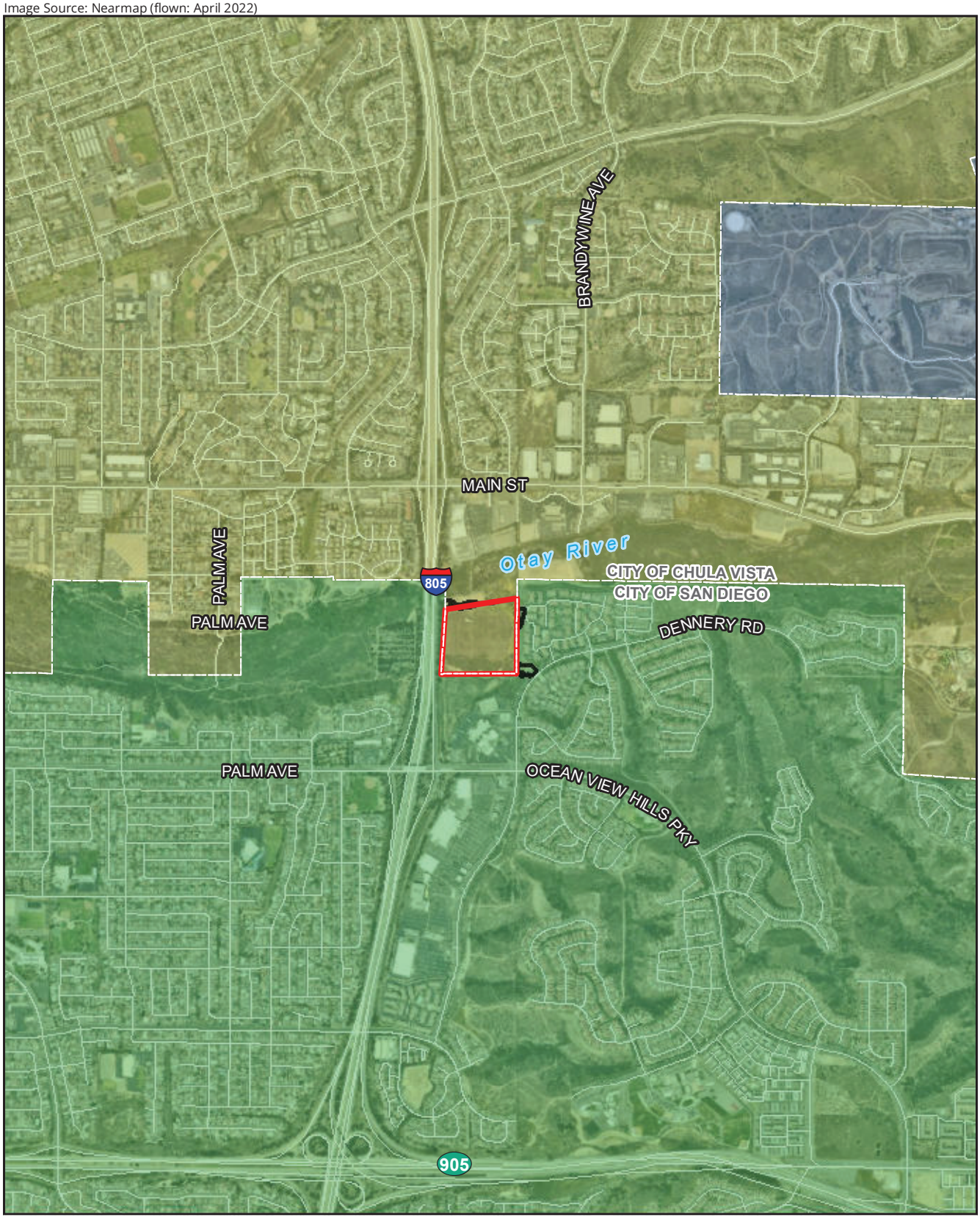


FIGURE 2-2
Project in Relation to Jurisdictional Boundaries

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Image Source: NearMap (flown April 2022)



FIGURE 2-3
Project Location on Aerial Photograph

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2.3 Environmental Setting

2.3.1 Topography/Land Cover

The project site is currently vacant and was historically used for agricultural purposes. Agricultural operations ceased on the site circa 2010. Former agricultural building foundations are in the central area of the site. The majority of the site is flat, with the flat area consisting of disturbed habitat and non-native grasslands. The southern area of the site includes a hillside with Diegan coastal sage scrub, southern willow scrub, and disturbed habitats. Elevations within the project site range from 90 feet above mean sea level in the northern portion of the site to 180 feet above mean sea level in the southern portion of the site. There is a drainage containing some native vegetation along the eastern boundary of the project site that conveys stormwater runoff from the Kaiser Permanente Otay Mesa medical offices to the south through the site to the Otay River. Several dirt trails extend through the project site from the southeastern corner near Dennery Road to the north towards the Otay Valley River Park. A San Diego Gas and Electric (SDG&E) 69-kilovolt power line and associated easement is along the southern boundary. An existing dirt access road is present from Dennery Road that provides SDG&E access to the existing utility lines. An SDG&E above-ground power line also extends along the eastern boundary within an SDG&E easement. Other on-site easements include an SDG&E easement in the northern portion of the site, a California Department of Transportation drainage easement in the northwest corner of the project site, a City of San Diego sewer easement along the western and northern portions of the project site, and an Otay Water District easement along the eastern project boundary. Refer to Photographs 1 through 4 for views of the project site and surrounding area.

2.3.2 Surrounding Land Use

I-805 is immediately adjacent to the site to the west and is set above the site at a higher elevation. There are large mature eucalyptus trees between I-805 and the site (see Photographs 2 and 4). North of the site is the Otay River, with disturbed land between the project parcel and the Otay River. The residential development, RiverEdge Terrace, is immediately adjacent to the site to the east (see Photographs 1 and 3). This development is set at the top of a manufactured slope, within the City of San Diego, and is part of the larger Ocean View Hills community along Ocean View Hills Parkway, south of Dennery Road. South of the project site are Kaiser Permanente Otay Mesa medical offices (see Photograph 2). Refer to Figure 2-4 for the location of surrounding land uses in relation to the project site.



PHOTOGRAPH 1
View from the Southern Parcel Boundary Looking North Toward the Otay River, with an Existing Shopping Center North of the River in View and Rivers Edge Terrace Development Visible to the East



PHOTOGRAPH 2
View South/Southwest from the Middle of the Site with the Kaiser Parking Garage, the 69 kV Line, and Eucalyptus Trees Bordering I-805 in View

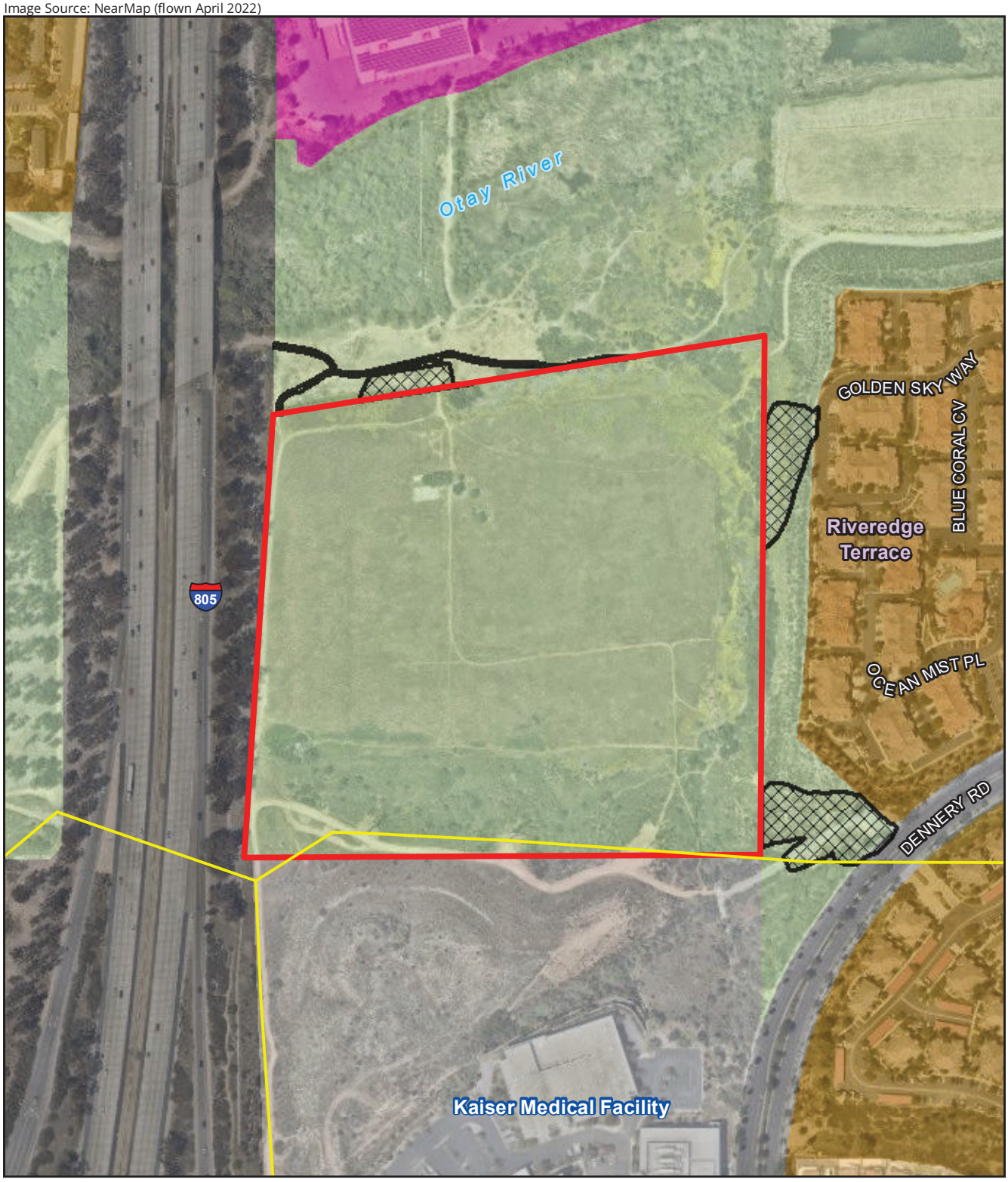


PHOTOGRAPH 3
View from the Southeast Corner of the Project Parcel with Eastern Parcel Boundary and Manufactured Slope in View



PHOTOGRAPH 4
Westward View from the Northerly Edge of the Project Parcel with the I-805 Bridge and Eucalyptus Trees Bordering the Freeway in View

Image Source: NearMap (flown April 2022)



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Project Boundary
Off-site Improvements
SDG&E 69kV Overhead Power Line

Land Use

Open Space / Undeveloped Land
Single Family Detached
Multi-Family Residential
Community Shopping Center
Hospital - General
Road Right of Way
Freeway

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FIGURE 2-4
Surrounding Land Uses

2.3.3 Transportation and Access

The regional transportation network in the project area consists of I-805 to the west and State Route 905 to the south. The nearest roadway is Dennery Road, a City of San Diego roadway connecting to Palm Avenue which provides access to I-805, the surrounding Ocean View Hills community to Otay Mesa neighborhoods, and the City of Imperial Beach. Site access is unavailable from City of Chula Vista streets as the Otay River is a barrier separating the site from City of Chula Vista roadways. Refer to Figure 2-2 for the location of the regional transportation network. Although no official public roadway provides direct access to the site, the site is accessible through several informal undeveloped unpaved utility roads to the north, east, and south of the site. The northern utility road is accessible from a backroad dirt road behind a Kohl's Department store located on Main Street in the City of Chula Vista; however, this roadway is blocked by a locked gate and may be overgrown with vegetation. A roadway that provides access via the northeastern corner of the site runs adjacent to the Otay River and is accessible via the Dennery Road/Black Coral Way intersection. A driveway along Dennery Road within the Ocean View Hills residential community provides access to the site via an undeveloped unpaved roadway leading to the southeast corner of the site. From the south, an undeveloped unpaved gated dirt road at the rear parking lot of an AM/PM convenience store located at the corner of Palm Avenue and northbound on-ramp of the I-805 leads north to the project site.

Class II bike lanes are present along Dennery Road and Palm Avenue, providing a portion of the roadway for bicycle travel through lane striping and pavement markings. There is a high frequency bus line (Route 933 and 934) with departures every 12 minutes at Palm Avenue and Dennery Road, 0.3 mile south of the project site on Dennery Road. This line provides service to Imperial Beach and provides a connection to the Blue Line Trolley at Iris Avenue.

2.4 Planning Context

Development projects are generally guided by a city's General Plan. As the project includes Annexation Scenarios and a No Annexation Scenario, the planning context for both agencies are provided. A more detailed discussion of the planning context for various topics is provided within the regulatory framework section of each issue section in this EIR.

2.4.1 San Diego Forward: The 2021 Regional Plan

The San Diego Association of Governments (SANDAG) is the regional authority that creates region-specific documents to provide guidance to local agencies. San Diego Forward: The 2021 Regional Plan (Regional Plan) combines two of the region's existing planning documents: the Regional Comprehensive Plan for the San Diego Region and the Regional Transportation Plan/Sustainable Communities Strategy into the 2021 Regional Plan (SANDAG 2021). The Regional Plan identifies the project site as an area adjacent to a future interregional corridor with managed lanes for goods movement along I-805, a future Next Gen Rapid line (Rapid 635 Eastlake to Palomar Trolley via Main Street Corridor), a regional arterial along Main Street and Palm Avenue, and within proximity to the future Southwest Chula Vista mobility hub.

2.4.2 City of Chula Vista General Plan

The project site is designated Open Space by the City of Chula Vista General Plan and is zoned Agricultural Zone A-8 by the City of Chula Vista Zoning Code. The off-site improvement area to the north of the project parcel within Chula Vista is also designated as Open Space but is zoned Floodway Zone F1. Refer to Figures 2-5 and 2-6 for existing General Plan and zoning designations for the site and the surrounding area.

2.4.3 City of San Diego General Plan and Otay Mesa Community Plan

The project parcel is currently outside of the City of San Diego sphere of influence; therefore, there is no City of San Diego pre-zoning or land use designation applied. Land surrounding the project site in the City of San Diego is part of the Otay Mesa Community Plan. The project off-site improvement areas for primary and secondary emergency only access, to the east and south respectively, are in the City of San Diego. These off-site improvement areas are designated Residential – Low Medium by the City of San Diego Otay Mesa Community Plan and zoned as RM-2-4 by the San Diego Zoning Code. Refer to Figures 2-5 and 2-6 for City of San Diego Otay Mesa Community Plan and zoning designations surrounding the project site.

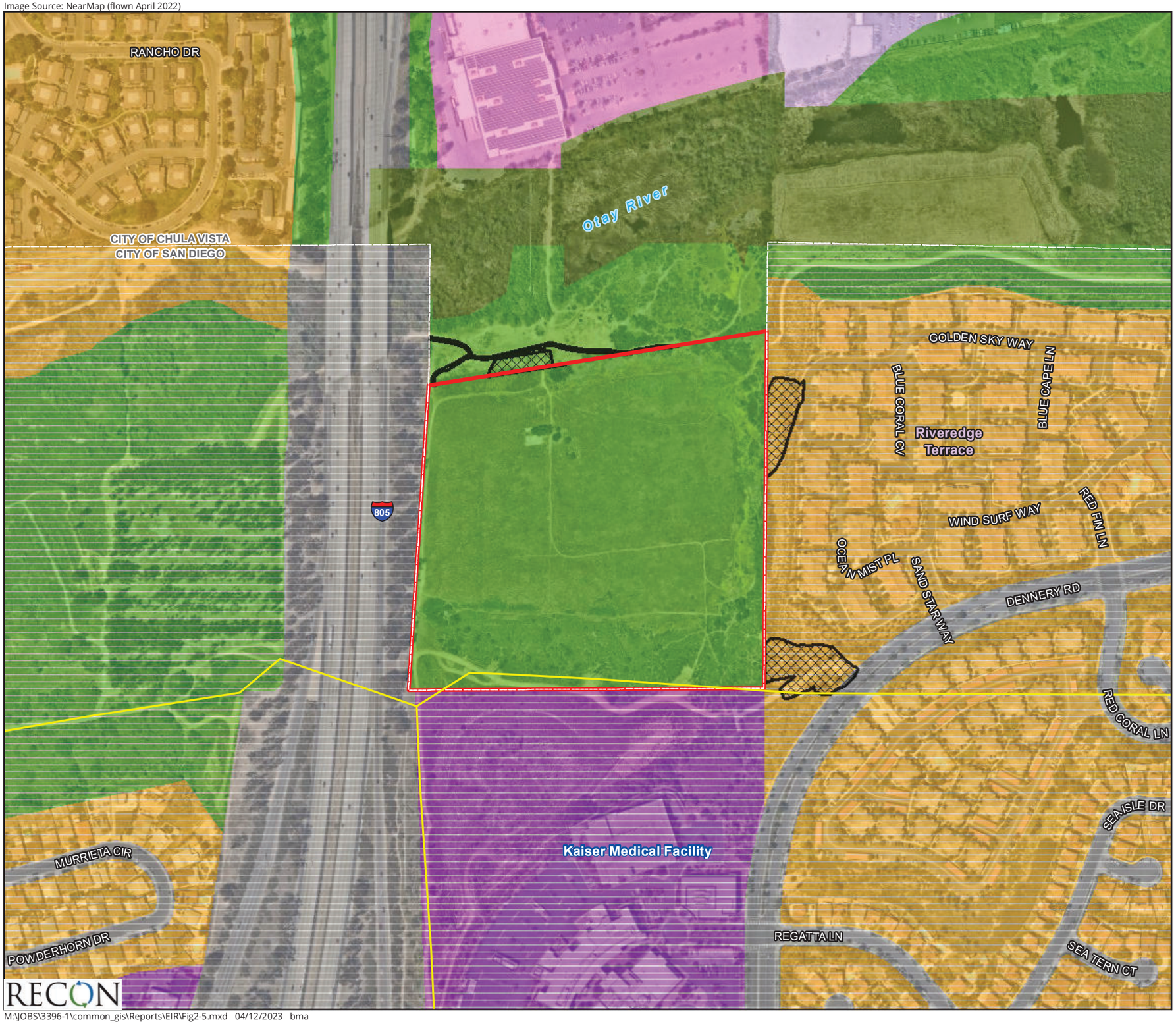
2.4.4 Otay Valley Regional Park Concept Plan

The project site is within the Otay Regional Park Concept Plan Boundary, which is a combined planning effort of the County of San Diego and cities of Chula Vista and San Diego. Within the Otay Regional Park, the project site is identified as open space land under private ownership. Refer to Figure 2-7.

2.4.5 Brown Field Airport Land Use Compatibility Plan

The 2010 Brown Field Airport Land Use Compatibility Plan is intended to ensure compatibility between adjacent land uses and the operation and/or expansion of the airport. The Airport Land Use Compatibility Plan designates the airport influence area and identifies flight activity and safety zones, projected noise contours, a land use compatibility matrix, and includes land use recommendations for areas surrounding Brown Field. The Brown Field airport influence area is shown in Figure 2-8.

Image Source: NearMap (flown April 2022)



Project Boundary
Off-site Improvements
SDG&E 69kV Overhead Power Line

San Diego Otay Mesa
Community Plan Designations
Commercial Employment, Retail, & Services
Park, Open Space, & Recreation
Residential
Roads / Freeways / Transportation

Chula Vista
General Plan Designations
Commercial Retail
Freeway
Limited Industrial
Open Space
Open Space Reserve
Residential: Medium-Hight Density

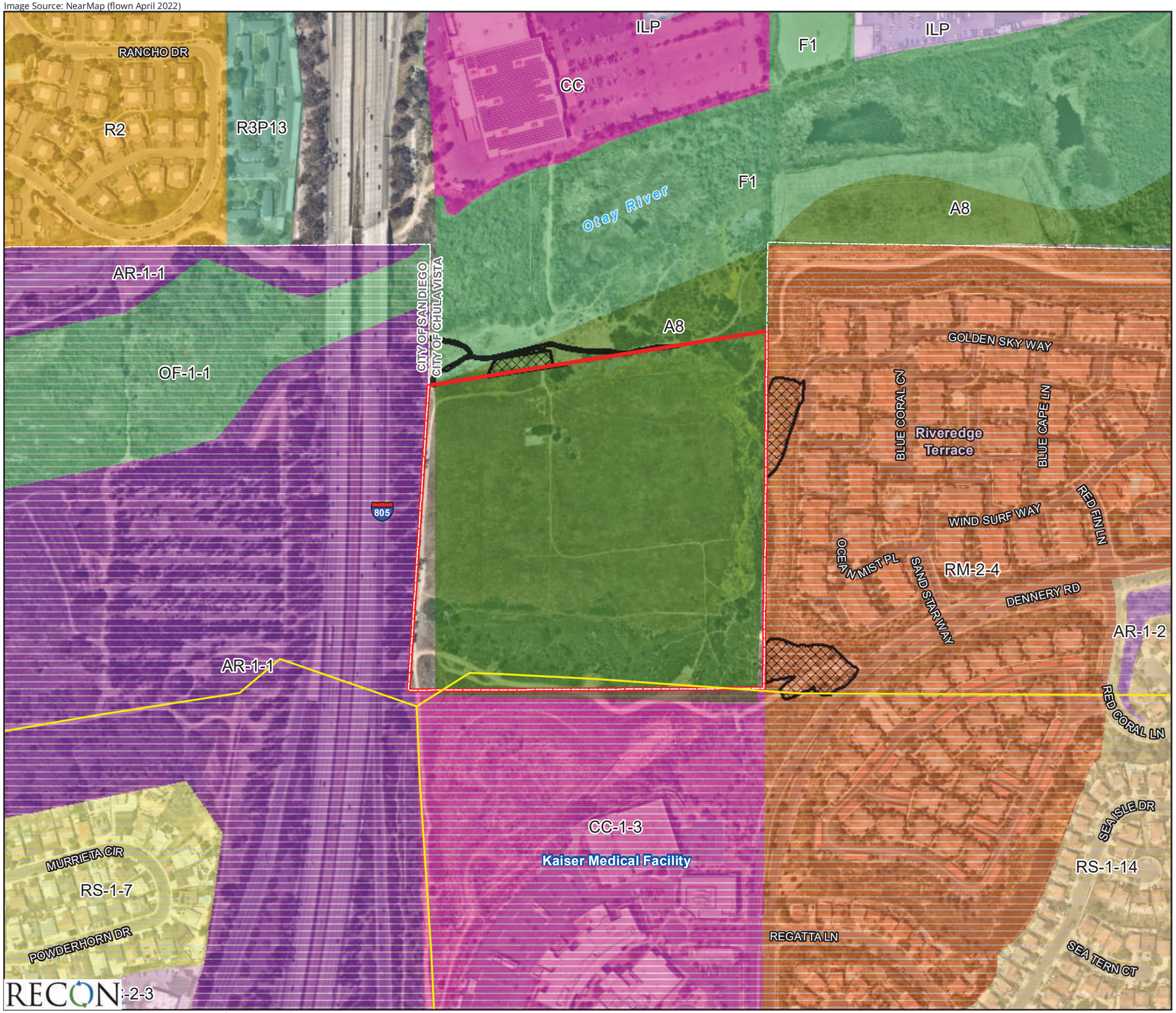
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FIGURE 2-5
Existing Land Use Designations

Image Source: NearMap (flown April 2022)



- Project Boundary
- Off-site Improvements
- SDG&E 69kV Overhead Power Line

City of Chula Vista Zoning Designations

- A8: Open Space Preserve
- CC: Transit Focus Area
- F1: Open Space Preserve
- ILP: Limited Industrial Precise Plan
- R2: Medium Density Residential
- R3P13: High Density Residential

City of San Diego Zoning Designations

- AR-1-1: Agricultural-Residential 10-Acre Lot
- AR-1-2: Agricultural-Residential 5-Acre Lot
- CC-1-3: Commercial-Community
- CC-2-3: Commercial-Community
- OF-1-1: Open Space-Floodplain
- RM-2-4: Residential-Multiple Unit
- RS-1-14: Residential-Single Unit
- RS-1-7: Residential-Single Unit

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FIGURE 2-6
Existing Zoning

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Map Source: Otay Valley Regional Park

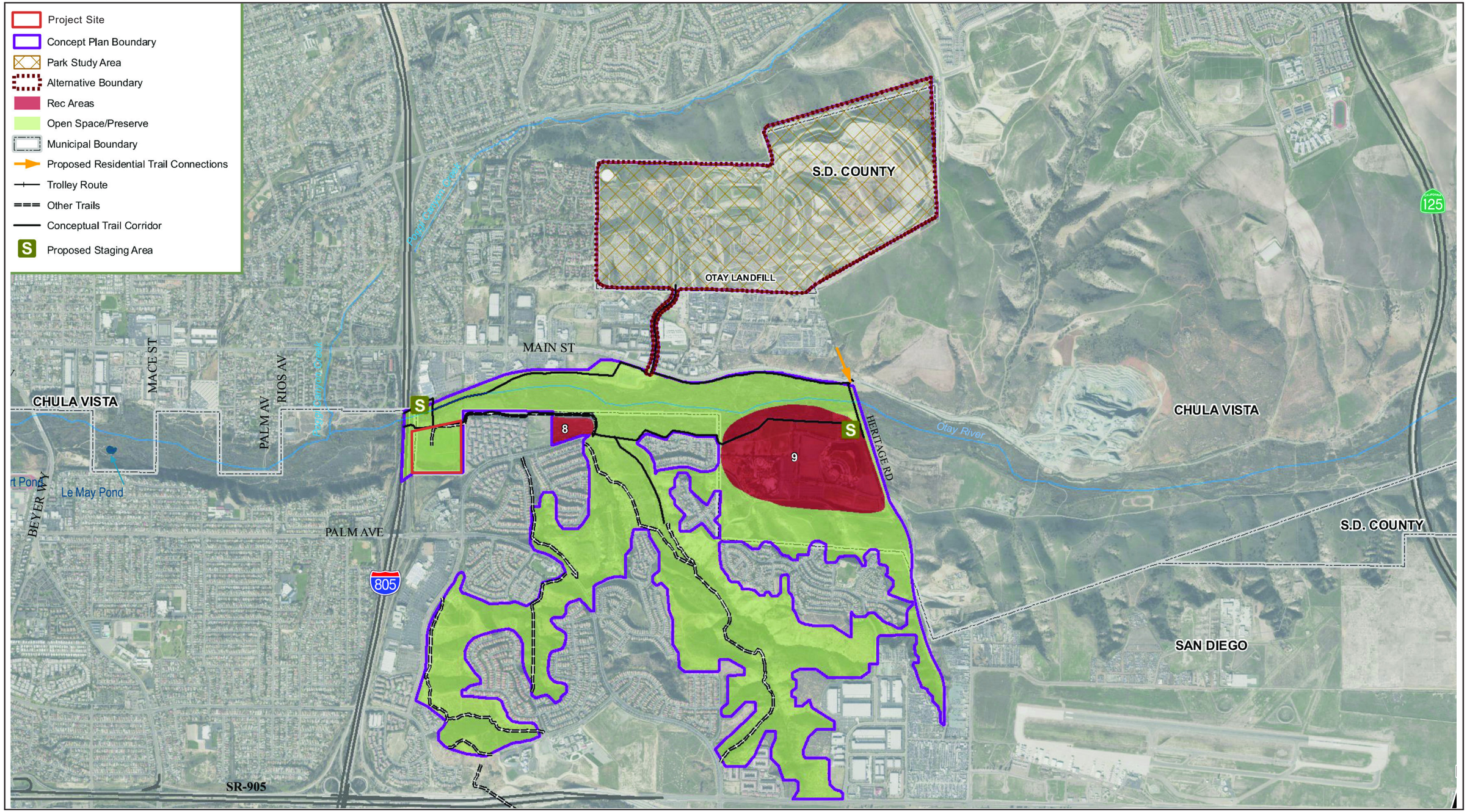
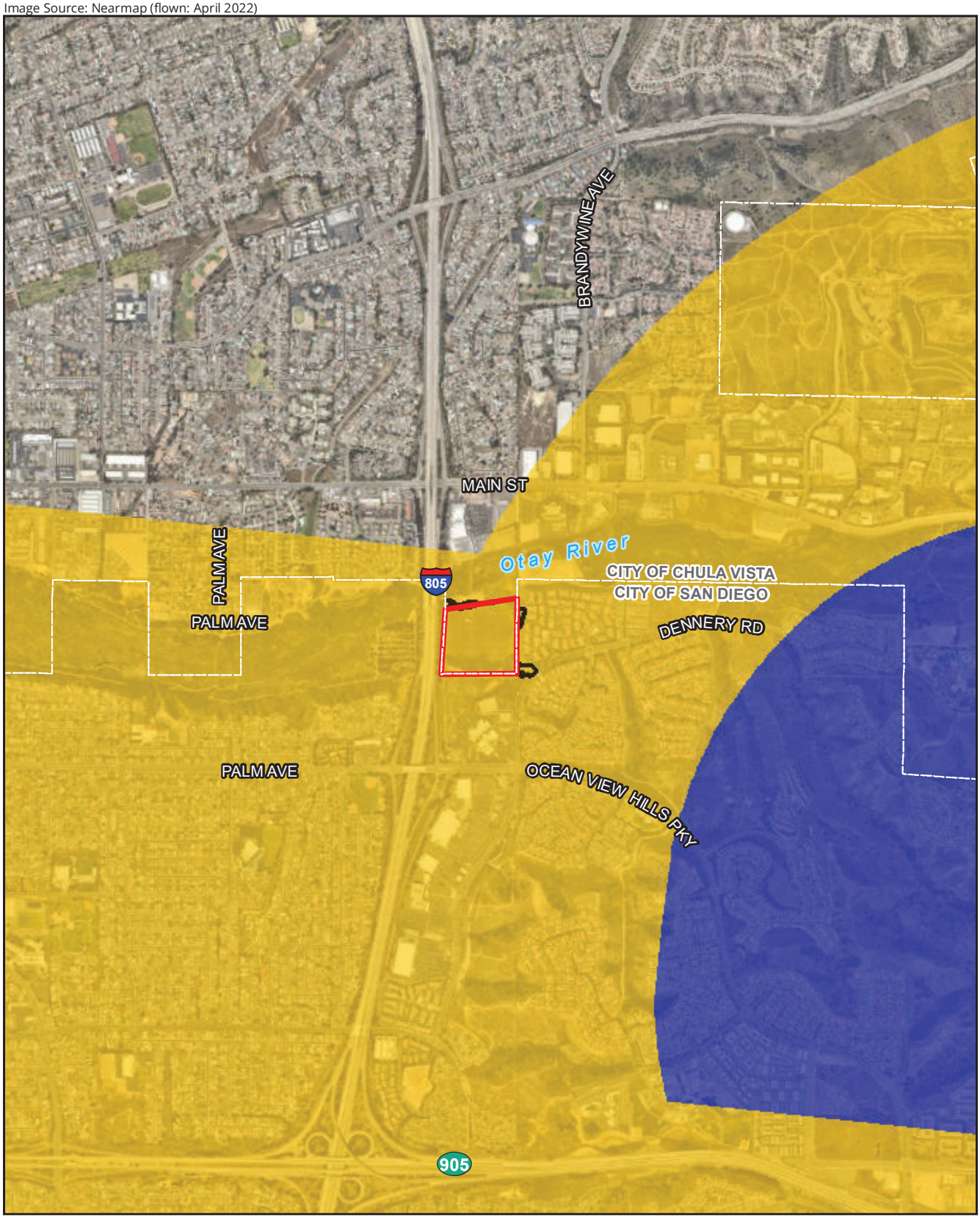


FIGURE 2-7
Project in Relation to the
Otay Valley Regional Park Concept Plan

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Image Source: Nearmap (flown: April 2022)



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FIGURE 2-8
Brown Field Airport Influence Areas

2.4.6 City of San Diego Climate Action Plan

On August 2, 2022, the City of San Diego approved an updated Climate Action Plan (CAP), revised greenhouse gas (GHG) California Environmental Quality Act significance thresholds, CAP Consistency Regulations, and associated Climate Resiliency Fund and Urban Tree Canopy fee. The 2022 CAP update expands the prior CAP approach and identifies six strategies for achieving the goal of net zero emissions:

1. Strategy 1: Decarbonization of the Built Environment
2. Strategy 2: Access to Clean and Renewable Energy
3. Strategy 3: Mobility and Land Use
4. Strategy 4: Circular Economy and Clean Communities
5. Strategy 5: Resilient Infrastructure and Healthy Ecosystems
6. Strategy 6: Emerging Climate Actions

These six strategies aim to set a path towards a goal of net zero emissions by 2035. Strategy 1: Decarbonization of the Built Environment addresses natural gas consumption in all buildings, both new development, and in the timespan of the CAP, existing buildings. Strategy 2: Access to Clean and Renewable Energy maintains the 100 percent renewable energy measure and acknowledges San Diego Community Power as a key pathway to achieving the renewable target. Strategy 2 additionally includes targets for converting the City of San Diego's vehicle fleet to electric and supports increasing electric vehicles used in the community. Strategy 3: Mobility and Land Use focuses on emissions from transportation and establishes actions that support mode shift through mobility and land use actions and policies. Strategy 4: Circular Economy and Clean Communities expands on current zero waste goals and maintains gas capture measures, prevents waste from entering the landfill, and supports efforts to increase composting and prevent food waste in response to Senate Bill (SB) 1383. Strategy 5: Resilient Infrastructure and Healthy Ecosystems addresses resiliency in the face of the impacts of climate change with a focus on greening the city, starting with communities of concern. Communities of concern are identified as those census tracts that have very low, low, or moderate access to opportunity as identified in the City of San Diego Climate Equity Index (City of San Diego 2024).

The newest strategy, Strategy 6: Emerging Climate Actions, addresses those GHG emissions that will remain after all current identified measures have been achieved, which account for roughly 20 percent of total GHG emissions by 2035. This new strategy allows the City of San Diego to address limitations in quantification GHG emissions and science and technology by identifying additional actions, pursuing technological innovation, expanding partnerships, and supporting research that reduces GHG emissions in all sectors.

2.4.6.1 Climate Action Plan Consistency Regulations (City of San Diego Municipal Code Chapter 14, Article 3, Division 14)

To facilitate implementation of the CAP, the City of San Diego adopted CAP Consistency Regulations as Chapter 14, Article 3, Division 14 in the Land Development Code (City of San Diego 2022). The CAP Consistency Regulations apply to specified ministerial and discretionary projects to ensure

compliance with the goals and objectives of the updated CAP. The CAP Consistency Regulations apply to the following projects:

- Development that results in three or more total dwelling units on all premises in the development;
- 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
- Parking facilities as a primary use.

The CAP Consistency Regulations require the following:

1. Pedestrian enhancements to reduce heat island effect:
    - Where the premises contains a street yard or abuts the public right-of-way, shading of at least 50 percent of the Throughway Zone is required.
    - Where development does not contain a street yard or abut a public right-of-way with a Furnishings Zone, a specified number of trees shall be planted on-site or at an off-site location within one mile of the development. If trees cannot be planted, an Urban Tree Canopy Fee shall be paid.
2. Development on a premises with 250 linear feet or more of street frontage shall provide and privately maintain at least one of the following publicly accessible pedestrian amenities for every 250 linear feet of street frontage to the satisfaction of the Development Services Department:
    - One trash receptacle and one recycling container;
    - Seating comprised of movable seats, fixed individual seats, benches with or without backs, or design feature seating, such as seat walls, ledges, or seating steps;
    - Pedestrian-scale lighting that illuminates the adjacent sidewalk;
    - Public artwork;
    - Community wayfinding signs; or
    - Enhancement of a bus stop or public transit waiting station within 1,000 feet of the premises.
3. At least 50 percent of all residential and non-residential bicycle parking spaces required in accordance with Chapter 14, Article 2, Division 5 shall be supplied with individual outlets for electric charging at each bicycle parking space.

If a project is unable to comply with one or more of the CAP Consistency Regulations, the project will be required to obtain a Process Two Neighborhood Development Permit with deviation findings specifying how the project will reduce GHG emissions in a manner comparable to the regulation(s) the project is deviating from.

2.4.7 City of San Diego Complete Communities Housing Solutions and Mobility Choices

2.4.7.1 Housing Program

Housing Solutions is an optional affordable housing incentive program aimed at encouraging the building of homes near high-frequency transit. The focus is intended to create a variety of housing options for everyone, particularly those at low and middle-income levels. These incentives include investments in neighborhood amenities, such as pocket parks and plazas, as well as the preservation of existing affordable housing units. General Regulations for Complete Communities Housing Solutions can be found in San Diego Municipal Code Chapter 14, Article 3, Division 10 (City of San Diego 2021).

Future development projects that provide affordable housing and provide or contribute toward neighborhood-serving improvements would be allowed additional square footage and building height, which would allow for additional units beyond what is otherwise allowed in the respective base zone, Planned District Ordinance, or Community Plan. Existing height restrictions in the Coastal Zone in addition to height restrictions in proximity to airports would continue to apply. Additionally, projects that qualify for participation in the Housing Program could be approved through a ministerial process, unless site-specific conditions warrant a discretionary approval.

In exchange for additional density, building square footage and height, the Housing Program would require all projects to provide new community-serving infrastructure improvements through either payment of a fee into a Neighborhood Enhancement Fund or by accommodating a public promenade that meets specified standards including minimum street frontage requirements.

2.4.7.2 City of San Diego Mobility Choices Program

The purpose of the Mobility Choices Program is to implement SB 743 by ensuring that new development mitigates transportation impacts based on vehicle miles traveled (VMT) impacts to the extent feasible, while incentivizing development within the City of San Diego's transit priority areas and urban areas (Mobility Zones 1, 2, and 3). The Mobility Choices Program will support investments in active transportation and transit infrastructure–in the areas where that infrastructure is needed most–where the most reductions in overall VMT and GHG emissions reductions can be realized.

The Mobility Choices Program would apply citywide to any new development for which a building permit is issued except for certain exceptions. The Mobility Choices Fee would be used to fund active transportation and VMT reducing infrastructure projects in Mobility Zones 1, 2, and 3. Consistent with SB 743's mandate to reduce VMT, the Mobility Choices Fee would be used in areas that have the greatest capacity to realize VMT reductions within the City of San Diego.

Deed-restricted affordable housing within Mobility Zone 4 that meets specified criteria would be exempt from payment of the Mobility Choices Fee.

2.5 Conservation Planning

2.5.1 County of San Diego Multiple Species Conservation Program – South County Plan

The San Diego Multiple Species Conservation Program (MSCP) Plan for the southwestern portion of San Diego County was approved in 1998 and covers 85 species. The City of San Diego, portions of the unincorporated county, and ten additional city jurisdictions make up the San Diego MSCP Plan Area. The County Subarea Plan (South County Plan) was adopted by the Board of Supervisors in October 1997.

The goal of the South County Plan is to acquire or permanently protect 98,379 acres in the unincorporated areas of the County. Since 1998, thousands of acres of land have been added to the MSCP by local, state, and federal agencies.

Development projects are required to conform with the South County Plan through compliance with the County Biological Mitigation Ordinance. How a project conforms varies depending on the development type. Some projects meet certain exemption criteria and do not require any modification, while others require revisions and mitigation in order for the project to conform. County staff reviews each project and determines what is necessary for conformance with the South County Plan.

2.5.2 City of Chula Vista Multiple Species Conservation Program Subarea Plan

The City of Chula Vista MSCP Subarea Plan, approved on May 13, 2003, is a policy document through which the MSCP Subregional Plan is implemented within the City of Chula Vista's jurisdiction (City of Chula Vista 2003). The City of Chula Vista MSCP Subarea Plan provides a blueprint for conservation of covered species and their associated habitats and forms the basis for federal and state incidental "take " permits for 86 plant and animal species within the city. The incidental take permits are issued by the U.S. Fish and Wildlife Service and the California Department of Fish and Game, also referred to as the "Wildlife Agencies."

The City's Preserve will eventually encompass approximately 5,000 acres of the City of Chula Vista's most sensitive open space areas. In addition, another approximately 4,200 acres outside the City of Chula Vista's jurisdiction will be preserved as a result of development occurring within the city's urban boundaries. Lands set aside within the Preserve will be appropriately managed while still providing passive recreational opportunities for area residents and the public at large.

2.5.3 City of San Diego Multiple Species Conservation Program Subarea Plan

The City of San Diego's MSCP Subarea Plan is a comprehensive, long-term habitat conservation planning program that is designated to preserve native habitat for multiple species by identifying areas for directed development and areas to be conserved in perpetuity, referred to as the Multi-Habitat Planning Area. The project site is currently outside of the City of San Diego MSCP Subarea Plan (City of San Diego 1997).

2.6 Air Quality – State Implementation Plan and Regional Air Quality Standards

The San Diego Air Basin (SDAB) is a nonattainment area for the federal ozone (O_3) standard which means it exceeds the National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency. The California Air Resources Board has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs, district rules, state regulations, and federal controls. The California Air Resources Board is the lead agency related to the SIP under state law. The San Diego Air Pollution Control District (SDAPCD) is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SIP plans for San Diego County specifically include the Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County (2012), and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide – Updated Maintenance Plan for Ten Federal Planning Areas.

The SDAPCD is the agency that regulates air quality in the SDAB. The SDAPCD prepared the Regional Air Quality Standards (RAQS) in response to the requirements set forth in the California Clean Air Act Assembly Bill (AB) 2595 (SDAPCD 1992) and the federal Clean Air Act. Motor vehicles are San Diego County's leading source of air pollution. In addition to these sources, other mobile sources include construction equipment, trains, and airplanes. Reducing mobile source emissions requires the technological improvement of existing mobile sources and the examination of future mobile sources, such as those associated with new or modification projects (e.g., retrofitting older vehicles with cleaner emission technologies). In addition to mobile sources, stationary sources also contribute to air pollution in the SDAB. Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources of air pollution are regulated by the local air pollution control or management district, in this case the SDAPCD.

The SDAPCD is responsible for preparing and implementing the RAQS. As part of the RAQS, the SDAPCD developed transportation control measures (TCMs) 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 RAQS and TCMs set forth the steps needed to accomplish attainment of NAAQS and CAAQS. The most recent update of the RAQS and corresponding TCMs were adopted in March 2023 (SDAPCD 2023).

The SDAPCD has also established a set of rules and regulations initially adopted on January 1, 1969, and periodically reviewed and updated. These rules and regulations are available for review on the agency's website (Regional Water Quality Control Board 2004).

2.7 Water Quality Control Plan for the San Diego Basin

San Diego Basin Plan (Basin Plan), adopted by the San Diego Regional Water Quality Control Board, sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, the Basin Plan is designed to accomplish the following: designate beneficial uses for surface water and groundwater; set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; describe implementation programs to protect the beneficial uses of all waters within the region; and describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan. The Basin Plan incorporates by reference all applicable State Water Resources Control Board and San Diego Regional Water Quality Control Board plans and policies. The project site lies within Otay Hydrologic Unit 910, within the San Diego Bay watershed. The Otay HU is listed on the Clean Water Act Section 303(d) list of impaired water bodies due to coliform bacteria, with other areas of concern including trace metals and other toxic constituents.

Chapter 3.0
Project Description

3.1 Project Background and Relationship to Other Planning Documents

3.1.1 Project Background

The Nakano Project (project) is proposed on a 23.77-acre parcel (Assessor Parcel Number [APN] 624-071-0200) south of the Otay River and east of Interstate 805 (I-805). The project site is currently within the City of Chula Vista, while the off-site improvement areas required for primary and secondary emergency access are located within the City of San Diego. The land to the east, south, and west of the site are within the City of San Diego. Due to the location of the Otay River separating the site from Chula Vista jurisdictional lands and public services to the north, and the availability of adjacent access and public services from the City of San Diego, the project site is being considered for annexation into the City of San Diego to provide logical organization of jurisdictional boundaries.

As detailed in the Memorandum of Understanding between the City of San Diego and the City of Chula Vista, approved on December 7, 2021, both agencies are considering annexation of the parcel from the City of Chula Vista to the City of San Diego. A Joint Exercise of Powers Agreement among the City of San Diego, City of Chula Vista, and the County of San Diego was executed on January 30, 1990, which allowed the parties to work together to acquire land for development of the adjacent Otay Valley Regional Park (OVRP). As a result of the Joint Exercise of Powers Agreement, the City of Chula Vista and City of San Diego entered into a non-binding Letter of Intent (LOI) to cooperate with each other in developing an OVRP Reorganization Plan that would propose reorganizing properties within the vicinity of the OVRP, including attaching the project site to the City of San Diego. On August 5, 2002, the City of San Diego passed Resolution No. R-296937 approving the LOI. The City of Chula Vista passed Resolution No. 2002-285 approving the LOI, which expired in 2003. The 2021 Memorandum of Understanding further details the intent to obtain approvals from the City of Chula Vista to allow for ultimate annexation of the site to the City of San Diego.

3.1.2 Relationship to Other Planning Documents

The project site is currently designated as Open Space by the City of Chula Vista General Plan and is within Agricultural Zone A-8 of the City of Chula Vista Zoning Code. The project would take primary access through an off-site parcel within the City of San Diego (APN 645-400-05-00) via Dennery Road to the south and secondary emergency access from Golden Sky Way within the City of San Diego (APN 645-400-0300) to the east. These off-site roadway connections within the City of San Diego are designated Residential – Low Medium in the City of San Diego's Otay Mesa Community Plan (OMCP) and RM-2-4 in the City of San Diego Land Development Code. The project site is identified as Open Space within the OVRP Concept Plan. The site is not currently within the City of San Diego's sphere of influence.

3.2 Project Objectives

In accordance with the California Environmental Quality Act Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the lead agency in developing a reasonable range of alternatives to be evaluated in this Environmental Impact Report (EIR), and ultimately aid decision makers in preparing findings and overriding considerations, if necessary. The project would implement the policies of both the City of San Diego and City of Chula Vista through implementation of the following objectives:

1. Develop underutilized property to provide housing in response to regional housing needs.
2. Achieve efficient provision of services through reorganization of the property through an application to the San Diego Local Agency Formation Commission (LAFCO) to detach from the City of Chula Vista and Otay Water District (OWD), and annex into the City of San Diego.
3. Provide a compact residential development pattern that is conducive to walking and bicycling.
4. Construct a variety of housing types at a density range that maximizes development potential consistent with the surrounding residential communities.
5. Provide amenities that contribute to the nearby OVRP recreational uses and community connectivity, including an overlook to the park and multi-modal connections.
6. Generate financial benefits to the local economy, through efficient provision of public services, providing workforce housing, and generating property tax and local jobs.

3.3 Project Scenarios

While there is only one proposed physical development proposal evaluated throughout the EIR, the agency responsible for project entitlements would vary depending on whether the project site is annexed into the City of San Diego and the timing of annexation in relation to site development. Additionally, the plan for service provision for each scenario varies slightly, detailed in Section 3.5. To account for the various site development pathways, the following scenarios are considered throughout the EIR.

3.3.1 No Annexation Scenario

The No Annexation Scenario assumes the project would stay in the City of Chula Vista and not be annexed into the City of San Diego. LAFCO approval of out of agency service agreements for services and utilities from the City of San Diego would be required. Under this scenario, the City of Chula Vista would issue grading and development permits for the project site; however, the City of San Diego would require a Site Development Permit (SDP) and grading permit for the off-site improvements associated with primary site access and secondary emergency access. Refer to Section 3.5 for a complete list of discretionary actions required.

3.3.2 Annexation Scenarios

Two potential annexation scenarios are outlined below. In both scenarios, the project site would be annexed into the City of San Diego. The key difference between the two annexation scenarios would be the agency responsibility for issuance of grading and development permits for the project site. These two scenarios are described below.

3.3.2.1 Annexation Scenario 2a: Site Development in San Diego after Annexation

In Annexation Scenario 2a, grading and development of the project site would not proceed until the LAFCO reorganization process is complete. In this scenario, the City of San Diego would issue grading and building permits for the project site and all off-site improvement areas after approval of the LAFCO reorganization.

3.3.2.2 Annexation Scenario 2b: Site Development in Chula Vista followed by Annexation

In Scenario 2b, grading and site development would proceed prior to LAFCO reorganization. In this scenario, the City of Chula Vista would issue grading and development permits for the project site and City of San Diego would issue a grading permit for the off-site portions located in the City of San Diego. Annexation of the project site to the City of San Diego would not occur until the City of Chula Vista issues all building permits and certificates of occupancy for the site.

3.4 Project Components

3.4.1 Development Summary

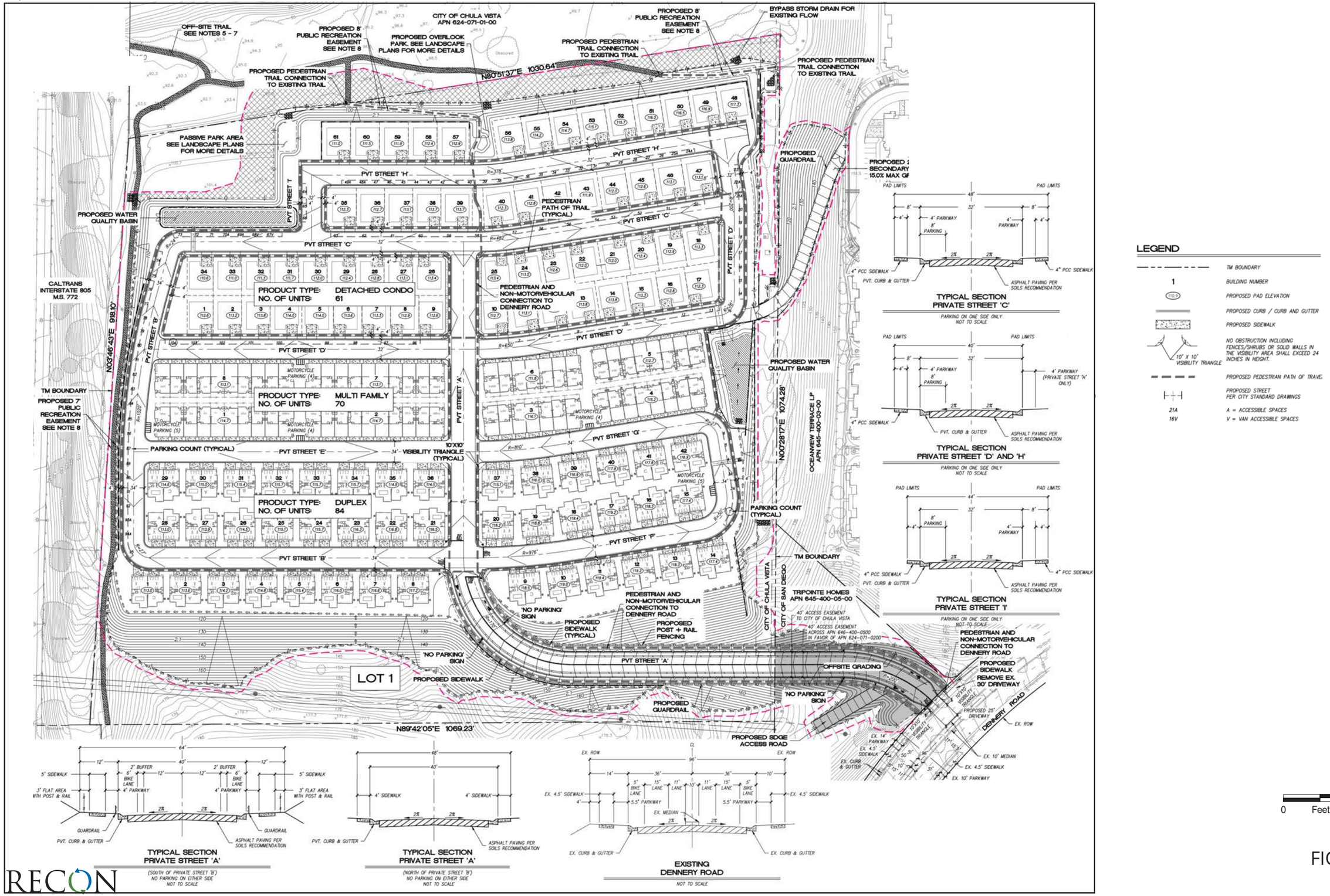
The project would develop up to 221 dwelling units consisting of detached condominiums, duplexes, and townhome dwelling units. While the site plan identifies a total of 215 units, consisting of 61 detached condominiums, 84 duplexes, and 70 townhome dwelling units (Table 3-1 and Figure 3-1), the environmental analysis assumes up to 221 units to account for potential changes in the unit mix.

Table 3-1
Development Summary

Unit Type	Number of Units[1]	Private Open Space
Condominiums (detached units)	61 units	58,760 sf or 963 sf/unit
Townhomes (multi-family)	70 units	9,700 sf or 139 sf/unit
Duplexes (attached units)	84 units	46,024 sf or 547 sf/unit
Common Open Space	26,726 sf	--

sf = square feet
[1]The site plan identifies 215 units; however, 221 units are evaluated throughout this EIR for a conservative analysis that accounts for potential changes to the unit mix.

Map Source: Civil Sense, Inc.



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FIGURE 3-1
Site Plan

While the proposed development design and density is the same under both scenarios, the process to implement the proposed zoning and development standards would differ under each scenario. In the No Annexation Scenario and Annexation Scenario 2b (see Section 3.3.2.2), the development would be implemented by the City of Chula Vista through adoption of a Specific Plan, as detailed in Section 3.4.1.1. As detailed in Section 3.4.1.2, under the Annexation Scenario 2a, the project would be implemented by the City of San Diego through application of base zone regulations including deviations to the Land Development Code and adoption of an uncodified ordinance applicable to the project site.

3.4.1.1 No Annexation Scenario

As part of the No Annexation Scenario, a Specific Plan is proposed to establish the land uses, intensity, development standards, design guidelines, and primary infrastructure components to guide implementation of the project. Refer to Section 3.5 for a comprehensive list of discretionary actions required for the No Annexation Scenario. As detailed in the Specific Plan, development of the residential units under the No Annexation Scenario would be subject to the development regulations shown in Table 3-2 in addition to a maximum development potential of 221 units.

Table 3-2
Chula Vista Development Regulations

Development Regulation	Metric
Minimum lot size	1,000
Maximum lot size	1,500 square feet
Floor Area Ratio[1]	1.50
Minimum front setback	10 feet
Minimum driveway length	15 feet
Minimum side setback	5 feet or 10 percent of premises width
Minimum street side setback	10 feet or 10 percent of the premises width
Minimum rear setback	15 feet
Maximum Building Height	30 feet
Off-street Parking 1 Bedroom 2 Bedrooms 3 Bedrooms 4 Bedrooms	 1.5 spaces 2 spaces 2 spaces 3 spaces
Common Area Parking	A rate of 15 percent of the total off-street parking spaces required
Common Open Space	A rate of 25 square feet per dwelling unit, with at least one common open space area with minimum dimensions of 12 feet by 15 feet that is improved with lawn or recreational facilities.
Private Open Space (including private balconies and patios, front yards, backyards, and side yards) 1 Bedroom 2 Bedrooms 3 Bedrooms 4 Bedrooms	 400 square feet 400 square feet 480 square feet 560 square feet
[1]Floor Area Ratio is a measure of the bulk of buildings on a lot or site.	

3.4.1.2 Annexation Scenario 2a

In the Annexation Scenario 2a, the City of San Diego would adopt a prezoning ordinance to allow for the project site to be zoned Residential Multiple Unit 1-1 (RM-1-1), which would permit a maximum density of one dwelling unit for each 3,000 square feet of lot area. The site would be designated Residential-Low Medium in the OMCP and San Diego General Plan. Refer to Table 3-4 for a comprehensive list of discretionary actions required for the Annexation Scenario 2a.

Development regulations for the site would be as defined in the San Diego Municipal Code (SDMC) regulations for the RM-1-1 zone except two deviations from the SDMC are requested as follows:

- Allow a 10-foot side yard setback where up to 50 percent of the length of the building envelope on one side of the premises may observe the minimum 5-foot side setback, provided the remaining percentage of the building envelope length observe at least the standard side setback of feet 5 feet or 10 percent of the lot width (100 feet), whichever is greater pursuant to SDMC 131.0443(d)(2)(A), Table 131-04G.

Allow retaining wall heights up to 24 feet outside of the setback where the maximum allowed is 12 feet pursuant to SDMC Section 142.0340(e). Deviations from the development regulations for the RM-1-1 zone would be implemented through adoption of an uncodified ordinance. As specified in SDMC Table 131-04G, development regulations of the RM-1-1 zone include but are not limited to:

- 3,000 square feet per dwelling unit maximum permitted density
- 6,000 square feet minimum lot area
- 30-foot maximum structure height
- 1.25 maximum floor area ratio
- Private open space requirements per SDMC Section 131.0455(a)
- Common open space requirements per SDMC Section 131.0456.

Additionally, site design regulations would be adopted through an uncodified ordinance. The project would be required to comply with Zone RM-1-1 regulations, and proposed deviations, site design criteria, and conditions of approval which would be part of the uncodified ordinance. Based on the proposed RM-1-1 zone, the project site could accommodate up to 345 units; however, the maximum development potential for the site would be limited to up to 221 units through the uncodified ordinance.

3.4.1.3 Annexation Scenario 2b

In this scenario, the City of Chula Vista development regulations described in Section 3.4.1.1 would govern development of the project site. This scenario would require City of San Diego adoption of a prezoning ordinance to allow for the project site to be zoned RM-1-1, in addition to a Community Plan and General Plan amendment to designate the site Residential-Low Medium in the OMCP and San Diego General Plan

3.4.2 Residential Unit Mix

The detached condominiums would be two-story, stand-alone units that share no adjoining walls with neighboring units. The condominiums feature three to five bedrooms and attached two-bay garages. The condominiums units would range in size from approximately 1,761 to 2,135 square feet. Each unit would include a private driveway, backyard, and side yard.

The duplexes would include two units stacked side-by-side within a two- or three-story structure. Each unit would include three to four bedrooms, 2.5 bathrooms, and a two-bay garage with private driveway. Duplex units would range in size from approximately 1,461 to 1,668 square feet.

The attached multi-family (townhomes) would consist of four to five units clustered in a row with no separation between units. The townhomes would be two or three stories with varied roof pitching. Each townhome unit would include two to four bedrooms, two- to two-and-one-half bathrooms, and a two-bay garage. The townhome dwelling units would range in size from approximately 1,083 to 1,480 square feet.

The project would provide 10 percent of the total units, or 22 units, as affordable. A total of 11 units would be affordable-to-low-income households (five percent of the total) and 11 units would be affordable-to-moderate income households (five percent of the total).

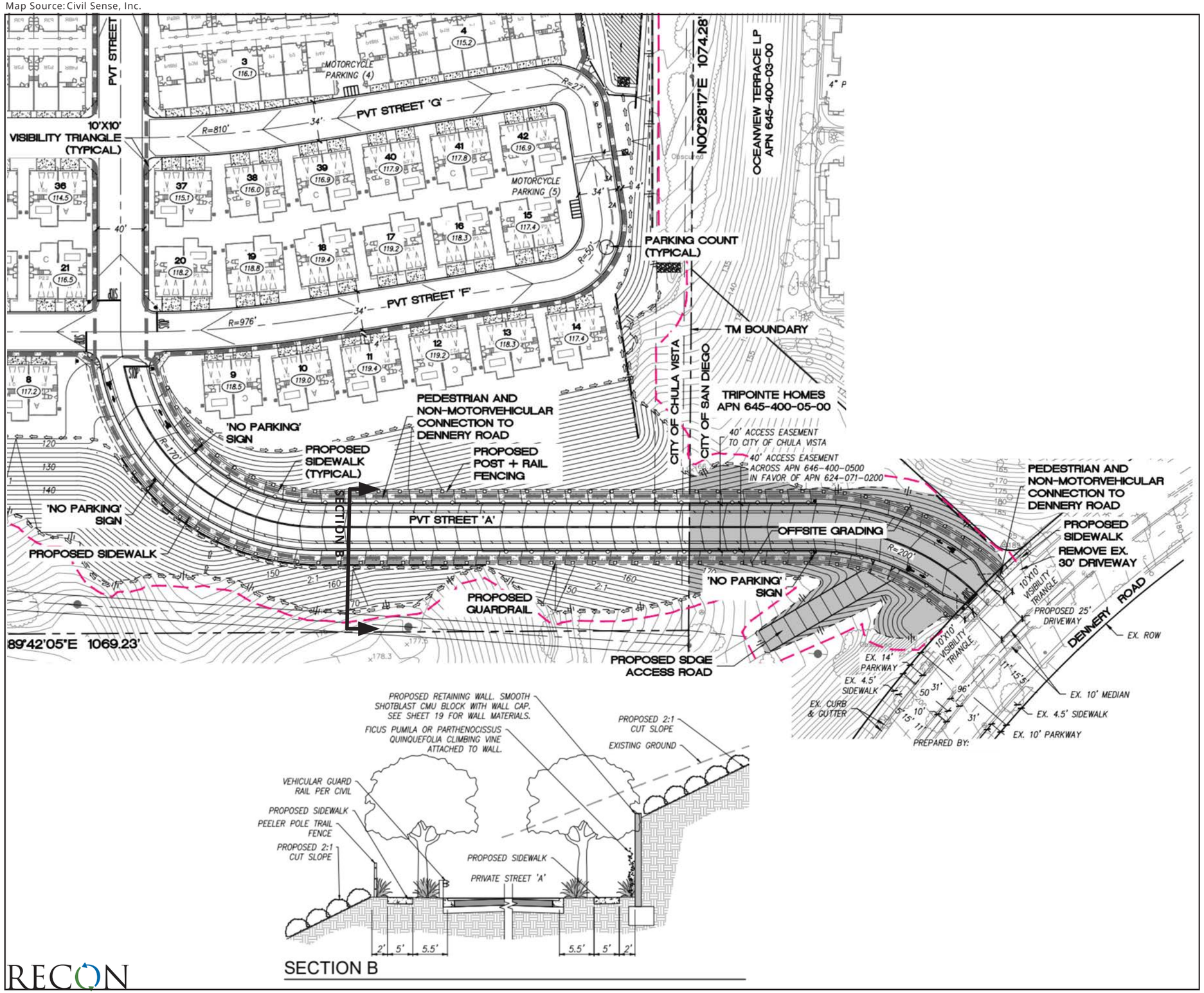
3.4.3 Roadway Improvements and Circulation

3.4.3.1 Access and Internal Circulation

Access to and from the project site would be provided via Dennery Road, a City of San Diego 4-Lane Collector located southeast of the project site. Primary site access from Dennery Road would be provided through an off-site parcel located within the City of San Diego. Primary access via Private Street A would include a full curb and gutter and a new 25-foot-wide driveway approximately 40 feet southwest of the existing driveway. An access easement through the off-site primary access road would be granted in favor of all parcels within the project site. Internal circulation would consist of a series of private streets (A through I). Private Street A would be the main project access providing access to the site via Dennery Road (Figure 3-2). As shown in Figure 3-2, post and rail fencing and guardrails would be constructed along Private Street A (see Section B on Figure 3-2). Private Street A would be accessed from Dennery Road with right-in/right-out movements only. All internal private streets are referred to as private streets in the City of Chula Vista and private drives in the City of San Diego.

Access to the exiting San Diego Gas and Electric (SDG&E) utility line and easement area along the southern portion of the site would be provided via a driveway access from Private Street A that would connect to an existing dirt access road (see Figure 3-2).

Map Source: Civil Sense, Inc.



LEGEND

- TM BOUNDARY
- 1 — BUILDING NUMBER
- (110.0) — PROPOSED PAD ELEVATION
- PROPOSED CURB / CURB AND GUTTER
- PROPOSED SIDEWALK
- 10' X 10' VISIBILITY TRIANGLE — NO OBSTRUCTION INCLUDING FENCES/SHRUBS OR SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 24 INCHES IN HEIGHT.
- PROPOSED PEDESTRIAN PATH OF TRAVEL
- PROPOSED STREET PER CITY STANDARD DRAWINGS
- 21A — A = ACCESSIBLE SPACES
- 16V — V = VAN ACCESSIBLE SPACES

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FIGURE 3-2
Private Street "A"

Secondary emergency only access would be provided via a 20-foot-wide emergency access road located off-site within an existing manufactured slope, in the northeastern portion of the project area (Figure 3-3). An easement from the adjacent property owner would be required to allow access through this property. The emergency access road would enable emergency-only travel to the east through the adjacent residential community in the City of San Diego. The emergency access road would be a concrete roadway with a guard rail and a 15 percent maximum grade. The road would be gated with a swing gate and Knox key switch to prohibit public entry but allow access for emergency personnel.

3.4.3.2 Off-site Roadway Improvements

a. Dennery Road at the Project Driveway

At the project entrance along Dennery Road and the project driveway, the existing driveway would be replaced with full curb and gutter and a new 25-foot-wide driveway would be constructed approximately 40 feet southwest of the existing driveway. The project would remove and/or repair existing trees and landscaping affected by driveway construction (see Note 11, Conceptual Landscape Plan).

b. Palm Avenue and Dennery Road Intersection

The following improvements would be implemented at this intersection:

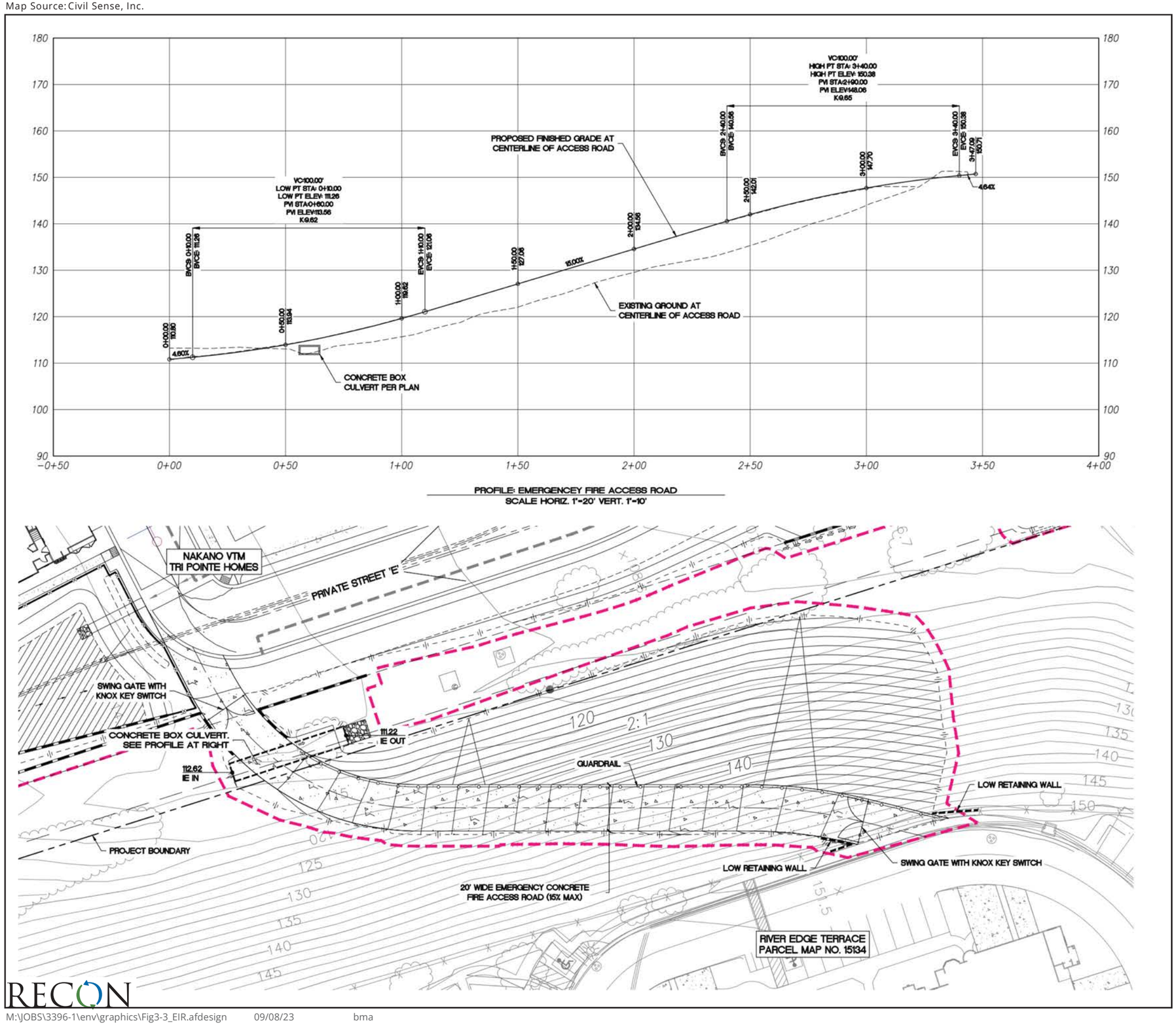
- Palm Avenue Left Turn Bay Storage: To accommodate additional project trips, for eastbound left turns, the project would extend the existing left turn bay storage at the intersection of Palm Avenue and Dennery Road by an additional 85 feet to provide approximately a total of 365 feet of left turn bay storage. This improvement would remove the existing transition and construct a new transition 85 feet to the west including stamped concrete to match the raised median nose to the east. The improvement would require the removal of existing landscaping, including trees and plants. Refer to Figure 3-4 for a schematic of proposed improvements.

- Dennery Road Right Turn Bay Storage: To accommodate additional project trips, for southbound right turns, the project would extend the right turn bay by an additional 50 feet to provide a total of approximately 145 feet of right turn bay storage. This improvement would construct new transition, pavement, curb, and gutter and remove and replace existing curb, gutter, and landscaping including trees and plants. Refer to Figure 3-4 for a schematic of proposed improvements.

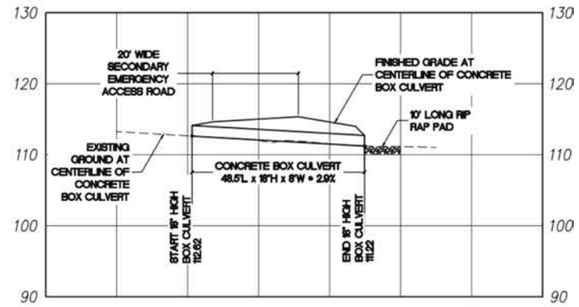
- As part of the City of San Diego's Systemic Safety The Data-Driven Path to Vision Zero (San Diego 2019), to increase the visibility of traffic signals and reduce vehicles from proceeding through red lights, upgraded signal heads with backplates with retroreflective borders would be installed by the project at all intersection approaches.

- As part of the City of San Diego's Systemic Safety The Data-Driven Path to Vision Zero (City of San Diego 2019), at the intersection of Palm Avenue/Dennery Road, proposed improvements include the installation of audible countdown pedestrian heads for each pedestrian phase and upgrading the traffic controller to a 2070 controller including software update and communications equipment per current City of San Diego standards by the Owner/Permittee.

Map Source: Civil Sense, Inc.



PROFILE: EMERGENCEY FIRE ACCESS ROAD
SCALE HORIZ. 1"=20' VERT. 1"=10'



PROFILE: CONCRETE BOX CULVERT
SCALE HORIZ. 1"=10' VERT. 1"=5'

LEGEND

- TM BOUNDARY
- 1 — BUILDING NUMBER
- (110.5) — PROPOSED PAD ELEVATION
- PROPOSED CURB / CURB AND GUTTER
- PROPOSED SIDEWALK
- 10' X 10' VISIBILITY TRIANGLE — NO OBSTRUCTION INCLUDING FENCES/SHRUBS OR SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 24 INCHES IN HEIGHT.
- PROPOSED PEDESTRIAN PATH OF TRAVEL
- PROPOSED STREET PER CITY STANDARD DRAWINGS
- 21A — A = ACCESSIBLE SPACES
- 16V — V = VAN ACCESSIBLE SPACES

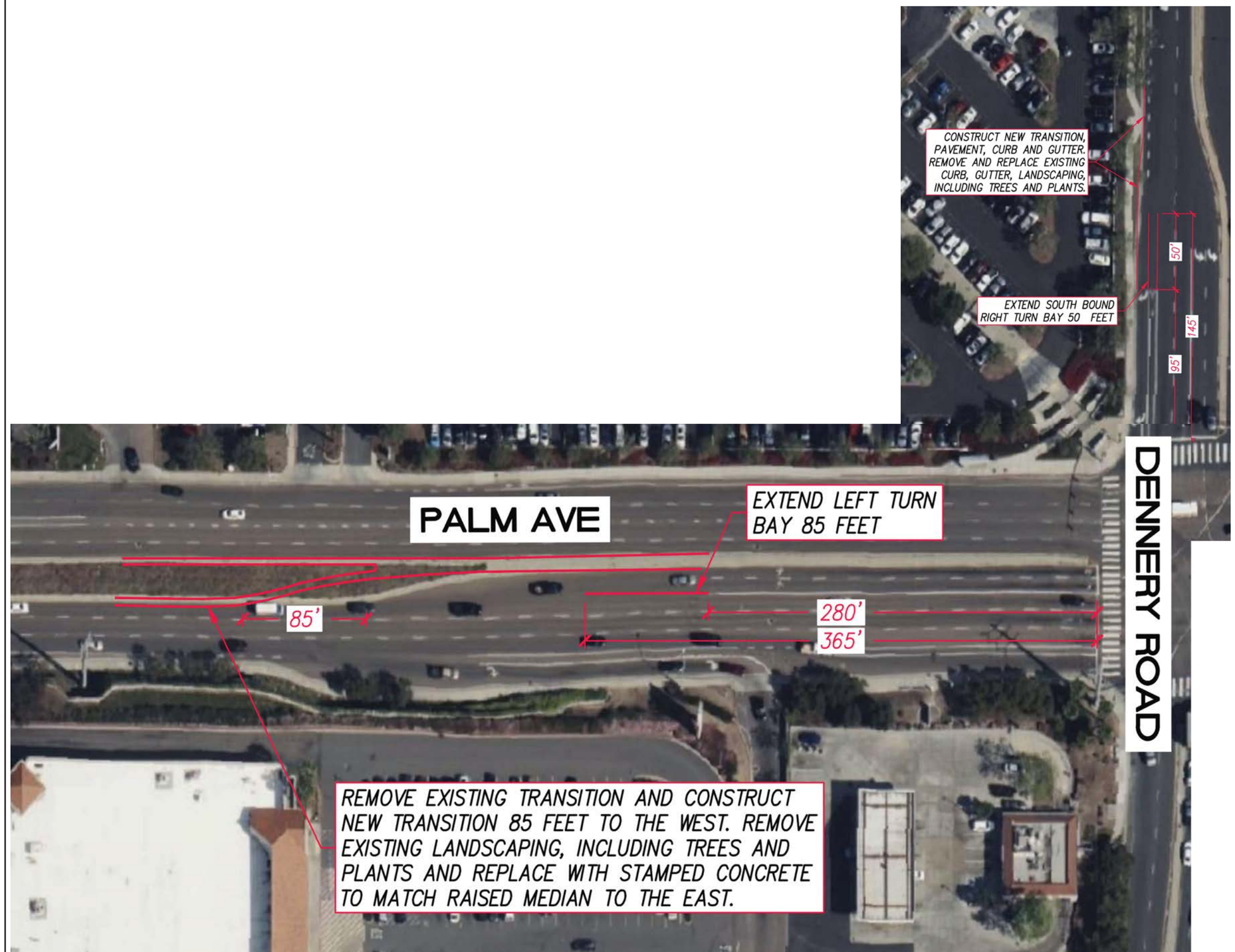
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FIGURE 3-3
Secondary Access

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Map Source: Civil Sense, Inc.



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FIGURE 3-4
Off-site Roadway Improvements -
Turn Bay Storage at Palm Ave. & Dennery Rd

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c. Dennery Road/Red Coral Lane/Red Fin Lane Intersection

To accommodate the project's eastbound U-turning vehicles along Dennery Road, the project would extend the left turn bay storage by an additional 50 feet at the intersection of Dennery Road/Red Coral Lane/Red Fin Lane to provide a total of approximately 240 feet of left turn bay storage. This improvement would require the removal of some median landscaping and construction of a new transition approximately 50 feet to the east. Refer to Figure 3-5.

Additionally, to increase safety and functionality for bicyclists, the existing bicycle loop detectors along Dennery Road at Red Fin Lane would be upgraded and Type E Modified front loops per City of San Diego Standard Drawing SDE-104 would be installed on all approaches. Bicycle loop detectors ensure bicycles are detected at traffic signals so that the signals change allowing for bicycle movement. The modified front loops are wires installed in the roadway that detect vehicles and bicyclists and communicate to the signal controller that there is a vehicle and/or bicyclist in the travel lane.

d. Fair Share towards City/California Department of Transportation Interstate 805/Palm Avenue Bridge Widening

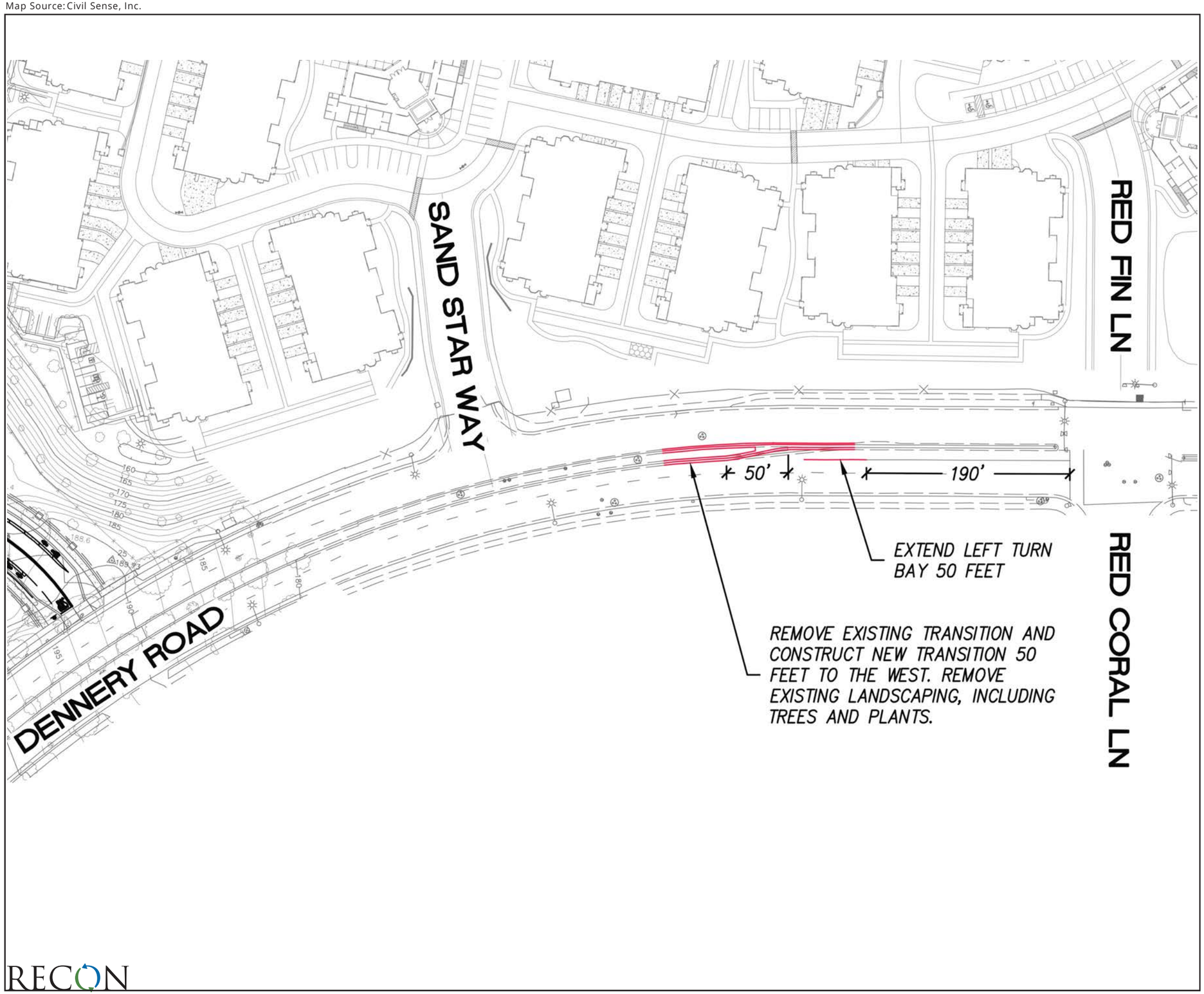
While not a project improvement that would be constructed as a part of the project, the project would contribute 2.5 percent of the unfunded cost of the planned City/California Department of Transportation I-805/Palm Avenue bridge widening project which proposes to expand the Palm Avenue bridge to accommodate five lanes between the I-805 southbound and northbound ramps. This project is project number OM T-1 per Table 6 of the Fiscal Year 2014 Otay Mesa Public Facilities Financing Plan (City of San Diego 2015).

3.4.4 Open Space and Recreational Amenities

3.4.4.1 Parks

The project would include several pocket parks, paseos, and trail connections to the OVRP, as shown in Figure 3-6. Pocket parks and paseos are considered "Private Common Open Space Amenity Areas" that count towards the project's common usable open space obligations and not towards the project's public parklands obligations. As shown in Figure 3-6, two park areas are sited along the northern boundary to increase access and views toward the OVRP. The central overlook pocket park at the northern boundary would provide a trail connection to the OVRP. The pocket park at the northwestern corner of the site would offer two playground areas. An approximate 0.04-acre monument entry pocket park would be provided near the project entrance.

Map Source: Civil Sense, Inc.



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FIGURE 3-5

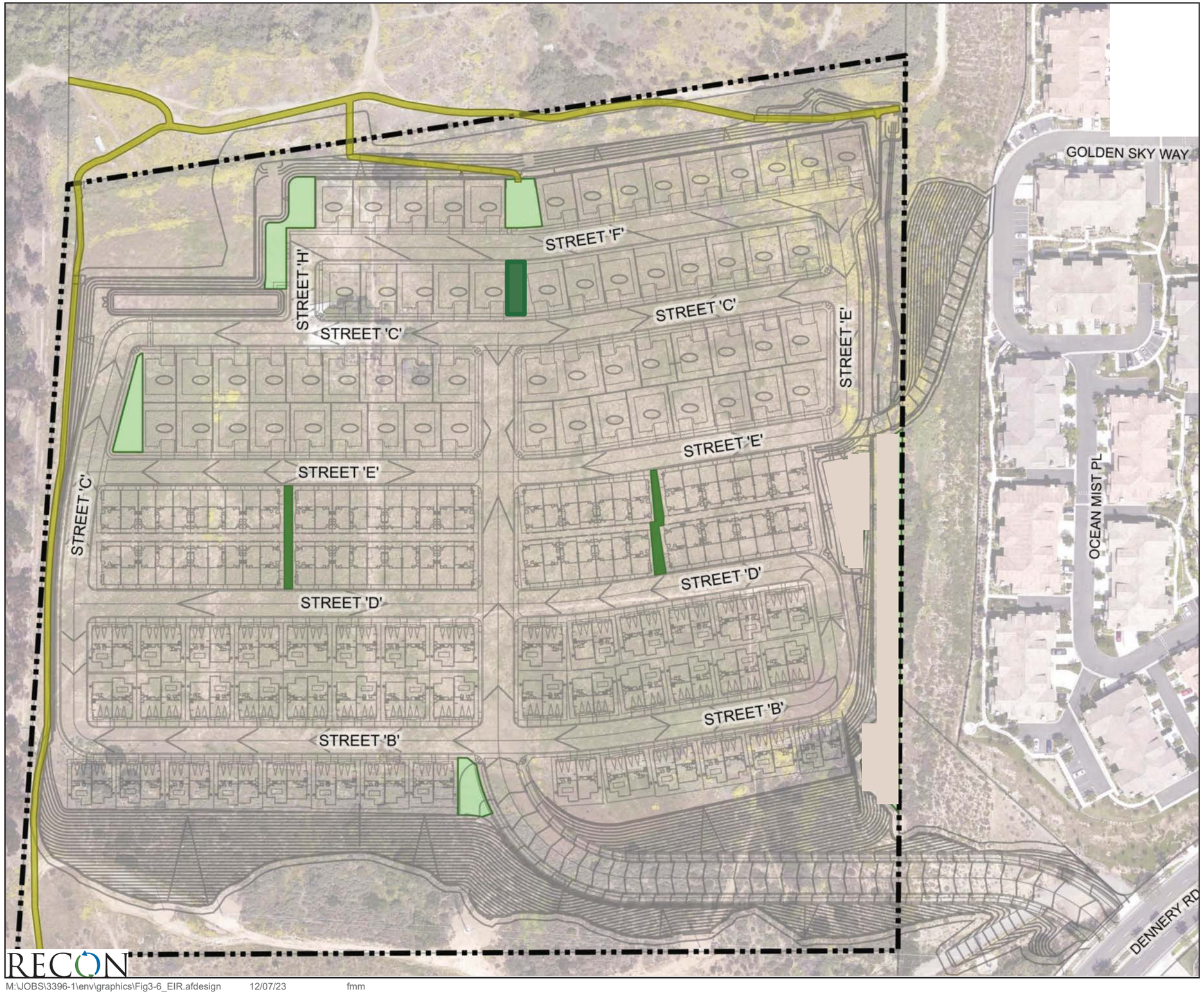
Off-site Roadway Improvements -

Left Turn Bay Storage at Intersection of Dennery Rd / Red Coral Ln / Red Fin Ln

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Map Source: Rick Engineering, Inc.



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FIGURE 3-6
Parks and Trails

As detailed in the Specific Plan Design Guidelines for the No Annexation Scenario and Annexation Scenario 2b and the City of San Diego uncodified ordinance for Annexation Scenario 2a, the following design guidelines would apply to pocket parks:

- Private common open space amenity areas should be accessible by bicycling, walking, and public transit;

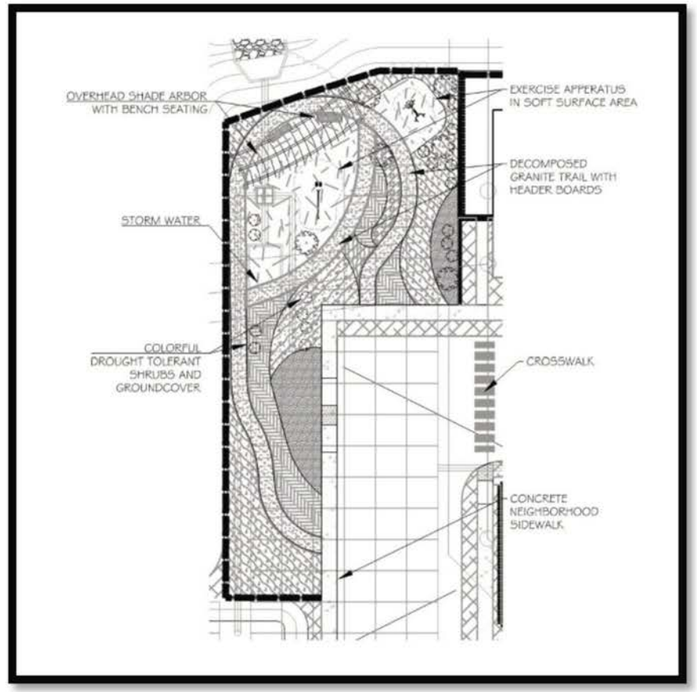
- The entry monument private open space amenity area should provide a sense of arrival to the neighborhood with an illuminated monument ground sign; and

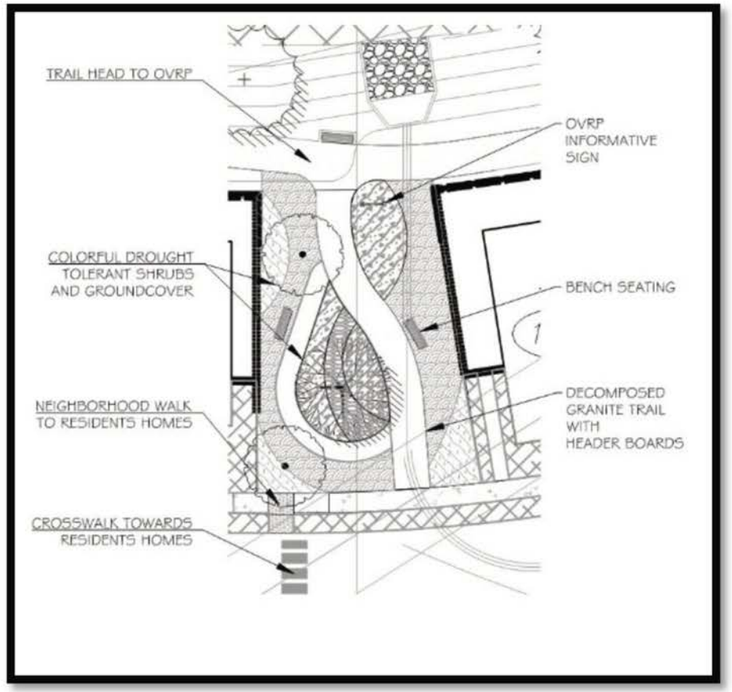
- Private common open space amenity areas are encouraged to provide the following recreational amenities and design criteria:
    - Play structures or tot-lots;
    - Exercise apparatus;
    - Overhead shade arbor with bench seating;
    - Decomposed granite trail with header boards;
    - Colorful drought tolerant shrubs and groundcover;
    - Bordering landscaping consisting of shade trees, accent trees, and screening trees;
    - Meandering decomposed granite pathways;
    - Trailhead connecting to Otay Valley Regional Park Trail;
    - Otay Valley Regional Park informative signage;
    - "Fallen Tree" balance beam;
    - Stepping stumps and boulders;
    - Bicycle racks;
    - Bench seating;
    - Safety lighting and rail fencing; and
    - Trash and recycling receptacles;
    - Pet Waste Stations

Private Common Open Space Amenity Areas would be landscaped with seating, walkways, and other amenities. Pet waste stations may be included within private common open space areas (not along public trails). The site design measures establish that each scenario provide conceptual pocket park designs. In addition to parks, the project would provide paseos, which are enhanced pedestrian pathways providing residents additional green space incorporating large trees, shrubs, bench seating, and exercise stations. Conceptual private common open space amenity areas and paseo designs are depicted on Figure 3-7. As detailed on the Conceptual Landscape Plan, trees would be maintained at a minimum of two feet clearing from buildings.

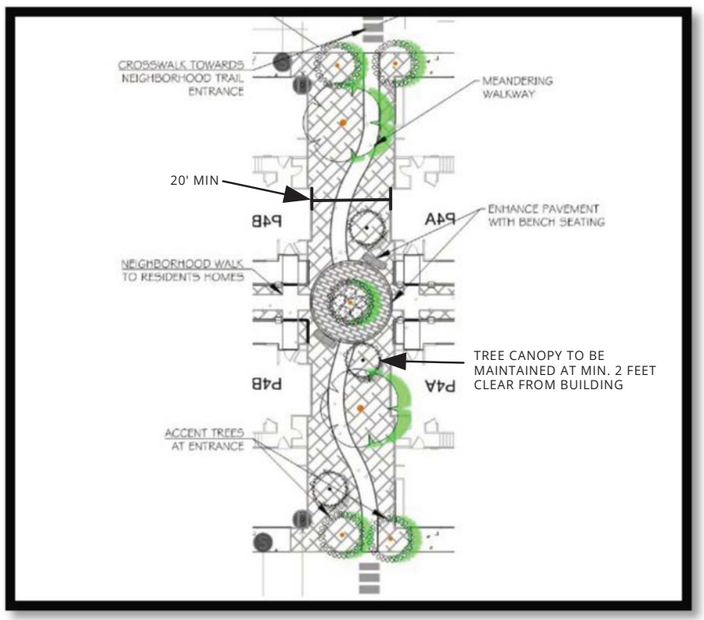
The private common open space amenity areas would contribute to the projects common open space requirements. Should the project site be annexed to and developed in the City of San Diego, the project shall comply with the standards and requirements of the City of San Diego Parks Master Plan.

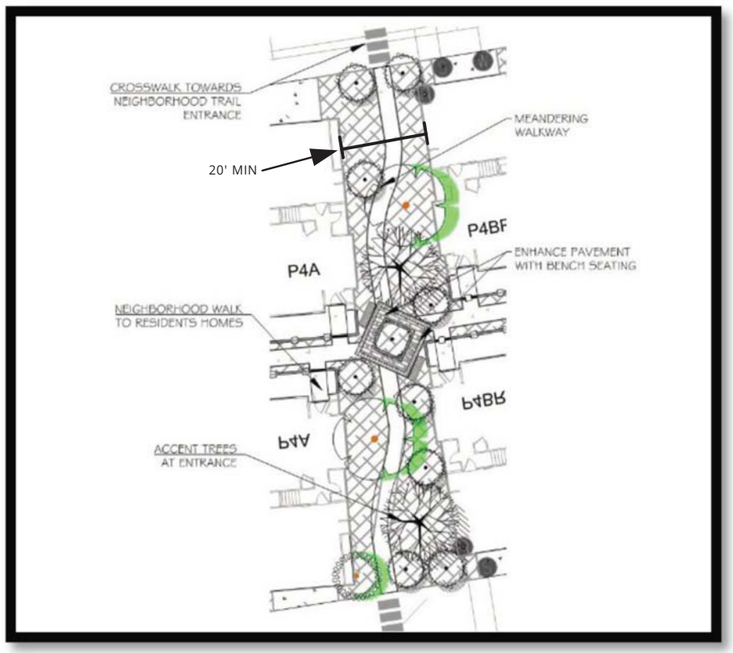
Map Source: Rick Engineering, Inc.





Conceptual Private Common Open Space Amenity Areas Design





Conceptual Paseo Design

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FIGURE 3-7
Conceptual Park and Paseo Design

3.4.4.2 Public Trails

The project would emphasize trail connections to the OVRP for both residents and members of the surrounding community. An existing trail connection running along the western side of the project site would be retained as a 7-to-8-foot-wide trail enhanced with decomposed granite surfacing to provide connection to the OVRP trail system. This existing trail would be separated from the development area by a small retaining wall and a composite split rail fence.

In addition to the north-south trail connection, the project would provide trail improvements within the parcel to the north to enhance the OVRP trail system. Proposed trail improvements are shown on Figure 3-6. Trails in the north within the OVRP would be 8 feet wide, with decomposed granite surfacing, header boards on each side, and peeler pole fencing on one side of the trail. Trail improvements would be constructed consistent with OVRP trail guidelines. All on-site trails would be maintained by the Homeowners Association (HOA) but would be available for public access through dedication of a public recreation access easement. Trails within the parcel to the north would be maintained by the OVRP. A trail signage and OVRP kiosk would be provided near the project entry, identifying public access to the OVRP trail system is available through the project site. An additional trail sign would be placed at the overlook park at the north end of the project site.

3.4.4.3 Open Space

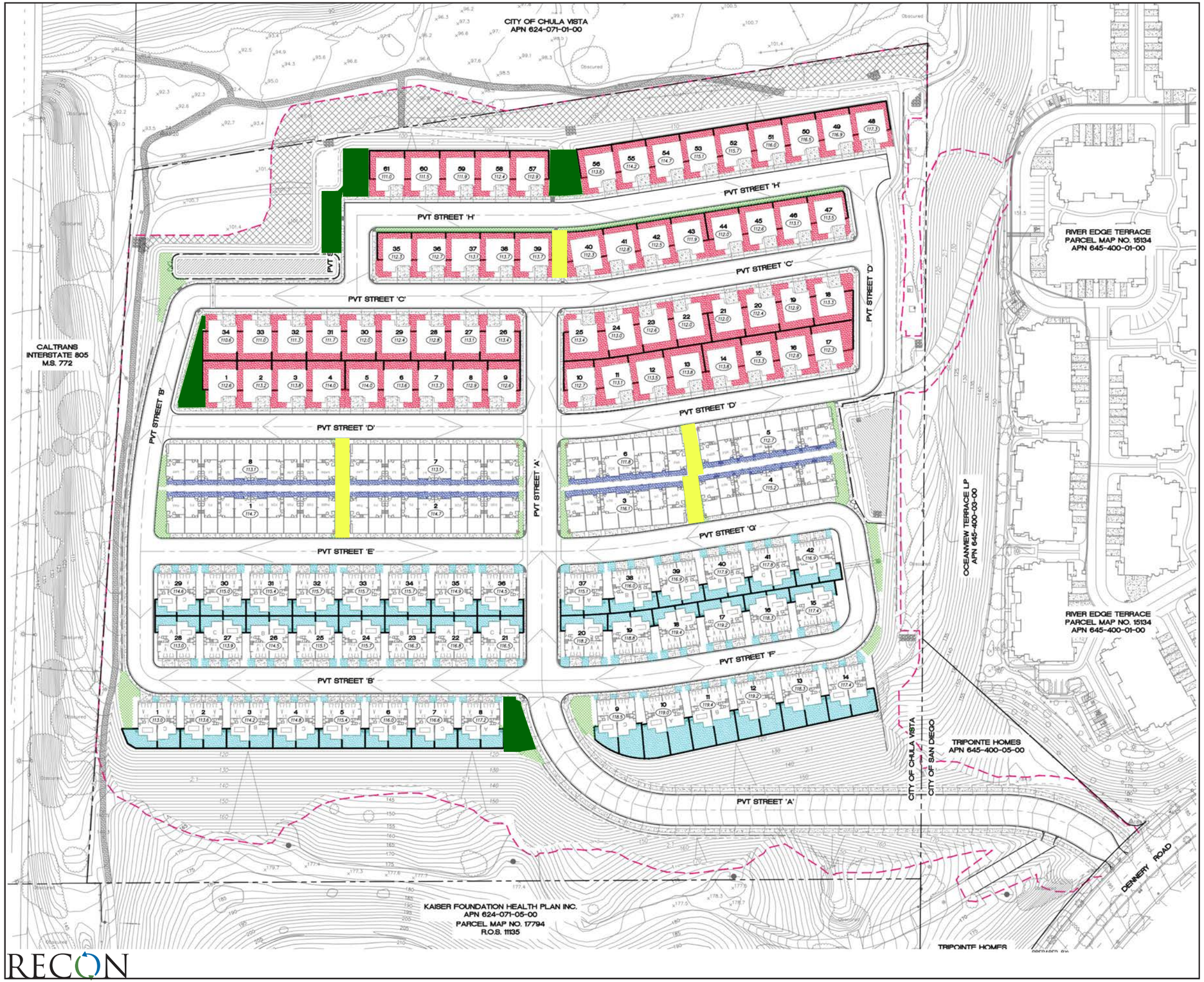
The project's private common open space amenity areas are depicted on Figure 3-8. Private common open space includes the pocket parks and paseos described in Section 3.4.4.1. Private open space is for the individual use of each resident and includes private balconies and patios, front yards, back yards, and side yards. Private open space is required to meet the private open space standards defined in the Specific Plan for the No Annexation Scenario and Annexation Scenario 2b or the requirements of SDMC Section 131.0455(a) and the uncodified ordinance for the Annexation Scenario 2a.

3.4.5 Pedestrian and Bicycle Facilities

Neighborhoods within the project site would be linked via sidewalks, paseos, bicycle amenities, and a continuous street network that would accommodate a variety of living styles and mobility options. The proposed internal streets would have sidewalks and landscaped paseos that would provide connections to the proposed pocket parks, as well as trail access to the OVRP. Internal mobility and pedestrian access to Dennery Road would ensure accessible pedestrian access to bus stops located along Palm Avenue and Dennery Road.

The project would provide buffered Class II bike lanes along Private Street A, the main private street running through the site. The buffered Class II bicycle lanes would separate bicycles from automobile traffic and link to the existing Class II bike lane along Dennery Road. The private streets leading east and west from the primary roadway would include bicycle sharrows, which are painted markings on the road surface to indicate to drivers that the road must be shared with bicycles. Bicycle racks would be located at pocket parks.

Map Source: Civil Sense, Inc.



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FIGURE 3-8
Proposed Open Space

Bicycle improvements (bicycle loop detectors) are also proposed along Dennery Road at Red Fin Lane as described in Section 3.4.4.c.

3.4.6 Parking

Parking for individual units would be provided within each unit's garage and driveway consistent with the SDMC Chapter 14, Article 2, Division 5: Parking Regulations and the Design Guidelines. Additional common area, motorcycle, and accessible parking spaces would also be provided as detailed in Table 3-3.

Table 3-3
Parking Summary

Parking Description	Spaces Provided
Garage Spaces[1]	430
Accessible Spaces	14
Off-Street Parking (driveway spaces associated with lots 1 through 61)	122
On-Street Parking[2]	90
Total Spaces Provided[3]	**656**
Other Parking – Motorcycle	22

[1]Consistent with 2022 Title 24 Green Building Standards, Residential Mandatory Measures requires each garage to accommodate a listed raceway to accommodate a dedicated 208/240-volt branch circuit which would allow for electric vehicle charging.
[2]Street parking would be limited to one side of the private streets.
[3] Based on the unit mix and bedroom count, 551 total off-street parking spaces are required per SDMC Chapter 14, Article 2, Division 5: Parking Regulations and 619 off-street parking spaces are required per Chula Vista Municipal Code Sections 19.62.010-19.62.130.

3.4.7 Landscaping and Open Space

The project has prepared a detailed landscape plan to guide the appearance and functionality of landscaping within the project site. Street trees would be provided along Dennery Road in addition to the proposed private streets. Native, drought-tolerant species would be emphasized for water conservation, fire resistance, and erosion control. The HOA would be responsible for long-term maintenance of all landscaping outside of individual homeowner lots, within the entirety of the project site. All constructed slope areas would be landscaped in compliance with applicable jurisdiction guidance. The project would be consistent with all City of San Diego and City of Chula Vista requirements relating to minimum planting and landscaped area requirements. Under the Annexation 2b Scenario, street tree selections would comply with the OMCP approved street tree species list.

Undeveloped portions of the site including sloped areas in the southern portion of the site and portions of an on-site drainage running along the eastern edge of the project site would be protected through dedication of a covenant of easement restricting future development within these areas. Along the wetland drainage area, placement of signage would denote the presence of

an environmentally sensitive area. The project has been designed to not require brush management within the drainage. Additionally, signage would include notice of prohibition of brush management. Along the eastern edge of the project site, the landscape plan incorporates wetland plant species within the on-site detention basin and within the drainage area north of the secondary access road.

In the event of annexation into the City of San Diego, the project would be annexed into the Ocean View Hills Maintenance Assessment District (OVH MAD) due to the project's frontage on Dennery Road and adjacency to the OVH MAD. The OVH MAD levies taxes on property to fund specified improvements within the boundary of the district. District improvements and activities generally consist of maintenance and servicing of specified landscaped and paved medians, landscaped and paved rights-of-way, landscaped slopes, natural open space areas, gutters, and neighborhood and community parks. The OVH MAD boundary generally includes the Ocean View Hills, Robinhood Ridge, and Remington Hills neighborhoods.

3.4.8 Fire Management

Brush management zones and alternative compliance features are depicted on Figure 3-9. As shown, the project incorporates fuel modification alongside roadways and generally within 100 feet of residences. Where 100 feet of brush management cannot be accommodated, alternative compliance measures are incorporated to provide enhanced fire protection.

Alternative compliance measures include the installation of radiant heat walls would be installed along the brush side of the following buildings as depicted on Figure 3-9. Specifically, radiant heat walls would be provided at the following buildings as depicted on the plans:

- Buildings 17-18, 47-61 of the detached condominiums units
- Buildings 1, 4-5, 8 of the multi-family units
- Buildings 1, 14-15, 28-29, 42 of the duplex units

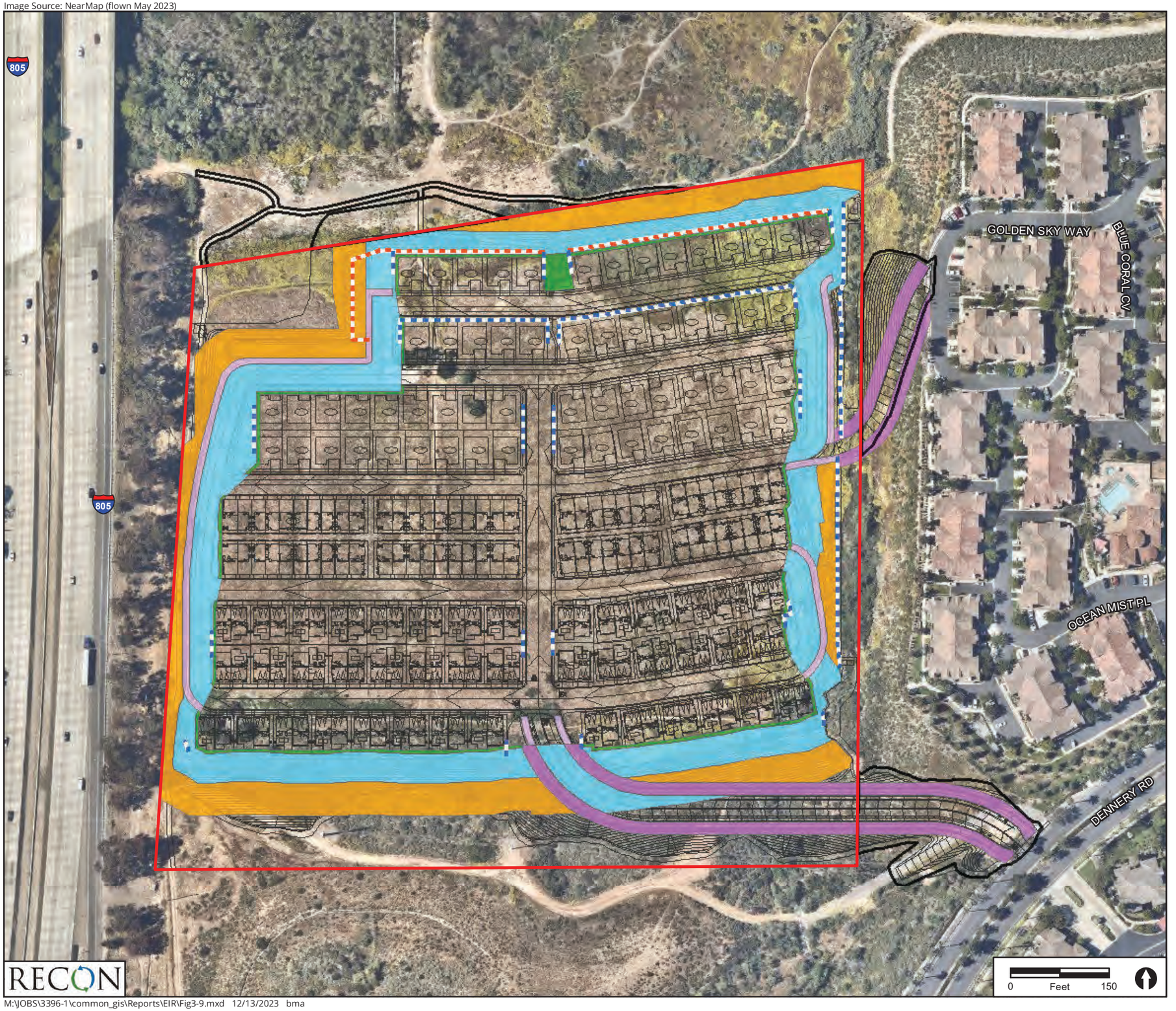
Specifically, radiant heat walls would be either 6-foot masonry walls or 6-foot masonry with glass view fence wall as depicted on Figure 3-10. Both walls provide fire protection; however, the masonry with glass view wall is provided along the northern project border to provide views toward the Otay River.

Additional alterative compliance measures would be installed including dual glazed/dual tempered panes and additional 10-foot perpendicular returns along adjacent wall faces in the following building locations:

- East side walls of the detached condominium buildings 17, 18, 47, and 48, multi-family buildings 4 and 5, and duplex buildings 14, 15, and 42
- West side walls of multi-family buildings 1 and 8, duplex buildings 1, 28, and 29
- North side walls of buildings 48 through 61 of the detached condominiums.

Additional project design features addressing fire safety are detailed in Section 3.6.2.1.

Image Source: NearMap (flown May 2023)



Project Site
Off-site Improvements
6-foot Masonry and Glass View Fence and Radiant Heat Wall
Masonry Wall

Fuel Modification

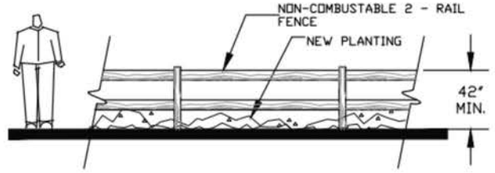
Zone 0 (0-5', Non-combustible)
Zone 1 (5-50', Permanent Irrigation)
Zone 2 (50-100', Temporary Irrigation/Thinned Vegetation)
10-ft Roadside Zone
20-ft Roadside Zone

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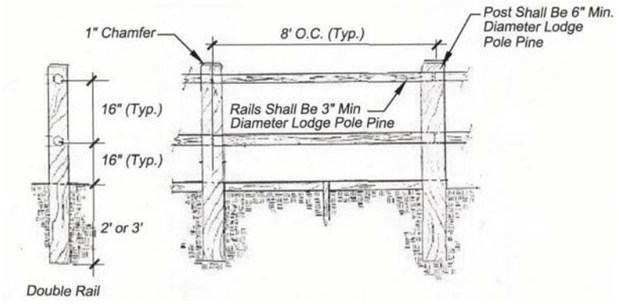
FIGURE 3-9
Fuel Management and Fire Walls

Map Source: Civil Sense, Inc.



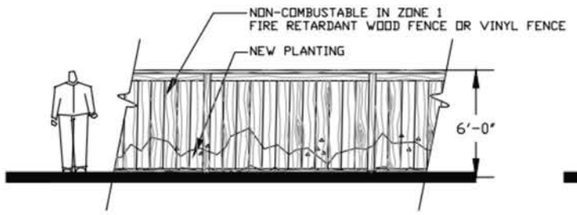
SPLIT 2 RAIL COMPOSITE FENCE

NTS SYMBOL ON PLAN:



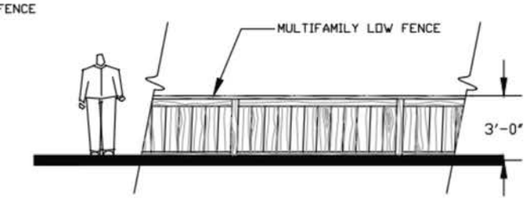
PEELER POLE FENCE

NTS SYMBOL ON PLAN:



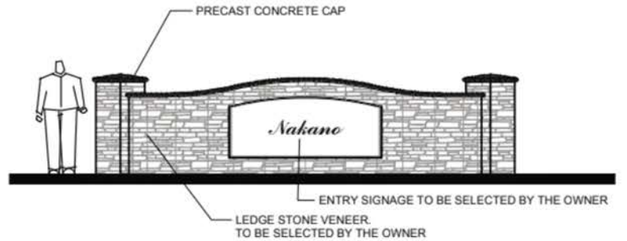
6' SOLID FENCE

NTS SYMBOL ON PLAN:



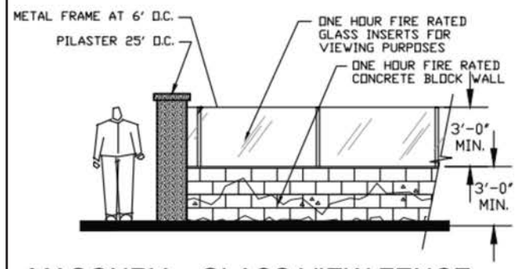
3' LOW FENCE

NTS SYMBOL ON PLAN:



MONUMENT WALL DETAIL

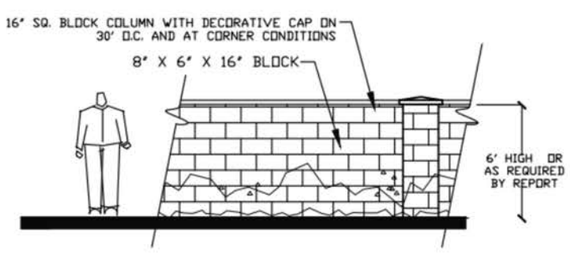
N.T.S. SYMBOL ON PLAN



MASONRY + GLASS VIEW FENCE & RADIANT HEAT WALL

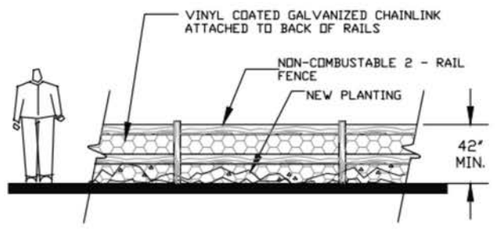
NTS SYMBOL ON PLAN:

* REQUIRED RADIANT HEAT WALL SEE BRUSH MANAGEMENT PLAN



MASONRY WALL

NTS SYMBOL ON PLAN:



SPLIT 2 RAIL COMPOSITE FENCE W/ CHAINLINK

NTS SYMBOL ON PLAN:

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FIGURE 3-10
Fence and Wall Detail

3.4.9 Signage, Lighting, Walls, and Fencing

3.4.9.1 Signage and Lighting

The project would include vertical monument signage with lighting within private property, along the project frontage at the entrance driveway from Dennery Road. Additional monument signage with lighting within private property is proposed at the entry into the residential area at the project entrance driveway, outside of the public right-of-way. Lighting is proposed throughout the development for safety and aesthetic purposes. Pole-mounted lighting would be provided along private streets and bollard lighting is proposed within the pocket parks along the northern end of the project site. Trail signage is also proposed as detailed in Section 3.4.4.2.

3.4.9.2 Walls and Fencing

The rear of residential lots along the northern project boundary would have glass and block fire rated walls for alternative compliance fire protection, while providing views to the adjacent open space. These walls would be a maximum of six-foot-tall CMU wall topped with a 3-foot-tall glass component. Composite split rail fencing with chain link attached is proposed throughout the project site, specifically along proposed trails and pedestrian paths, and along the project boundaries and detention basin located in the northwest portion of the project site. Six-foot-tall masonry block walls with decorative caps are proposed at the rear of certain yard areas where noise attenuation is needed. In other areas, six-foot-tall, non-combustible, fire-retardant wood fence or vinyl fencing is proposed to separate rear yards. Fence and wall details are depicted on Figure 3-10.

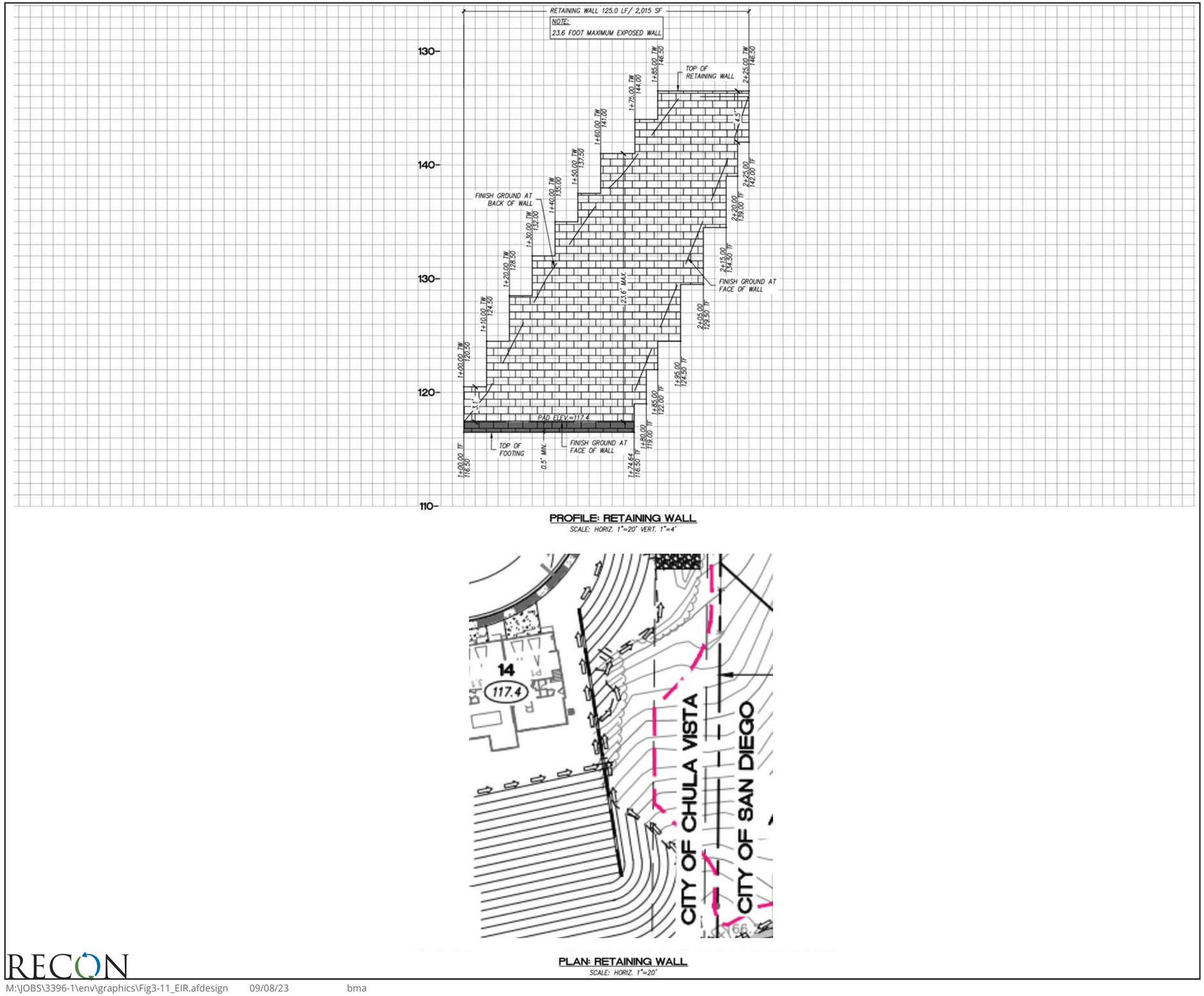
To accommodate the project site access from Dennery Road while maintaining roadway design standards along Private Street A, a concrete masonry block retaining wall is proposed along the south side of Private Street A to retain the adjacent slope. This wall would run a length of 419 feet with a maximum height of 14 feet. Refer to Figure 3-2 for a cross-section of Private Street A.

Just east of Lot 14, an approximately 125-linear-foot-long stepped retaining wall with a maximum height of 24 feet would be constructed to retain the adjacent slope. Approximately 23.6 feet of the wall height would be exposed as depicted on Figure 3-11.

3.4.10 Grading

Grading is proposed on a total of 21.18 acres within and adjacent to the project site, as detailed on Figure 3-12. Off-site improvement areas include an approximate 0.45-acre area of remedial grading and trail improvements within the OVRP to the north. Remedial grading entails removal and recompaction of soil to ensure stability of the adjacent manufactured slopes. Trail improvements do not require grading but are included within the overall project footprint. All off-site disturbance areas to the north outside of proposed trail alignments would be revegetated with native species. Off-site improvements to the south and east include grading within an approximate 1.28-acre area of disturbance associated with the project's access road and secondary emergency only access road located in the City of San Diego. The total project disturbance footprint including all grading, off-site improvement areas, and buffer areas beyond grading limits is 23.37 acres.

Map Source: Civil Sense, Inc.

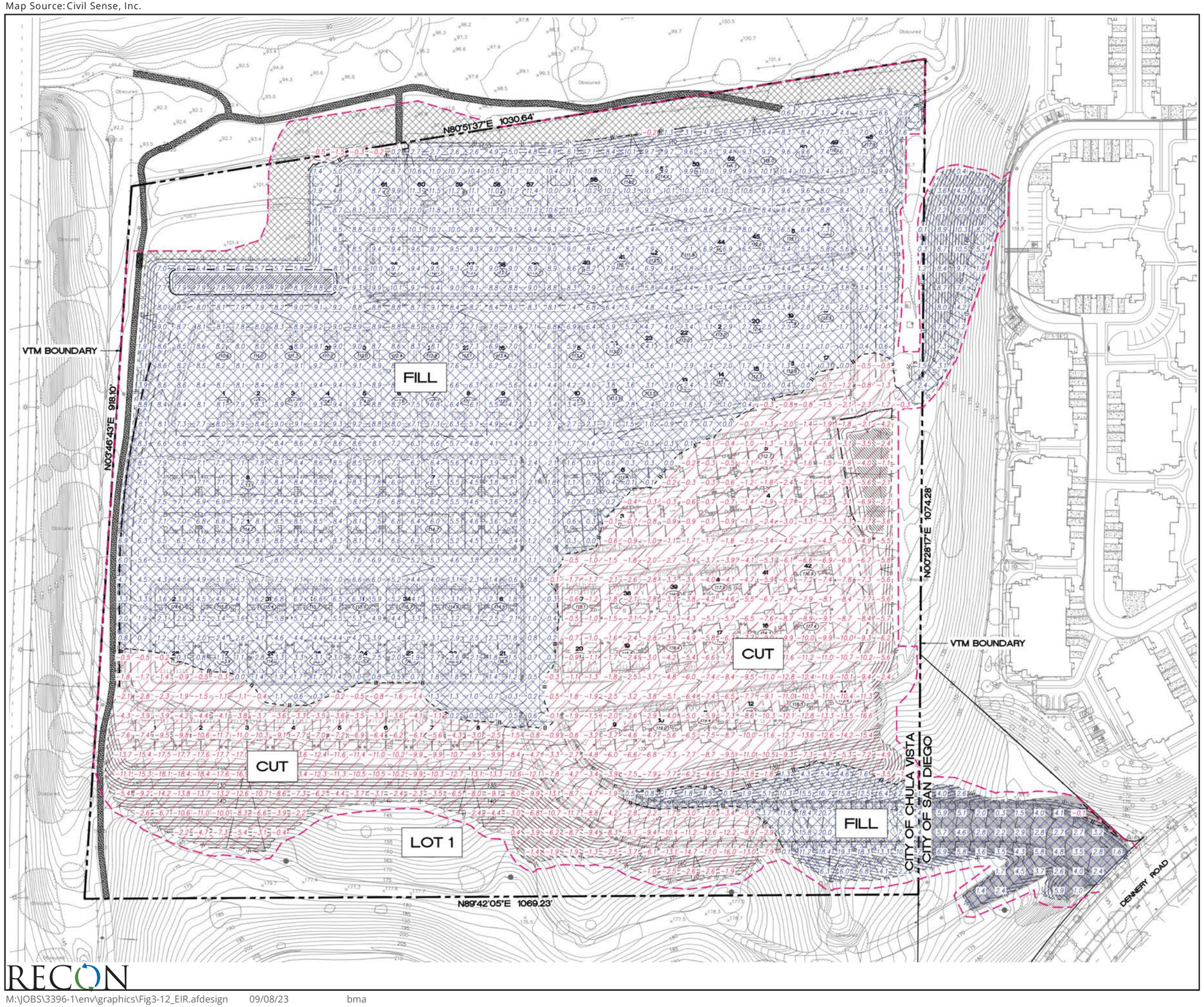


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FIGURE 3-11
Eastern Retaining Wall Detail

Map Source: Civil Sense, Inc.



Daylight Line
Cut / Fill Line
Proposed Fill Area
Proposed Cut Area
Remedial Grading Area

0 Feet 100

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FIGURE 3-12
Site Grading

Grading cut volumes would total approximately 110,400 cubic yards located in the southern portion of the site. Approximately 133,000 cubic yards of fill would be required within the northern portion of the site and associated with the primary and secondary emergency only access roads. Approximately 22,600 cubic yards of soil import is anticipated. Soil import would be sourced locally based on availability at the time of construction. The maximum height of fill slopes is 21 feet and the maximum height of cut slopes is 19 feet. Of the 4.06 acres of existing slopes steeper than 25 percent, approximately 2.76 acres are proposed to be graded. All slopes would be revegetated after disturbance consistent with the project's landscape plan.

3.4.11 Drainage and Storm Water

The project would install an upgraded storm drain to convey water from south to north, maintaining its current direction of flow. An existing channel (and wetland feature) along the east side of the project would be mostly preserved and run-on originating from south of the site, would continue to flow to the north through the drainage/wetland course, through a concrete box culvert to be located under the emergency access road, with flow continuing north toward the Otay River valley.

Two biofiltration basins and a modular wetland unit with a detention vault would be constructed on-site to manage water quality and provide peak flow detention. The biofiltration basins would have an impermeable lining. Site runoff would outlet on the north end of the project site and sheet flow towards the Otay River. Maintenance and monitoring of on-site drainage and storm water facilities would be the responsibility of the HOA.

3.4.12 Water Infrastructure

As the project site does not have direct access to City of Chula Vista water services, water services would be provided via City of San Diego Water Department pipelines and infrastructure in all scenarios. The City of San Diego has provided a will serve letter for the project (see Appendix R). Water service to the project site would include two separate private water systems, one to provide domestic water service to residences and the other for fire protection purposes.

Extension of City of San Diego water distribution systems and facilities would be required to serve the project site as detailed in Figure 3-13. Waterline improvements within the project site would be provided via 4-, 6-, and 8-inch pipes connecting to the 12-inch diameter Dennery Road pipeline. The existing 12-inch-diameter water line in Dennery Road would be extended to serve the project. The improvement would involve construction of approximately 200 linear feet of new, 12-inch-diameter, 365 Zone water line in Dennery Road, extending from the existing water regulating station at Sand Star Way to the project entrance driveway.

Facilities required for the private fire protection system would consist of two 8-inch-diameter fire service laterals extending from the proposed and existing 12-inch-diameter public water lines in Dennery Road. Additionally, within the project site, 8-inch-diameter fire-protection piping would provide service to seven proposed private fire hydrants. Fire sprinkler water lines and laterals would also be provided to supply individual dwelling unit fire sprinkler systems. Irrigation services would also be provided as part of the water infrastructure. The Conceptual Landscape Plans include location and quantity of proposed irrigation services.

During construction, water would be trucked in from the San Diego Water Department for construction activities.

3.4.13 Wastewater Infrastructure

In all scenarios, wastewater service to the project site would be provided via the City of San Diego's Otay Valley Trunk Sewer connection, which currently crosses the Otay River and extends onto the project site. No wastewater infrastructure is available from the City of Chula Vista; however, in the No Annexation Scenario the flow generated by the project would be subtracted from the treatment capacity rights that the City of Chula Vista has in the Metropolitan Wastewater Department of the City of San Diego System. A portion of the existing City of San Diego on-site public gravity sewer line would be removed with the associated sewer easements proposed to be vacated. The sewer line would be reconstructed along the northern property line with a new sewer easement to be granted, as detailed in Figure 3-14. Wastewater would gravity flow to the existing (relocated) 27-inch-diameter Otay Valley Trunk Sewer to be located at the northern property line. An on-site private sewer collection system would consist of a 12-inch-diameter sewer lateral connected to the Otay Valley Trunk Sewer. The City of San Diego has provided a will serve letter for the project (see Appendix R).

Since the project is proposing to connect to the City of San Diego's 27-inch Otay Valley Trunk Sewer and to relocate a portion of the pipe, the applicant must get written approval by the City of San Diego for the design and ensure required processes (inspections, construction, etc.). All requirements, including but not limited to the payment of fees and construction costs related to the connection to the City of San Diego's sewer main are the responsibility of the applicant. If it is determined that a sewage metering station is needed for the project, the applicant shall pay when due all direct and incidental costs for the installation and maintenance of the sewage metering station at the proposed connection to the City of San Diego's sewer main. If it is determined that the municipalities need to enter into an agreement for providing sewer service to the development, the agreement shall be executed before the approval of improvement plans for the project.

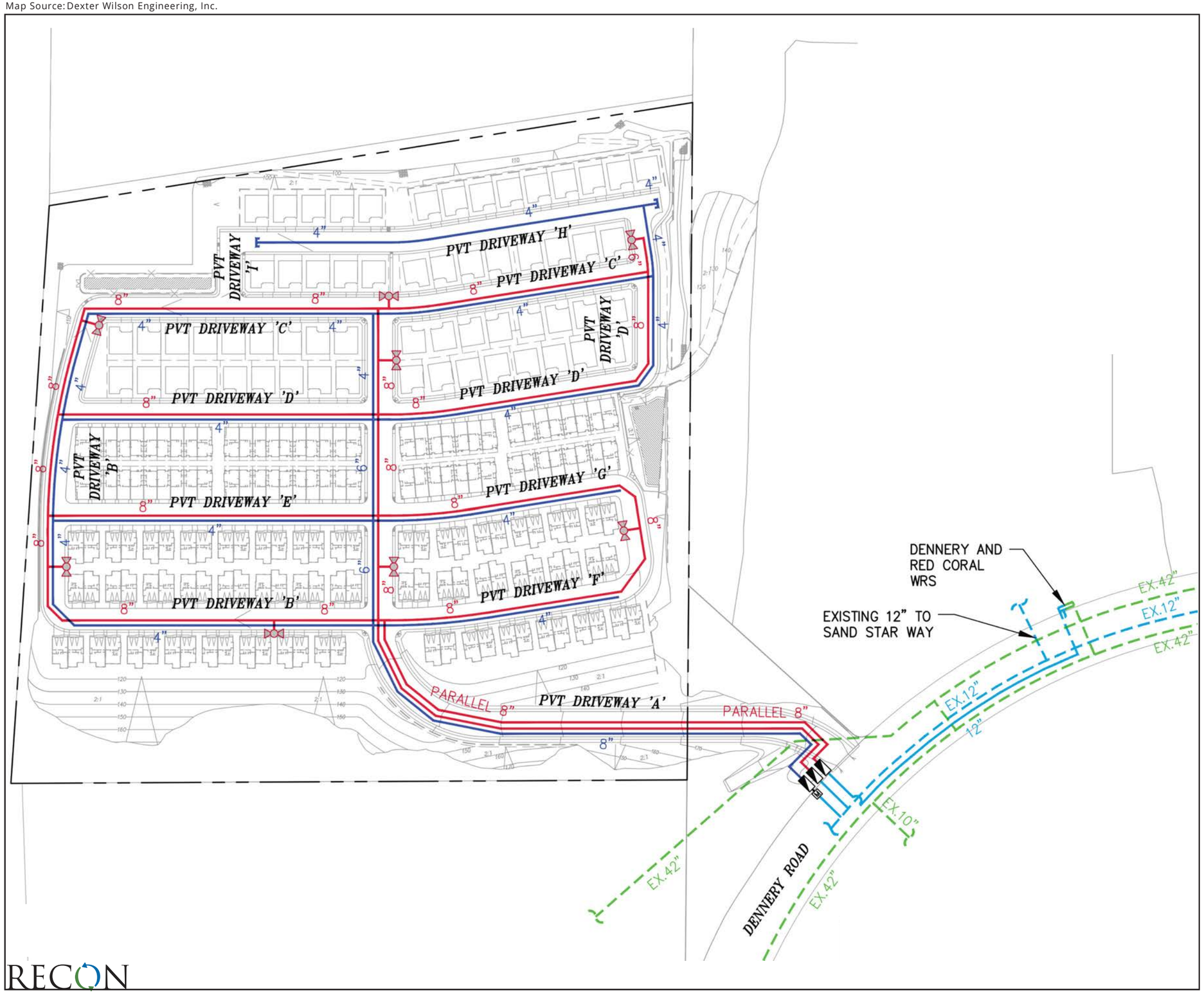
3.4.14 Phasing and Implementation

All project components are anticipated to be constructed concurrently in one comprehensive phase. Grading is to last approximately two years, with an operational year of 2025. While a No Annexation Scenario and two Annexation Scenarios are evaluated throughout this EIR, the intent is for the site to obtain final engineering and grading approvals from the City of Chula Vista, followed by site annexation into San Diego.

3.5 Discretionary Actions

Discretionary actions are those actions taken by an agency that call for the exercise of judgment in deciding whether to approve, or how to carry out, a project. A number of discretionary actions would be required to implement the project. Table 3-4 details the required discretionary actions by applicable agencies for the No Annexation Scenario (Scenario 1) and the two Annexation Scenarios (Scenario 2a and 2b), as the discretionary actions would differ for each.

Map Source: Dexter Wilson Engineering, Inc.

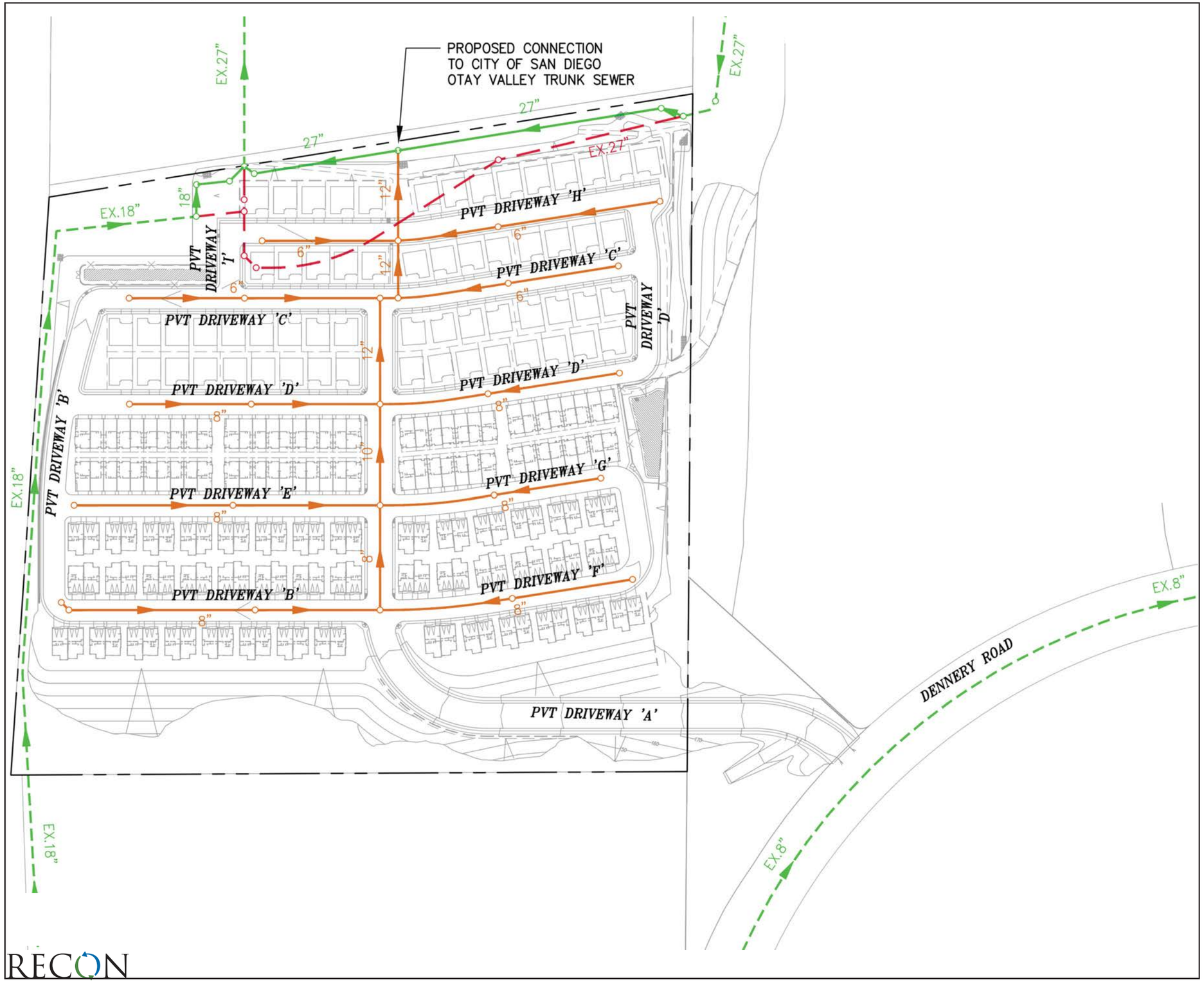


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FIGURE 3-13
Existing and Proposed Water System

Map Source: Dexter Wilson Engineering, Inc.



- Project Site Boundary
- Existing Public Gravity Sewer Line
- Existing Public Gravity Sewer Line to be Removed
- Proposed Public Gravity Sewer Line
- Proposed Private Gravity Sewer Line

0 Feet 130

FIGURE 3-14
Existing and Proposed Sewer System

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3.5.1 No Annexation Scenario

In the No Annexation Scenario, the project would remain in the City of Chula Vista and out of agency service agreements would be required for the City of San Diego to provide water. Sewer services would be provided by the City of Chula Vista. The City of San Diego would issue discretionary and grading permits for the off-site portions located within the City of San Diego. Implementation of this scenario would involve a number of discretionary actions by various agencies. The required discretionary actions are listed below by agency, in the general order the various actions would occur.

City of Chula Vista

- Amend the City of Chula Vista General Plan to remove the Open Space (OS) designation and designate the project site as Specific Plan – Residential Medium to allow residential development at a density range of 6.1 to 11 dwelling units per acre.
- Adopt the City of Chula Vista Nakano Specific Plan to establish the land use, intensity, development regulations, design standards, and primary infrastructure components needed to support development of the site.
- Approve a Tentative Map to subdivide the property as a condominium project as defined by Section 4125 of the Civil Code of the State of California and as filed pursuant to the Subdivision Map Act.
- Certify the project EIR.
- Adopt the California Environmental Quality Act (CEQA) Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program.
- Approve the tax sharing agreement between the City of San Diego and the City of Chula Vista.

After approval of the above City of Chula Vista discretionary actions, the following actions would be required:

- Grading Permit for the on-site portions of the project.
- Habitat Loss and Incidental Take Permit.
- Approval of a Design Review consistent with the Nakano Specific Plan (administrative process).

City of San Diego

After Chula Vista discretionary actions, the City of San Diego would take the following actions:

- Adopt a SDP Findings as required by SDMC Section 126.0505 for the off-site primary and secondary emergency only access roads located within the City of San Diego.
- Approve a grading permit to allow grading for access roads.
- Adopt the Project EIR as a responsible agency, City of San Diego CEQA Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program, as necessary.
- Approve easement vacations for City of San Diego sewer easements as shown on the Tentative Map. Easement vacations would be vacated pursuant to Section 66434(G) of the Subdivision Map Act.
- Approve the LAFCO out of service area agreement with the OWD to allow City of San Diego to provide water service within the OWD boundaries.
- Approve the tax sharing agreement between the City of San Diego and the City of Chula Vista.

Otay Water District

- Approve the LAFCO out of service area agreement for water service with the City of San Diego.

San Diego Gas and Electric

- Approve the SDG&E easement vacations along the northern and eastern property line as shown on the Tentative Map. Easement vacations would be vacated pursuant to Section 66434(G) of the Subdivision Map Act.

LAFCO

- Approve an Out of Agency Service Agreement between the City of San Diego and OWD for water.

3.5.2 Annexation Scenario 2a

In Annexation Scenario 2a, grading and development of the project site would not proceed until the LAFCO reorganization process is complete. In this scenario, the City of San Diego would approve a number of discretionary actions to facilitate the annexation and future development process as detailed in Section 3.5.2; however, site grading and development would not occur until after approval of the City of Chula Vista discretionary actions and the LAFCO reorganization (e.g., annexation of the site into the City of San Diego). Implementation of this scenario would

involve a number of discretionary actions by various agencies. The required discretionary actions are listed below by agency, in the general order the various actions would occur.

City of Chula Vista

- Amend the City of Chula Vista General Plan to remove the Open Space (OS) designation and designate the project site as Specific Plan – Residential Medium to allow residential development at a density range of 6.1 to 11 dwelling units per acre.
- Adopt the City of Chula Vista Nakano Specific Plan to establish the land use, intensity, development regulations, design standards, and primary infrastructure components needed to support development of the site.
- Approve a Tentative Map to subdivide the property as a condominium project as defined by Section 4125 of the Civil Code of the State of California and as filed pursuant to the Subdivision Map Act.
- Certify the project EIR.
- Adopt the CEQA Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program.
- Adopt a Resolution of Support for City of San Diego's Application to LAFCO consenting to the Reorganization.
- Approve an Annexation Agreement outlining the process by which the project would be processed and annexed into the City of San Diego.

City of San Diego

After approval of the City of Chula Vista discretionary actions, the City of San Diego actions would be required:

- Adopt a Prezoning Ordinance delineating the zoning territory not yet incorporated into the City of San Diego as Residential Multiple Unit Zone, RM-1-1. The Prezone Ordinance would be initiated by and receive a recommendation from the Planning Commission. The Prezone Ordinance would require City Council approval and would not be effective until after the effective date of the LAFCO approval of the Nakano Reorganization.
- Amend the City of San Diego General Plan to designate the site Residential.
- Amend the OMCP to designate the site as Residential – Low Medium.
- Adopt SDP Findings as required by SDMC Section 126.0505 for the off-site primary and secondary emergency only access roads currently within the City of San Diego.
- Approve a Multiple Species Conservation Program Subarea Plan Minor Amendment to include the property within the City of San Diego Subarea Plan).

- Approve a Resolution of Application to LAFCO.
- Approve an Annexation Agreement outlining the process by which the project would be processed and annexed into the City of San Diego.
- Approve a City of San Diego sewer easement vacation pursuant to Section 66434(G) of the Subdivision Map Act.
- Adopt an uncodified ordinance allowing site development to proceed after annexation. The uncodified ordinance would ensure project consistency with the Land Development Code and applicable City of San Diego requirements including:
    - SDP Findings as required by SDMC Section 126.0505 for the project site.
    - Approval of deviations from the SDMC for the RM-1-1 Zone regulation to allow:
        - A 10-foot side yard setback where up to 50 percent of the length of the building envelope on one side of the premises may observe the minimum 5-foot side setback, provided the remaining percentage of the building envelope length observe at least the standard side setback of feet 5 feet or 10 percent of the lot width (100 feet), whichever is greater pursuant to SDMC Section 131.0443(d)(2)(A).
        - Retaining wall heights outside the required yard of up to 24 feet where the maximum allowed is 12 feet pursuant to SDMC Section 142.0340(e).
- Wetland Deviation findings based on the Biologically Superior Option in accordance with SDMC Section 143.0150 for the portion of the project site.
- Amend the City of San Diego City Council District Boundary to incorporate the project site into District 8.
- Annex the project site into the Ocean View Hills Maintenance Assessment District.

LAFCO

- Approve a City of San Diego and City of Chula Vista Sphere of Influence Revision.
- Approve a resolution to detach the site from the City of Chula Vista and OWD.
- Remove the site from the City of Chula Vista and Annex the project site to the City of San Diego.

Otay Water District

- Prior to submittal of a LAFCO application the OWD is to provide a Resolution or Letter of Support to remove the property from the OWD boundaries and annex the property into the City of San Diego for water services.

San Diego Gas & Electric

- Approve SDG&E easement vacations along the northern and eastern property line as shown on the Tentative Map. Easement vacations would be vacated pursuant to Section 66434(G) of the Subdivision Map Act.

3.5.3 Annexation Scenario 2b

In Scenario 2b, grading and site development would proceed prior to LAFCO reorganization. In this scenario, the City of Chula Vista would issue grading and development permits for the project site and City of San Diego would issue a grading permit for the off-site portions. Implementation of this scenario would involve a number of discretionary actions by various agencies. The required discretionary actions are listed below by agency, in the general order the various actions would occur.

City of Chula Vista

- Amend the City of Chula Vista General Plan to remove the Open Space (OS) designation and designate the project site as Specific Plan – Residential Medium to allow residential development at a density range of 6.1 to 11 dwelling units per acre.

- Adopt the City of Chula Vista Nakano Specific Plan to establish the land use, intensity, development regulations, design standards, and primary infrastructure components needed to support development of the site.

- Approve a Tentative Map to subdivide the property as a condominium project as defined by Section 4125 of the Civil Code of the State of California and as filed pursuant to the Subdivision Map Act.

- Certify the project EIR.

- Adopt the CEQA Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program, as necessary.

- Adopt a Resolution of Support for City of San Diego's Application to LAFCO consenting to the Reorganization.

- Approve an Annexation Agreement outlining the process by which the project would be processed and annexed into the City of San Diego.

- Approve easement vacations for sewer. Easement vacations would be vacated pursuant to Section 66434(G) of the Subdivision Map Act.

- Approve a fee sharing agreement between the City of San Diego and the City of Chula Vista to allocate fees to the serving agency.

After approved of the City of Chula Vista discretionary actions, the following permits and approvals would be required associated with site grading:

- Habitat Loss and Incidental Take Permit.
- Grading Permit for the on-site portions of the project.
- Approval of a Design Review consistent with the Nakano Specific Plan (administrative process).

City of San Diego

- Adopt a Prezoning Ordinance delineating the zoning territory not yet incorporated into the City of San Diego as Residential Multiple Unit Zone, RM-1-1.The prezone would need to be initiated by and receive a recommendation from the Planning Commission. The prezone Ordinance would require City Council approval and would not be effective until after the effective date of the LAFCO approval of the Nakano Reorganization.
- Amend the City of San Diego General Plan to designate the site Residential.
- Amend the OMCP to designate the site as Residential – Low Medium.
- Approve an Annexation Agreement outlining the process by which the project would be processed and annexed into San Diego.
- Approve a Resolution of Application to LAFCO.
- Amend the City of San Diego City Council District Boundary to incorporate the project site into District 8.
- Adopt the SDP Findings as required by SDMC Section 126.0505 for the off-site primary and secondary emergency only access roads located within the City of San Diego.
- Approve a grading permit to allow grading for access roads.
- Adopt the project EIR, as a responsible agency, San Diego CEQA Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program to address the off-site components.
- Approve Multiple Species Conservation Program Subarea Plan Amendment to include the property within the City of San Diego Subarea Plan.
- Annex the project site into the Ocean View Hills Maintenance Assessment District.
- Approve a fee sharing agreement between the City of San Diego and the City of Chula Vista to allocate fees to the serving agency.

Otay Water District

- Prior to submittal of a LAFCO application OWD to provide a Resolution or Letter of Support to remove the property from the OWD boundaries and annex into the City of San Diego for water services.

San Diego Gas and Electric

- Approve SDG&E easement vacations along the northern and eastern property line as shown on the Tentative Map. Easement vacations would be vacated pursuant to Section 66434(G) of the Subdivision Map Act.

LAFCO

- Approve a City of San Diego and City of Chula Vista Sphere of Influence Revision.
- Resolution to detach the site from the City of Chula Vista and OWD.
- Remove the site from the City of Chula Vista and Annex the site to the City of San Diego.

3.6 Project Design Features

Several sustainable project design features would be implemented through compliance with design guidelines and/or through project conditions. Applicable project design features that would facilitate minimizing environmental impacts are detailed below.

3.6.1 Project Design Features (No Annexation Scenario and Annexation Scenario 2b)

a. Land Use (Noise Compatibility)

PDF-NOS-1 **On-Site Noise Barriers.** Prior to approval of building plans, the approving agency shall verify the presence of noise walls consistent with Figure 4.1-2. Exterior noise levels shall be reduced to the City of Chula Vista's threshold of 65 Community Noise Equivalent Level (CNEL) for residential uses. Noise reduction for exterior traffic noise impacts can be accomplished through on-site noise barriers. Six-foot sound walls shall be constructed on the western side of residential lots 1, 28, 29, 34, 35, and 61; along the northern boundary of lots 35, 36, and 48 through 61; and along the eastern side of lot 48. Six-foot sound walls shall be constructed along the western and northern boundaries of the park area located immediately west of Lot 61. The sound attenuation walls must be solid and free of cracks or holes. They can be constructed of masonry, wood, plastic, plexi-glass, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least one-inch total thickness or have a density of at least 3.5 pounds per square foot.

3.6.2 Project Design Features (Annexation Scenario 2a)

a. Land Use (Noise Compatibility)

PDF-NOS-1 **On-Site Noise Barriers.** Prior to issuance of building permits, the building plan shall be verified by the City's Assistant Deputy Director (ADD) environmental designee to include noise walls consistent with EIR Figure 4.1-2. Exterior noise levels at residential backyards and park uses shall be reduced to 60 CNEL and 70 CNEL, respectively. Noise reduction for exterior traffic noise impacts can be accomplished through on-site noise barriers depicted on Figure 4.1-2. Six-foot sound walls shall be constructed on the western side of residential lots 1, 28, 29, 34, 35, and 61; along the northern boundary of lots 35, 36, and 48 through 61; and along the eastern side of lot 48. Six-foot sound walls shall be constructed along the western and northern boundaries of the park area located immediately west of Lot 61. The sound attenuation walls must be solid and free of cracks or holes. They can be constructed of masonry, wood, plastic, plexi-glass, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least one-inch total thickness or have a density of at least 3.5 pounds per square foot.

3.6.3 Project Design Features (All Scenarios)

a. Land Use (Noise Compatibility)

PDF-NOS-2 **Interior Noise.** Prior to issuance of building permits, the Owner/Permittee shall provide an exterior-to-interior noise analysis for the proposed dwelling units expected to be exposed to noise levels in excess of 60 CNEL (e.g., units facing I-805) to the City's ADD environmental designee for review and approval. Installation of mechanical ventilation systems or air conditioning systems and sound-rated windows shall be required if the predicted interior background noise due to traffic noise intrusion through the building envelope assemblies exceeds the 45 CNEL interior standard. The acoustical analysis shall substantiate that the resulting interior background noise levels, with appropriate implementation of interior comfort systems and sound insulation, would be less than this noise standard.

b. Air Quality

PDF-AQ-1 **Fugitive Dust Control**. Prior to the issuance of grading permits, the grading plan notes shall be verified by the City's ADD environmental designee to state that the Owner/Permittee shall implement the following measures to minimize fugitive dust (particulate matter with a diameter of 10 microns and less and particulate matter with a diameter of 2.5 microns and less):

- A non-toxic dust control agent shall be used on the grading areas or watering shall be applied at least three times daily.
- Grading areas shall be stabilized as quickly as possible.
- Chemical stabilizer shall be applied, a gravel pad shall be installed, or the last 100 feet of internal travel path within the construction site shall be paved prior to public road entry and for all haul roads.
- Visible track-out into traveled public streets shall be removed with the use of sweepers, water trucks, or similar method at the end of the workday.
- All soil disturbance and travel on unpaved surfaces shall be suspended if winds exceed 25 miles per hour.
- On-site stockpiles of excavated material shall be covered.
- A 15-mile-per-hour speed limit on unpaved surfaces shall be enforced.

PDF-AQ-2 **No Fireplaces.** Prior to issuance of building permits, the building plan shall be verified by the City's ADD environmental designee to not include any wood stoves or wood-burning or natural gas fireplaces within the residential units.

c. Biological Resources

PDF-BIO-1 **Wetland Buffer.** Prior to issuance of any construction permit, the building plan shall be verified by the City's ADD environmental designee to show that a wetland buffer ranging from 18 feet and 99 feet is provided between the development area and the western edge of the wetland area to protect and maintain the functions and values of the wetland located along the eastern project boundary. To ensure that the wetland buffer provides protection of the functions and values of the remaining southern willow scrub and Arundo-dominated riparian, the City's ADD environmental designee shall ensure following measures are identified on the building plans and implemented to reduce, avoid, and minimize edge effects:

- A 6-foot block wall shall be installed along the outer edge of the buffer to restrict access to the adjacent wetlands and streambed.
- Signage shall be posted that informs people of the sensitive nature of the adjacent wetland habitat and prohibits any brush management activities. The landscape plan shall identify three signs located west of the drainage, and shall state "Environmentally sensitive area: no brush management shall be performed beyond this point".
- Only native plants shall be used in the wetland buffer as shown on the project landscape plans.

- Long-term management shall include on-going removal of invasives from the drainage and wetland buffer, as detailed in the Wetland Mitigation Plan and Longterm Management Plan (see Appendix D, Attachment 13) and brush management plan.

d. Greenhouse Gas Emissions

PDF-GHG-1 **Increased Density**. The project shall allow up to 221 residential units in an area with access to transit.

PDF-GHG-2 **Affordable Housing**. The project shall provide 22 units (10 percent), including 11 low-income units and 11 moderate-income units, that are affordable to low- and moderate-income households.

PDF-GHG-3 **Electric Appliances.** Prior to issuance of building permits, the City's ADD environmental designee shall verify the building plans include all electric appliances and heating systems. Woodburning and natural gas/propane shall be prohibited on-site.

PDF-GHG-4 **Pedestrian Network Improvements.** Prior to issuance of building permits, the City's ADD environmental designee shall verify the following pedestrian and trail amenities are shown on the building plans:

- A 7-to-8-foot-wide decomposed granite public trail connection along the western edge of the project site. To ensure public accessibility to the OVRP trail system, a public trail easement would be granted along this alignment.

- An 8-foot-wide decomposed granite public trail improvement with split rail fencing from the proposed mini-park at the north central portion of the project site, connecting north to off-site portions of the OVRP trail system.

- Off-site within the City of Chula Vista parcel to the north, the project includes improvements to the OVRP trail system including formalizing existing trail alignments with placement of decomposed granite within an 8-foot-wide alignment and installation of split-rail fencing on one side of the trail.

- Wayfinding signage to the OVRP trail system along Dennery Road, within private property, as detailed on the project landscape plans.

- Sidewalks are proposed on both sides of Private Street A. All other internal streets would provide sidewalks on one side of the street. Sidewalks provide a connection to the OVRP trail connection on the north end of the site.

PDF-GHG-5 **Bicycle Network Improvements.** Prior to issuance of building permits, the City's ADD environmental designee shall verify the building plans include buffered Class II bike lanes. The bike lanes shall be provided along Private Street A, the main private street running through the site, connecting to the existing Class II bike lane along Dennery

Road. The private streets leading east and west from the primary roadway would include bicycle sharrows (i.e.: shared lane markings).

PDF-GHG-6 **Outdoor Electrical Outlets to Allow for Electric Landscape Equipment** Prior to issuance of building permits, the City's ADD environmental designee shall verify the landscape plans identify the locations of the exterior electrical outlets necessary for sufficient powering of electric lawnmowers and other landscaping equipment.

PDF-GHG-7 **Prohibit Turf.** Prior to issuance of building permits, the City's ADD environmental designee shall verify the landscape plans do not include turf lawns in any residential portion of the project.

PDF-GHG-8 **Community Gardens.** Prior to issuance of construction permits, the City's ADD environmental designee shall verify the building plans include a minimum of 26,726 square feet of common open space that would allow for community gardens.

PDF-GHG-9 **Electric Vehicle Charging Capacity.** Prior to the issuance of building permits, the City's ADD environmental designee shall verify the building plans demonstrate all units comply with Title 24 Green Building Standards Code, Residential Mandatory Measures which requires each dwelling unit to install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall originate at the main service or subpanel and shall terminate in the garage to allow for electric vehicle charging.

e. Utilities and Service Systems

PDF-UTIL-1 **Waste Management Plan.** Prior to the issuance of building permits, the City's ADD environmental designee shall verify the building plans include space within each residential unit for refuse, recyclable material storage, and organic waste storage space consistent with the City of San Diego SDMC and implement the project's Waste Management Plan (see Appendix U). The requirement would be met by designing garages with enough space to accommodate three 12.83-square-foot (96-gallon) carts. Construction waste shall be diverted consistent with the Waste Management Plan.

f. Transportation

PDF-TRA-1 Prior to the issuance of any building permit, the Owner/Permittee shall assure by permit and bond the removal and replacement of the existing driveway on Dennery Road with full height curb, gutter, and non-contiguous sidewalk and construct a new 25-foot-wide driveway as shown on Exhibit 'A' per current City of San Diego standards, satisfactory to the City of San Diego Engineer. All improvements shall be completed and operational prior to first occupancy.

PDF-TRA-2 Prior to the issuance of any building permit, the Owner/Permittee shall pay a fair share of 2.5 percent of the unfunded cost of the planned Palm Avenue/I-805

Interchange improvements (Public Facilities Financing Plan Project OM T-1) to the City of San Diego, satisfactory to the City of San Diego Engineer.

PDF-TRA-3 At the intersection of Palm Avenue/Dennery Road, prior to the issuance of any building permit, the Owner/Permittee shall assure by permit and bond the following, satisfactory to the City of San Diego Engineer. All improvements shall be completed and operational prior to first occupancy.

- Installation of pedestrian countdown signal heads and the installation of backplates with retroreflective borders on all approaches via a traffic signal modification plan.
- Extend the exclusive eastbound dual left turn lanes with 280 feet of storage per lane by an additional 85 feet of storage per lane with appropriate taper to provide a total storage length of 365 feet per lane via improvement plans and signing and striping plans.
- Extend the exclusive southbound right turn lane with 95 feet of storage by an additional 50 feet of storage with appropriate taper to provide a total storage length of 145 feet via improvement plans and signing and striping plans.
- Installation of audible countdown pedestrian heads for each pedestrian phase and upgrading the traffic controller to a 2070 controller including software update and communications equipment per current City of San Diego standards.

Per current City standards, and satisfactory to the City of San Diego City Engineer, all improvements in this measure shall be completed and operational prior to first occupancy.

PDF-TRA-4 Prior to issuance of any building permit, the Owner/Permittee shall construct a secondary emergency only access, as shown on Exhibit 'A', to the satisfaction of the City of San Diego City Engineer and Fire Marshal. All improvements shall be completed and operational prior to first occupancy.

g. Wildfire

PDF-HAZ-1 **Dual Pane Windows Exceeding Code.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the building plans show shall identify the following features on the building plans: Windows shall be upgraded on the preserved vegetation side of the structures subject to less than 100 feet of fuel modification to include dual pane, both panes tempered, exceeding the code requirement. Upgraded windows would be required in the following locations:

- East side walls of the detached condominium buildings 17, 18, 47, and 48, multi-family buildings 4 and 5, and duplex buildings 14, 15, and 42.
- West side walls of multifamily buildings 1 and 8, duplex buildings 1, 28, and 29.
- North side walls of buildings 48 through 61 of the detached condominiums.

PDF-HAZ-2 **Upgraded Fire Rating Exteriors.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the following features are identified on the building plans: All buildings shall provide minimum 1-hour fire rated exterior walls and doors; one layer of 5/8-inch type X gypsum sheathing shall be applied behind the exterior covering or cladding on the exterior side of the framing, from the foundation to the roof, for all exterior walls of each building.

PDF-HAZ-3 **Ember Resistant Vents.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the following features are identified on the building plans: All exterior vents shall be ember-resistant, such as BrandGuard, O'Hagin, or similar.

PDF-HAZ-4 **Heat Deflecting Wall.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the following features are identified on the building plans: A 6-foot heat deflecting wall shall be constructed of concrete masonry units between on-site structures and unmaintained open space. Radiant heat walls would be 6-foot masonry walls except along the northern project boundary 6-foot masonry with glass view fence walls would be provided. Specifically, radiant heat walls would be provided at the following buildings locations as depicted on the plans:

- Buildings 17-18, and 47-61 of the detached condominiums units,
- Buildings 1, 4-5, and 8 of the multifamily units, and
- Buildings 1, 14-15, 28-29, and 42 of the duplex units.

Additional 10-foot perpendicular returns along adjacent wall faces in the following building locations would be provided:

- East side walls of the detached condominium buildings 17, 18, 47, and 48, multi-family buildings 4 and 5, and duplex buildings 14, 15, and 42,
- West side walls of multi-family buildings 1 and 8, duplex buildings 1, 28, and 29, and
- North side walls of buildings 48 through 61 of the detached condominiums.

PDF-HAZ-5 **Chapter 7A Fire Code Requirements.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the deed encumbrances for each lot identified in PDF-HAZ-1 to PDF-HAZ-4 to ensure ongoing maintenance of fire-resistive building materials and fire sprinkler systems.

PDF-HAZ-6 **Undergrounded Power Lines.** Prior to issuance of any building permit, City's ADD environmental designee shall verify the following features are identified on the building plans: All new power lines shall be installed underground for fire safety purposes. Temporary construction power lines may be allowed in areas that have been cleared of combustible vegetation.

3.7 Agency Consultation

3.7.1 Federal Aviation Administration Part 77 Determination

The project site lies within the Federal Aviation Administration (FAA) Noticing Area for the Brown Field Municipal Airport. The project will be submitted to the FAA for their review of obstruction evaluation criteria contained in the Federal Code of Regulations, Title 14, FAA Part 77 (Obstruction Evaluation/Airport Airspace Analysis) at least 45 days prior to construction.

3.7.2 Native American Heritage Commission

The City of Chula Vista completed consultation with Native American tribes, consistent with the requirements of Assembly Bill 52 and Senate Bill 18. Tribes who are traditionally and culturally affiliated with the geographic area of the project were invited to consult regarding potential impacts to tribal cultural resources. The City of Chula Vista received responses from the Viejas Band of Kumeyaay Indians, the Campo Band of Kumeyaay Indians, the Jamul Indian Tribe, and the San Pasqual Band of Diegueño Mission Indians in response to a notification letter dated May 6, 2022. During tribal consultation, none of the tribes identified any known tribal cultural resources on the project site but requested that Native American monitors be present during ground disturbance activities. The Jamul Indian Tribe requested that any artifacts found during construction be placed at the Desert Museum. Consultation concluded with the Viejas Band of Kumeyaay Indians on May 17, 2022. Consultation concluded with the Campo Band of Kumeyaay Indians on June 9, 2022. Consultation with the San Pascual Band of Diegueño Mission Indians concluded on September 8, 2022. Consultation with the Jamul Indian Tribe concluded on August 31, 2022.

3.7.3 U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife

Impacts to jurisdictional waters and wetlands would require permits from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife due to proposed changes to the on-site drainage. In addition, the project would be required to consult with CDFW if Crotch's bumble bee individuals are located on-site during preconstruction surveys. The Owner/Permittee shall obtain all necessary permits from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife.

3.7.4 California Department of Transportation

The California Department of Transportation (Caltrans) right-of-way is located adjacent to the project site to the west associated with I-805. Additionally, a Caltrans utility easement is located in the northwest corner of the project site. No encroachment into the Caltrans right-of-way is

proposed; however, remedial grading within the Caltrans easement is proposed. While not anticipated, the applicant would obtain any applicable Caltrans approvals or permits required to implement the project.

3.7.5 Otay Water District

In the No Annexation Scenario, OWD would need to approve the LAFCO out of service area agreement with the City of San Diego. In the Annexation Scenarios, OWD would provide a Resolution or Letter of Support to remove the property from the District boundaries and annex into San Diego for water service. The LAFCO reorganization would amend the OWD Sphere of Influence to detach the Nakano site from their service area.

3.7.6 San Diego Gas and Electric

SDG&E easements are proposed to be vacated pursuant to Section 66434(G) of the Subdivision Map Act. Easements to be vacated include the following:

- Easement to SDG&E for public utilities recorded October 19, 1948, in book 2985 page 325, O.R.
- Easement to SDG&E for public utilities recorded April 1, 1974, as instrument number 74-080792.

3.7.7 Local Enforcement Agency

The project site is approximately 250-300 feet from the closed Shinohara II Property Burn Site. Any ground-disturbing activities performed within 1,000-feet of an active or former disposal site requires advance notification to the Local Enforcement Agency (LEA), which has regulatory jurisdiction related to disposal facilities. The LEA with jurisdiction over ground-disturbing activities performed within 1,000-feet of an active or former disposal site would be the County of San Diego LEA if grading occurs while the site is still within the City of Chula Vista (No Annexation and Annexation Scenario 2b). If the project site is graded after annexation to the City of San Diego (Annexation Scenario 2a), the City of San Diego LEA would have regulatory authority.

Chapter 4.0
Environmental Analysis

The following sections analyze the potential environmental impacts that may occur as a result of implementation of the Nakano Project (project). The environmental issues subject to detailed analysis in the following sections include those that were identified as potentially significant by both the City of Chula Vista and the City of San Diego through preliminary project review and in response to the Notice of Preparation.

Fifteen environmental issues are addressed in Chapter 4.0. The issues of agricultural and forestry resources, energy, mineral resources, and population and housing were determined to be less than significant and are discussed briefly in Chapter 8.0. The environmental issues addressed in Chapter 4.0, in sequential order, include the following:

- Land Use and Planning
- Air Quality
- Biological Resources
- Geologic and Paleontological Resources
- Greenhouse Gas Emissions
- Health and Safety/Hazardous Materials
- Historical Resources
- Noise
- Transportation
- Tribal Cultural Resources
- Aesthetics
- Hydrology and Water Quality
- Public Services and Facilities
- Utilities and Sewer Systems
- Wildfire.

Each issue analysis section is formatted to include a discussion of existing conditions and regulatory framework, including the applicable regulations for both Chula Vista and San Diego to address all possible approvals.

As detailed in Chapter 3.0, Project Description, there is only one physical development proposed for the site; however, the project considers potential scenarios including a No Annexation Scenario, Annexation Scenario 2a, and Annexation Scenario 2b.

Under the No Annexation Scenario and Annexation Scenario 2b, the project would be graded and developed within the City of Chula Vista. Off-site portions of the project would require a grading permit and Site Development Permit for the City of San Diego. These two scenarios would be implemented in the same manner in terms of agency permitting responsibility. The primary difference is that under Annexation Scenario 2b, the project site would ultimately annex into the City of San Diego after approval of the Local Agency Formation Commission reorganization process. Due

to the similarity of these two scenarios in terms of implementation and permit authority, the analysis for the No Annexation Scenario and Scenario 2b is combined. In these scenarios, the City of Chula Vista standards and thresholds apply, except where specifically noted otherwise.

Under Annexation Scenario 2a, the site would be graded and developed in the City of San Diego after approval of the Local Agency Formation Commission (LAFCO) annexation. In this scenario, the City of San Diego would issue grading and development permits for the project site and all off-site improvement areas after approval of the City of Chula Vista discretionary actions and the LAFCO reorganization. Therefore, the City of San Diego would have responsibility for implementing the project and associated mitigation after annexation and the analysis focuses on consistency with City of San Diego standards and California Environmental Quality Act thresholds.

Within each environmental issue section, the applicable thresholds and issue questions (if applicable) are provided under separate subheadings for the No Annexation Scenario/Annexation Scenario 2b and Annexation Scenario 2a. A summary conclusion of the level of significance prior to mitigation, a list of required mitigation measures, if applicable, and conclusion of significance after mitigation for impacts identified as requiring mitigation is provided for each scenario. As each agency has their own thresholds and applicable regulations, the impact conclusions and mitigation requirements for each scenario sometimes differ and are reflected in the analysis accordingly.

4.1 Land Use and Planning

This section analyzes potentially significant impacts relating to land use and planning that result from implementation of the Nakano Project (project). Specifically, this section evaluates whether the project would conflict with regional planning documents as well as land use and development regulations of each applicable agency. This section is based on a review of secondary source information including the City of Chula Vista and City of San Diego General Plans and municipal code regulations, the proposed Specific Plan for the No Annexation Scenario and Annexation Scenario 2b and Design Guidelines for the Annexation Scenario 2a, the Noise Technical Report prepared by RECON Environmental, Inc. (RECON) (Appendix L), and the Biological Resources Report prepared by RECON (Appendix D). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for approving project implementation with the exception of the off-site grading and City of San Diego sewer line that are under the purview of the City of San Diego. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds, as the City of San Diego would be responsible for approving project implementation of all on-site and off-site components in this scenario.

4.1.1 Existing Conditions

The project site is currently within the jurisdictional boundaries of the City of Chula Vista and is within the concept plan boundaries of the Otay Valley Regional Park (OVRP). The project is surrounded on three sides by land in the jurisdiction of the City of San Diego (west, south, and east). Refer to Section 2.4 for additional planning context for the site.

4.1.1.1 On-site Land Use Designations

The project site is currently vacant and designated as Open Space by the City of Chula Vista General Plan. The project site is zoned as Agricultural Zone A-8 by the City of Chula Vista Zoning Code. The off-site remedial grading area north of the property boundary is also designated as Open Space and is zoned as Floodway Zone F1. The off-site primary and secondary emergency only access improvement areas within the City of San Diego, are designated as Residential – Low Medium by the City of San Diego General Plan/Otay Mesa Community Plan (OMCP) and zoned as RM-2-4 by the San Diego Zoning Code. Refer to Figures 2-5 and 2-6 for existing General Plan/OMCP land use designations and zoning designations, respectively.

4.1.1.2 Surrounding Land Uses

As shown in Figure 2-4, surrounding land uses include the Otay River to the north, residential development to the east, Interstate 805 (I-805) to the west, and a Kaiser Permanente medical facility to the south. The two City of San Diego multi-family residential developments just east of the project site include RiverEdge Terrace and Ocean View Hills. These developments are designated Residential-Low Medium in the City of San Diego's OMCP. As shown in Figure 2-7, the project site is within the OVRP concept plan, despite the site being privately owned.

4.1.2 Regulatory Framework

4.1.2.1 Regional

a. San Diego Forward: The 2021 Regional Plan

The San Diego Association of Governments (SANDAG) is the regional authority that creates regional-specific documents to provide guidance to local agencies, as SANDAG does not have land use authority. SANDAG's San Diego Forward: The 2021 Regional Plan (Regional Plan) was adopted by the SANDAG Board of Directors on December 10, 2021 (SANDAG 2021). The Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources.

The Regional Plan is intended to provide a plan for future growth through the year 2050 based on principles of sustainability and smart growth. It is intended to result in more compact development patterns with greater emphasis on use of transit and less need to rely on private vehicle travel; it is to be updated every four years to monitor its progress. The Regional Plan contains the following required elements: Policy Element; Sustainable Communities Strategy; Financial Element; and Action Element.

Relevant objectives of the Regional Plan include the following:

- Healthy and complete communities.
- Create great places for everyone to live, work, and play.
- Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.
- Increase the supply and variety of housing types–affordable for people of all ages and income levels in areas with frequent transit service and with access to a variety of services.

b. Sustainable Communities Strategy

Developed in accordance with Senate Bill 375 for the 2050 Regional Transportation Plan and incorporated into the Regional Plan, the Sustainable Communities Strategy identifies ways to achieve SANDAG's regional share of statewide greenhouse gas reduction targets from cars and light-duty trucks. The targets for the SANDAG region call for a 19 percent reduction in greenhouse gas emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035.

The Sustainable Communities Strategy focuses on housing and job growth in the urbanized areas where there is existing and planned infrastructure, protection of sensitive habitat and open space; investment in a network that gives residents and workers transportation options; the promotion of equity for all, and the implementation of the plan through incentives and collaboration.

c. Local Agency Formation Commission/ Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000

The San Diego LAFCO is a regulatory agency with countywide jurisdiction. It provides assistance to local agencies in coordinating, directing, and overseeing logical changes to local government jurisdictional boundaries, including annexations, sphere of influence updates/adoption, Municipal Service Reviews, and other actions. An annexation is the inclusion of new territory in a city or special district. A sphere of influence is a plan for the probable physical boundaries and service area of a local government agency as determined by the San Diego LAFCO. Spheres of influence are characterized as planning tools used to provide guidance for individual proposals involving jurisdictional changes and are intended to encourage efficient provision of organized community services and prevent duplication of service delivery. Territory must be within a city or district's sphere of influence to be annexed. As a condition to annexation, the property is required to be pre-zoned for annexation or provide evidence that the existing development entitlements are vested or already built out and are consistent with the applicable agencies' General Plan. Municipal Service Reviews are studies that must be conducted to determine the adequacy of governmental services being provided in the region or sub-region. The service review studies are to be conducted before or in conjunction with updating an agency's sphere of influence. Developing and updating spheres of influence and performing service reviews for each city and special district within the County of San Diego is a priority for the San Diego LAFCO.

The San Diego LAFCO's regulatory and planning intent is to fulfill the Legislature's regional growth management priorities outlined under the Cortese-Knox-Hertzberg Local Government Reorganization Act (Government Code Sections 56000–57550). Government Code Section 56301 states, "Among the purposes of the commission are discouraging urban sprawl, preserving open space and prime agricultural lands, efficiently providing governmental services, and encouraging the orderly formation and development of local agencies based upon local conditions."

As detailed in the Commission Policies of San Diego LAFCO (San Diego LAFCO 2021), San Diego LAFCO has established policies that address the preservation of open space and agriculture. Government Codes Sections 56425 and 56668 require consideration of the effects of all spheres of influence and jurisdictional changes on open space and agricultural lands. Specifically, commissions are directed to guide development away from prime agricultural lands and open space supporting wildlife–unless that action would not promote the planned, orderly, and efficient development of an area–and to encourage development of existing lands within an agencies' boundaries. San Diego LAFCO has adopted Legislative Policy L-101, Preservation of Open Space and Agricultural Lands. "Prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

a) Land that qualifies, if irrigated, for rating as class I or class II in the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.

b) Land that qualifies for rating 80 through 100 Storie Index Rating.

c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the USDA in the *National Range and Pasture Handbook*, Revision 1, December 2003.

d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.

e) Land that has returned from the production of unprocessed agricultural plan products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

Legislative Policy L-101 states:

It is the policy of the San Diego Local Agency Formation Commission to:

1. Make appropriate distinctions between open space and agriculture and their separate functions and benefits.

2. Protect and preserve open space lands–and of most importance lands that support wildlife–against their premature conversion.

    a) Discourage proposals that would convert open space to other uses.

    b) The Commission reserves discretion to consider proposals involving the conversion of open space based on local conditions and in conjunction with ensuring orderly growth and development reflecting local habitat planning.

    c) Encourage the County of San Diego and incorporated cities to coordinate the designation and protection of open space lands and associated uses as community greenbelts and separators.

3. Protect and enhance agricultural lands and their uses.

    a) Discourage proposals that would convert any agricultural lands–including and of highest priority prime agricultural–to other uses.

    b) The Commission reserves discretion to consider proposals involving the conversion of agriculture based on local conditions and in conjunction with ensuring orderly growth and development. This includes considering the economic viability of agricultural uses within the affected territory.

c) No harm provisions.

i. Lands otherwise qualifying as agricultural under Gov Code Section 56016 and prime agriculture under Gov Code Section 56064 shall not be subject to this policy and its limitations on conversions if left fallow, unsown, or disused for agricultural purposes at the present time and for more than 60 consecutive months.

ii. Lands otherwise qualifying as agricultural under Gov Code Section 56016 and prime agriculture under Gov Code Section 56064 shall not be subject to this policy and its limitations on conversions if their qualification commenced only within the last 60 consecutive months.

d) Encourage landowners to establish and/or expand agriculture uses if permissible under zoning. This includes – but not limited to – the Commission considering proposals to extend municipal services in support of maintaining and enhancing agricultural uses.

e) Recognize the uniqueness of agricultural uses in San Diego County to include above-ground and mobile production, such as nurseries, that merit separate considerations when applying State statutes.

4. Follow San Diego LAFCO's adopted procedures when reviewing proposals that could affect agricultural and open space lands and provided herein as Appendix A [Appendix A of Legislative Policy 101]. (San Diego LAFCO 2021)

The project site is located within the City of Chula Vista and is not currently within the City of San Diego Sphere of Influence but is surrounded on three sides by land within the City of San Diego jurisdiction. Annexation to the City of San Diego would require the LAFCO approval of a City of San Diego and City of Chula Vista Sphere of Influence Revision and annexation of the site to the City of San Diego.

d. Airport Land Use Compatibility Plan-Brown Field

The San Diego County Regional Airport Authority, designated as the Airport Land Use Commission for all public airports in the County of San Diego, adopted the Brown Field Airport Land Use Compatibility Plan (ALUCP) in September 1981 (last updated in December 2010). The ALUCP assists in achieving compatible land use development in the area surrounding Brown Field Municipal Airport in Otay Mesa on Heritage Road, east of I-805. Brown Field Municipal Airport is a general aviation airport accommodating both propeller- and jet-powered aircraft and serves as a port of entry for private aircraft coming into the United States from Mexico. Brown Field Municipal Airport is also heavily used by military and law enforcement agencies and is classified as a "reliever airport" by the Federal Aviation Administration (San Diego County Regional Airport Authority 2010). The ALUCP designates the airport influence area and contains projected noise contours, flight activity zones, a land use compatibility matrix, and plan recommendations for areas surrounding Brown Field Municipal Airport. The Brown Field Municipal ALUCP residential exterior and interior noise exposure standards are 65 community noise equivalent level (CNEL) and 45 CNEL, respectively.

The airport influence area is divided into Review Area 1 and Review Area 2. As shown in Figure 2-8, the project site is within the Airport Influence Area 2.

e. Otay Valley Regional Park Concept Plan

The County of San Diego and the cities of Chula Vista and San Diego have worked collaboratively on the OVRP Concept Plan, which foresees 13 miles of proposed park along the Otay River from west of Interstate 5, upstream to and around Upper and Lower Otay Reservoirs. The OVRP Concept Plan does not change existing zoning or land use plans, add new development regulations, or prohibit implementation of land uses currently allowed under the respective plans and regulations. The OVRP Concept Plan provides policy direction for the jurisdictions for coordinated land acquisition and development for the Regional Park within this framework of private property rights.

The OVRP Concept Plan is divided into segments. The project site is within the segment which extends from I-805 to Heritage Road, which is predominantly planned for open space/preserve (Figure 2-7). The OVRP Concept Plan identifies the project site and land immediately adjacent to the north within the Otay River as Open Space/Preserve. The OVRP Concept Plan identifies a planned staging area north of Otay River near the Chula Vista Auto Park. The OVRP Concept Plan includes the following policy that is applicable to the project:

- Encourage private development that occurs within or adjacent to the OVRP to provide linkages with OVRP trails and, as appropriate, to provide open space, recreational facilities, staging, and viewing areas in conjunction with the park.

f. Multiple Species Conservation Program

The Multiple Species Conservation Program (MSCP) is a comprehensive program to preserve a network of habitat and open space in the region. The MSCP covers an area encompassing 12 jurisdictions and 582,243 acres. The MSCP Subregional Plan is a "framework" plan for the 12 participating jurisdictions. The MSCP Subregional Plan addresses the potential impacts of urban growth, natural habitat loss and species endangerment, and creates a plan to mitigate for the potential loss of "covered species" and their habitat due to the direct, indirect, and cumulative impacts of future development of both public and private lands within the MSCP's approximately 900-square mile study area. Both the cities of Chula Vista and San Diego implement the MSCP through their own Subarea Plans as discussed under the local regulations section below.

4.1.2.2 Local Regulations - City of Chula Vista

a. City of Chula Vista General Plan

The City of Chula Vista's General Plan, known as Vision 2020, was adopted on December 13, 2005, and most recently amended in July 2021 with the adoption of the City of Chula Vista's 6th Cycle Housing Element. Vision 2020 is the long-range planning implementation tool that focuses on the City's land use development and is divided into six elements: (1) Land Use and Transportation, (2) Economic Development, (3) Public Facilities and Services, (4) Growth Management, (5) Environmental, and (6) Housing. As shown in Figure 2-5 the project site and remedial grading

area is designated Open Space. The Open Space designation is intended for lands to be protected from urban development, including floodplains; canyon; mountain; and agricultural uses. These lands may include unique natural conditions; provide scenic vistas; or are areas to be set aside that have potential exposure to hazards such as earthquakes; landslides; fires; floods; erosion; or even high levels of roadway noise. Passive recreation uses, such as trails; staging areas; scenic overlooks; and picnic areas, may occur within these areas.

The **Land Use and Transportation Element** in the City of Chula Vista's General Plan intends to provide a link between land use designations, intensity of development, and mobility. The City's differing neighborhoods, districts, and open space networks are framed by its circulation network and defined by the Bayfront, Northwest, Southwest, and East Planning Areas. The proposed project is in the East Planning Area. The East Planning Area encompasses open space and master planned communities that are generally bound by I-805 on the west; State Route 54 on the north; the San Miguel Mountain/Proctor Valley area on the northeast and east; and within and adjacent to the City of San Diego and unincorporated San Diego County on the south.

The **Economic Development Element** establishes policies to ensure the long-term vitality of the local economy and to help develop, guide, and encourage appropriate employment and business ownership in the City of Chula Vista. It promotes a sustainable local economy to benefit present and future generations without detrimentally affecting resources. Employment land, or land designated for commercial, industrial and other non-residential, or open space use, is concentrated in three principal areas: the tideland area, the Montgomery area, and the Otay Ranch area (City of Chula Vista 2005).

The **Public Facilities and Services Element** establishes the plan to provide and maintain infrastructure and public services for future growth, without diminishing services to existing development within the City of Chula Vista. The overall goal of this element is to provide and maintain public facilities and services within the City through abundant public infrastructure and community services that support and enhance the well-being of the City and its residents (City of Chula Vista 2005).

The purpose of the **Growth Management Element** is to guide future development in the City of Chula Vista based on the principles that (1) rapid population growth and development have the potential to cause a variety of problems and impact the well-being of a city and its residents, and (2) impacts can be mitigated by balancing competing demands for growth and development through the adoption of comprehensive objectives and policies. This element serves as the assurance that the vision described within the General Plan is achieved without sacrificing the quality of life enjoyed in the community, and establishes a framework for directing new development, redevelopment, and community enhancement, and provides the guidance to realize the vision for the City (City of Chula Vista 2005).

The **Environmental Element** establishes the policy framework for improving sustainability through the City of Chula Vista's stewardship of natural and cultural resources, promotion of environmental health, and protection of persons and property from environmental hazards and noise. Sustainable development is identified as a means of balancing current growth and economic progress with protection of future resources (City of Chula Vista 2005).

The **Noise Element** includes policies to minimize excessive noise effects and improve the quality of life of people working and living in the City of Chula Vista. The Noise Element identifies goals and related policies with regards to noise and land use compatibility, motor vehicle traffic noise, and trolley and train noise. Refer to Section 4.1.2.2.b for specific noise standards.

The **Housing Element** details an 8-year strategy for enhancement and preservation of the City of Chula Vista character, identifies strategies for expanding housing opportunities for the various economic segments of the City, and provides policy guidance for local decision-making related to housing. The focus of this element is to (1) promote housing that helps to create safe, livable, and sustainable neighborhoods; (2) facilitate the construction and provision of quality housing; (3) create opportunities for affordable housing; and (4) promote equitable and accessible housing options and resources.

b. Noise Element

The City of Chula Vista General Plan Noise Element establishes noise criteria for various land uses (City of Chula Vista 2005). The maximum allowable exterior noise level at outdoor usable areas for new residential development is an annual CNEL of 65 decibels (dB). The City's exterior land use-noise compatibility guidelines for various land uses are depicted in Table 4.1-1. For residential development, the City typically applies the noise criteria at the backyards of single-family homes and at private patios, exterior balconies, and exterior common use areas of multi-family developments. The minimum amount of required exterior use space shall be required to meet the noise compatibility criteria; any additional exterior use space provided above the minimum would not be subject to the minimum noise level criteria.

Table 4.1-1
City of Chula Vista Exterior Land Use/Noise Compatibility Guidelines

Land Use	Annual CNEL in Decibels					
	50	55	60	65	70	75
Residential	■	■	■	■		
Schools, Libraries, Daycare Facilities, Convalescent Homes, Outdoor Use Areas, and other Similar Uses Considered Noise Sensitive	■	■	■	■		
Neighborhood Parks, Playgrounds	■	■	■	■		
Community Parks, Athletic Fields	■	■	■	■	■	
Offices and Professional	■	■	■	■	■	
Places of Worship (excluding outdoor use areas)	■	■	■	■	■	
Golf Courses	■	■	■	■	■	■
Retail and Wholesale Commercial, Restaurants, Movie Theaters	■	■	■	■	■	■
Industrial, Manufacturing	■	■	■	■	■	■

NOTE: Shaded box indicates allowable decibel level
SOURCE: City of Chula Vista 2005

Policy E 21.1 of the City of Chula Vista General Plan requires the application of the exterior land use-noise compatibility guidelines listed in Table 4.1-1 to "new development, where applicable, and in light of project-specific considerations." In addition, Objective E 22 (Protect the community from the effects of transportation noise) of the City's General Plan Noise Element, Policy E 22.5 requires projects to construct appropriate mitigation measures to attenuate existing and projected traffic noise levels, in accordance with applicable standards, including the exterior land use/noise compatibility guidelines listed in Table 4.1-1.

For off-site project-related traffic, the City of Chula Vista considers a noise impact to be significant if implementation of the project results in noise levels that exceed the exterior noise limits established in the City of Chula Vista General Plan, including 65 CNEL for residences, schools, and recreational uses; 70 CNEL for offices, community parks and athletic fields; and 75 CNEL for commercial uses. For transportation-related noise, a significant impact would occur if the project results in a 3 A-weighted decibel [dB(A)] or greater increase in traffic noise on a roadway segment and the resultant noise level would exceed the City of Chula Vista General Plan exterior noise limits.

c. City of Chula Vista Multiple Species Conservation Program Subarea Plan

The City of Chula Vista's MSCP Subarea Plan is a subregional plan under the California Natural Communities Conservation Plan. The Subarea Plan was approved, and the City's Implementation Agreement with U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife was entered into in February 2003. The project site is identified as a future development area per the City of Chula Vista Subarea Plan.

The MSCP Subarea Plan regulates impacts to sensitive biological resources associated with noise impacts. In accordance with Section 7.5.2 of the City of Chula Vista Subarea Plan, Adjacency Management Issues, uses in or adjacent to the Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy areas or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species, consistent with Table 3-5 of the MSCP Subregional Plan, included as Appendix A to the MSCP Subarea Plan. In general, the construction noise threshold for sensitive biological resources is an hourly average noise level of 60 dB(A) and no clearing, grubbing, and/or grading is permitted within the MSCP Preserve during the breeding season of the sensitive species present. Within the City of Chula Vista Subarea Plan, the project area is designated as "Development Area Outside Covered Projects" (i.e., not designated a preserve or conservation area) and is not immediately adjacent to any 75% or 100% Conservation Areas. The closest Chula Vista Subarea Plan conservation area (75%) is approximately 197 feet north of the project area within the Otay River.

d. City of Chula Vista Municipal Code

Zoning Ordinance

The City of Chula Vista Municipal Code (CVMC) is the primary tool for implementing the City's General Plan and is outlined within Title 19 Planning and Zoning. The CVMC details regulations that control land use, density, the location, height, bulk, appearance, dimension, open space, and appearance of structures. The project site is zoned Agricultural (A-8) as defined in Chapter 19.20 of the CVMC. The purpose of the A-8 zone is to provide a zone with appropriate uses for areas rural in character, which are undeveloped and not yet ready for urbanization. The zone is intended to preserve agricultural use land which may be suited for eventual development in urban uses.

The off-site remedial grading and trail improvement area to the north within the City of Chula Vista is zoned Floodway Zone F1 as defined in Chapter 19.50 of the CVMC.

Habitat Loss and Incidental Take

Chapter 17.35 of the CVMC includes regulations for the protection and conservation of native habitat within the City of Chula Vista and the viability of the species supported by those habitats. These regulations are intended to implement the City of Chula Vista MSCP subarea plan by placing priority on the preservation of biological resources within the planned and protected preserve. These regulations are intended to assure that development occurs in a manner that protects the overall quality of the habitat resources, encourages a sensitive form of development, and retains biodiversity and interconnected habitats. The habitat-based level of protection achieved through implementation of the MSCP is intended to meet the conservation obligations of the covered species identified therein.

Affordable Housing Incentives

Chapter 19.90 of the CVMC provides incentives for the production of affordable housing for very low income, lower income or senior households in accordance with California Government Code Sections 65915 through 65918. This chapter is 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 for very low income, lower income, and senior households throughout the City of Chula Vista. These regulations are intended to facilitate the development of affordable housing development projects and implement the goals, objectives, and policies of the City of Chula Vista General Plan Housing Element.

4.1.2.3 Local Regulations - City of San Diego

a. City of San Diego General Plan

State law requires each city to adopt a general plan to guide its future development, and mandates that the plan be periodically updated to ensure its continuing relevance and value (State Planning and Zoning Law, California Government Code, Section 65300). State law also requires the inclusion of seven mandatory elements into the General Plan (land use, circulation, housing, conservation,

noise, open space, and safety), but permits flexibility and the inclusion of optional elements to best meet the needs of a particular city.

The City of San Diego General Plan sets forth a comprehensive, long-term plan for development within the City. The General Plan implements a City of Villages strategy as part of its Strategic Framework, which aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

The Strategic Framework comprises the introductory chapter of the City of San Diego General Plan, followed by the following 10 elements:

- Land Use and Community Planning
- Mobility
- Urban Design
- Economic Prosperity
- Public Facilities, Services, and Safety
- Historic Preservation
- Recreation
- Conservation
- Noise
- Housing

The **Land Use and Community Planning Element** (Land Use Element; 2015a) provides policies to implement the City of Villages strategy within the context of the City of San Diego's community planning program. The element addresses land use issues that apply to the City as a whole and identifies the community planning program as the mechanism to designate land uses, identify site-specific recommendations, and refine citywide policies as needed. The Land Use Element establishes a structure for the diversity of each community and includes policy direction to govern the preparation of community plans. The element addresses zoning and policy consistency, the plan amendment process, airport-land use planning, balanced communities, equitable development, and environmental justice. The site is not identified in the City's Land Use and Street System Map because the site is not within the City's jurisdictional boundaries.

The **Mobility Element** (2015b) contains policies that promote a balanced, multi-modal transportation network while minimizing environmental and neighborhood impacts. In addition to addressing walking, streets, and transit, the element also includes policies related to regional collaboration, bicycling, parking, the movement of goods, and other components of the transportation system.

Urban Design Element (2008) policies call for development that respects the City of San Diego'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 the City's natural environment that work to preserve open space systems and target new growth into compact villages.

The **Economic Prosperity Element** (2023a) identifies policies intended to improve economic prosperity by ensuring that the economy grows in ways that strengthen industries, retains, and

creates good jobs with self-sufficient wages, increases average income, and stimulates economic investment in communities.

The **Public Facilities, Services, and Safety Element** (2023b) is directed at providing adequate public facilities 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 the Public Facilities Element also apply to transportation and park and recreation facilities and services.

The **Recreation Element** (2021a) goals and policies build on the City of San Diego's natural environment and resources and existing recreational facilities and services to help achieve an equitable balance of recreational resources and to adapt to future recreation needs. Recreation Element policies address the challenge of meeting the public's park and recreational needs; the inequitable distribution of parks citywide; and the need to achieve a sustainable, accessible, and diverse park and recreation system.

The **Conservation Element** (2008b) contains policies to guide the conservation of resources that are fundamental components of the City of San Diego's environment, that help define the City's identity, and that are relied upon for continued economic prosperity. The City's resources include, but are not limited to water, land, air, biodiversity, minerals, natural materials, recyclables, topography, viewsheds, and energy.

The **Historic Preservation Element** (2008c) guides the preservation, protection, restoration, and rehabilitation of historical and cultural resources.

The **Noise Element** (2015) provides goals and policies to guide compatible land uses and the incorporation of noise attenuation measures for new uses to protect people living and working in the City of San Diego from an excessive noise environment. Refer to Section 4.1.2.3.b for specific noise standards.

The separately adopted 2021-2029 **Housing Element** (2021) is intended to assist with the provision of adequate housing to serve San Diegans of every economic level and demographic group. The City of San Diego Complete Communities: Housing Solutions and Mobility Choices supports Goal 5 of the Housing Element program through the promotion of sustainable land use and transportation planning. Objective O states that housing policies should align with state and local emissions reduction and climate adaptation strategies.

b. Noise Element – Noise/Land Use Compatibility Standards

The City of San Diego General Plan Noise Element (2015) establishes noise compatibility guidelines for uses affected by traffic noise, as detailed in Table 4.1-2.

Table 4.1-2
City of San Diego Land Use – Noise Compatibility Guidelines

Land Use Category	Exterior Noise Exposure (CNEL)				
	60	65	70	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, Maintaining and Keeping; Commercial Stables					
Residential					
Single Dwelling Units; Mobile Homes		**45**			
Multiple Dwelling Units **For uses affected by aircraft noise, refer to Policies NE-D.2. & NE-D.3.*		**45**	**45**		
Institutional					
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Child Care Facilities		**45**			
Other Educational Facilities including Vocational/Trade Schools and Colleges and Universities		**45**	**45**		
Cemeteries					
Retail Sales					
Building Supplies/Equipment; Food, Beverage, 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 & 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 and 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 for occupied areas.
		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 2015.

Applicable Noise Element policies with respect to the project are as follows:

- NE-A.1. Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.
- NE-A.2. Assure the appropriateness of proposed developments relative to existing and future noise levels by consulting the guidelines for noise-compatible land use (shown on Table 4.1-2) to minimize the effects on noise-sensitive land uses.
- NE-A.3. Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.
- NE-A.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 (see Table 4.1-2), so that noise mitigation measures can be included in the project design to meet the noise guidelines.
- 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.
- NE-B.1. Encourage noise-compatible land uses and site planning adjoining existing and future highways and freeways.
- NE-B.3. Require noise reducing site design, and/or traffic control measures for new development in areas of high noise to ensure that the mitigated levels meet acceptable decibel limits.
- NE-B.4. Require new development to provide facilities which support the use of alternative transportation modes such as walking, bicycling, carpooling and, where applicable, transit to reduce peak-hour traffic.
- NE-B.7. Promote the use of berms, landscaping, setbacks, and architectural design where appropriate and effective, rather than conventional wall barriers to enhance aesthetics.
- NE-B.9. When parks are located in noisier areas, seek to reduce exposure through site planning, including locating the most noise sensitive uses, such as children's play areas and picnic tables, in the quieter areas of the site; and in accordance with the other policies of this section.
- NE-I.1. Require noise attenuation measures to reduce the noise to an acceptable noise level for proposed developments to ensure an acceptable interior noise level, as appropriate, in accordance with California's noise insulation standards (California Code of Regulations [CCR] Title 24) and Airport Land Use Compatibly Plans.
- NE-I.2. Apply CCR Title 24 noise attenuation measures requirements to reduce the noise to an acceptable noise level for proposed single-family, mobile homes, senior housing, and all other types of residential uses not addressed by CCR Title 24 to ensure an acceptable interior noise level, as appropriate.

The project site currently experiences noise levels ranging from 62 dB(A) to 75 dB(A), with noise in the vicinity primarily generated from I-805 and the adjacent roadways (see Appendix L).

c. Otay Mesa Community Plan

Under the Annexation Scenarios, the project would annex to the City of San Diego and be within the OMCP Northwest District. The OMCP works together with the City of San Diego General Plan to provide location-based policies and recommendations, written to refine the City of San Diego General Plan's citywide policies, designate land uses and housing densities. The plan sets out a clear roadmap for both the public and private actions necessary to realize the community vision of a diverse international community due to its proximity to the U.S./Mexico border. The project is not currently located in the OMCP.

d. San Diego Municipal Code

The San Diego Municipal Code (SDMC) implements the City of San Diego General Plan and community plans. The SDMC contains citywide base zones that specify permitted land uses, residential density, floor area ratio, and other development requirements for given zoning classifications; planned district regulations that provide community-specific zoning and development regulations; as well as overlay zones and supplemental regulations that provide additional development requirements.

Land Development Code

Chapters 11 through 15 of the SDMC are referred to as the Land Development Code as they regulate how land can be subdivided and developed, the form that development can take, and the land uses that are permitted in various parts of the City of San Diego. The project site lies outside the limits of the Land Development Code zoning map. Land on the west side of I-805 is zoned Agricultural-Residential (AR) and Open Space Floodplain (OF). AR zoning is intended for agriculture but does allow single-family residences. OF is applied to floodplain uses.

Environmentally Sensitive Lands Regulations

The SDMC includes the City of San Diego's Environmentally Sensitive Lands (ESL) Regulations. The purpose of the ESL Regulations 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 (SDMC Chapter 14, Article 3, Division 1). 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 construction of flood control facilities. These regulations are intended to protect public health, safety, and welfare while employing regulations that are consistent with sound resource conservation principles and the rights of private property owners. ESL include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and special flood hazard areas (SDMC Chapter 14, Article 3, Division 1). Development on premises where ESL is present would

require a Site Development Permit in accordance with Section 126.0502 of the SDMC. The project site, in addition to the off-site improvement areas, includes area that meets the SDMC ESL definition, though only the off-site portions of the site are currently within the City of San Diego.

Affordable Housing Density Bonus Regulations

The purpose of these regulations is to provide increased residential density to developers who guarantee that a portion of their residential development will be available to above-moderate income, moderate income, low income, very low income, and extremely low-income households. 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 of San Diego. These regulations implement the provisions of California Government Code Sections 65915 through 65918. 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 and applicable community plans. All requests are required to be processed by the City of San Diego and implemented by the San Diego Housing Commission.

e. City of San Diego Multiple Species Conservation Program Subarea Plan

Large blocks of native habitat having the ability to support a diversity of plant and animal life are designated as multi-habitat planning areas (MHPAs) in the City of San Diego's Subarea Plan. MHPA lands are those that have been included within the City of San Diego's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City of San Diego to be a sensitive biological resource. Neither the project site nor the adjacent area is designated as MHPA. The nearest MHPA is approximately 180 feet west of the project area, across I-805.

f. Climate Action Plan

The Climate Action Plan (CAP) is the City of San Diego's policy commitment to set clear goals to reduce GHG emissions and details the strategies and actions to achieve these goals. The CAP outlines federal, regional, and local actions to avoid GHG emissions. Strategic land use planning is critical to reducing citywide vehicle emissions that result from vehicular travel. The City is developing a land use strategy and complementary transportation policies (via Blueprint SD) to support GHG emissions reductions including an amendment to the City's General Plan with new policies and target minimum densities to guide future growth. The City updated the SDMC to include zero parking minimums and unbundled parking requirements citywide within Transit Priority Areas (TPAs). The SDMC amendments require transportation amenities, such as on-site bicycle or micro-mobility fleets, secure storage for grocery deliveries, on-site shuttle services, or other amenities to support a reduced reliance on cars. In 2021, the City adopted a complementary SDMC update for non-residential uses within existing or near-term future TPAs to create flexibility for businesses to provide parking to meet the demand and incentivize more transportation demand management programs by employers. The project includes project design features as detailed in

Chapter 3.0, Project Description, intended to support the City of San Diego CAP goal of net zero GHG emissions.

g. Complete Communities: Housing Solutions and Mobility Choices

Complete Communities: Housing Solutions and Mobility Choices is a planning initiative that focuses on planning strategies to integrate housing, mobility, parks, and infrastructure.

- Housing Solutions: Housing Solutions is an optional affordable housing incentive program aimed at encouraging the building of homes near high-frequency transit. The focus is intended to create a variety of housing options, particularly those at low- and middle-income levels.

- Mobility Choices: Mobility Choices aims to provide more mobility options for San Diegans to commute and recreate by streamlining development in areas of the City of San Diego that are most aligned with the City's climate goals and by investing in active transportation infrastructure, such as pedestrian and bicycle facilities. Specifically, the Mobility Choices Program ensures that new development mitigates transportation vehicle miles traveled impacts to the extent feasible, while incentivizing development within the City of San Diego's TPAs and urban areas. The Mobility Choices Program included amendments to the SDMC to adopt the Mobility Choices Regulations (Chapter 14, Article 3, Division 11 of the SDMC). Additionally, the Mobility Choices Program included adoption of a new CEQA significance threshold for transportation to implement Senate Bill 743.

- Parks for All of Us: The City's adopted Parks Master Plan (2021c) provides a framework to support the planning vision for a citywide interconnected park system which expands recreation facilities beyond traditional parks.

- Build Better SD: Build Better SD provides a modernized funding structure to enable faster and more efficient delivery of public facilities and infrastructure across all communities by consolidating funding, proposing structural and operational changes to the existing development impact fee program, and investing in neighborhood amenities that help implement long-range planning strategies and enhance opportunities.

The project would create a residential community with a variety of housing types and park and recreational opportunities and includes infrastructure upgrades as needed to support the development. The discussion of vehicle miles traveled and the project's consistency with the Mobility Choices Program is included in Section 4.9, Transportation.

4.1.3 Issue 1: Physically Divide an Established Community

4.1.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to physical division of a community in the City of Chula Vista:

- Would the project physically divide an established community?

b. Impact Analysis

The project site is undeveloped, surrounded by the Otay River to the north, I-805 to the west, and existing residential communities to the east. Based on the proposed site plan, implementation of the project could result in development of up to 221 residential units comprised of both multi-family and detached residential uses that would be similar to the existing residential development to the east. The project would take access via Dennery Road, an existing City of San Diego arterial roadway, connecting to Palm Avenue which provides access to I-805. No project features are proposed that could physically divide an established community such as a new roadway or other features. Therefore, the project would not physically divide an established community.

c. Significance of Impacts

The project would not physically divide an established community as no major expansion of roadways or infrastructure is needed to serve the project. Therefore, the project would not physically divide an established community and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.1.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to land use:

- Would the proposal physically divide an established community?

b. Impact Analysis

The analysis of impacts related to dividing a community under the Annexation Scenario 2a would be the same as the No Annexation Scenario and Annexation Scenario 2b. Under all scenarios, the project would develop a new residential community that would be similar to adjacent residential development. The project would take access from existing developed roadways and major expansion of roadways or infrastructure is not proposed that could physically divide a community. Refer to Section 4.1.3.1.b above for further details.

c. Significance of Impacts

The project would not physically divide an established community as no major expansion of roadways or infrastructure is needed to serve the project. Therefore, the project would not physically divide an established community and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.1.4 Issue 2: Land Use Plan Consistency

4.1.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to plan consistency in the City of Chula Vista:

- Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

b. Impact Analysis

The project includes an amendment to the City of Chula Vista General Plan to remove the Open Space (OS)–Active Recreation designation and designate the project site as Specific Plan–Residential Medium to allow residential development at a density range of 6.1 to 11 dwelling units per acre, or up to a maximum of 221 residential units. Under the No Annexation Scenario and Annexation Scenario 2b, development would be guided by the project's Specific Plan which ensures the establishment of the land uses, intensity, development standards, design guidelines, and primary infrastructure components are consistent with the City of Chula Vista plans and policies. A summary of the project's consistency with applicable land use plans, policies and regulations is provided below. As it pertains to off-site improvements located within the City of San Diego, grading for off-site access roads within the City of San Diego would be consistent with City of San Diego plans

and policies. Consistency analysis with applicable City of San Diego plans and policies for off-site components are discussed in Section 4.1.4.2.b.

City of Chula Vista General Plan

The project site is designated Open Space Active Recreation. According to the City of Chula Vista General Plan, "the Open Space Active Recreation designation is intended for areas that are largely undeveloped and adjacent to or near other open space areas; do not contain significant sensitive plant or animal species or habitat; and, due to locational characteristics, provide opportunities for public or private recreational activities, including but not limited to ball fields; tennis courts; outdoor campgrounds; golf driving ranges; and limited commercially related active recreation uses." Although the project site is near the Otay River to the north, the site is surrounded on three sides by development in the City of San Diego including I-805 to the west, Kaiser Permanente Otay Mesa medical offices to the south, and the City of San Diego Ocean View Hills community to the east and southeast. With the project site being accessed by City of San Diego roadways (Dennery Road, Palm Avenue, Ocean View Hills Parkway), the project site more closely relates to the surrounding urbanized land uses. However, the project location does provide opportunities to provide public access to recreational trails within the OVRP. The project incorporates several pocket parks and publicly accessible trails that would provide connections to the OVRP as detailed in Chapter 3.0 Project Description, Section 3.4.4. Inclusion of these recreational features that would be accessible to the public would provide consistency with the intent of the Open Space Active Recreation designation, while allowing for development consistent with surrounding land uses.

Additionally, the project was evaluated against key City of Chula Vista General Plan themes and objectives to determine overall project consistency with the General Plan. Appendix B includes a consistency analysis of key City of Chula Vista General Plan policies. Key consistency findings related to City of Chula Vista General Plan themes pertinent to environmental resources are summarized below:

- **Theme 1 Strong Community Character and Image** – The project site is more related to the City of San Diego than the City of Chula Vista due to the separation of the project site from the City of Chula Vista by the Otay River. The project site is surrounded by residential developments within the City of San Diego Ocean View Hills community, which consists of residential and recreational uses. The project would enhance the interface of the community by contributing additional recreational amenities and housing units that complement the surrounding community.

- **Theme 2 Healthy and Sustainable Economy** – The project would accommodate expansion of the local economy by providing workforce housing options and infrastructure improvements. New residential development would support economic investment in the area which may enhance the economic vitality of the area.

- **Theme 3 Strong and Safe Neighborhoods** – The project would develop an existing vacant site that could enhance safety of the area by introducing homes and residents, eliminating opportunities for encampments and trash dumping. Formal trailheads and trail improvements would formalize existing informal trail networks to the OVRP and increase safety by improving land adjacent to the OVRP.

- **Theme 4 Improved Mobility** – The project includes new street connections, sidewalks, paseos, trail connections, and bicycle facilities to serve residents and visitors. These mobility improvements would tie into the existing local and regional mobility network to enhance local mobility.

- **Theme 5 Healthy and Sustainable Environment** – The project incorporates protective measures to ensure there are no adverse effects on the adjacent sensitive habitat in the OVRP. Implementation of the Nakano Specific Plan would also address stormwater management, transitional vegetation for protection of nearby habitat areas, as well as biofiltration basins for water quality protection.

As detailed above and further detailed in Appendix B, the project would be consistent with relevant environmental goals and policies of the City of Chula Vista General Plan.

Chula Vista General Plan Noise Element Land Use – Noise Compatibility

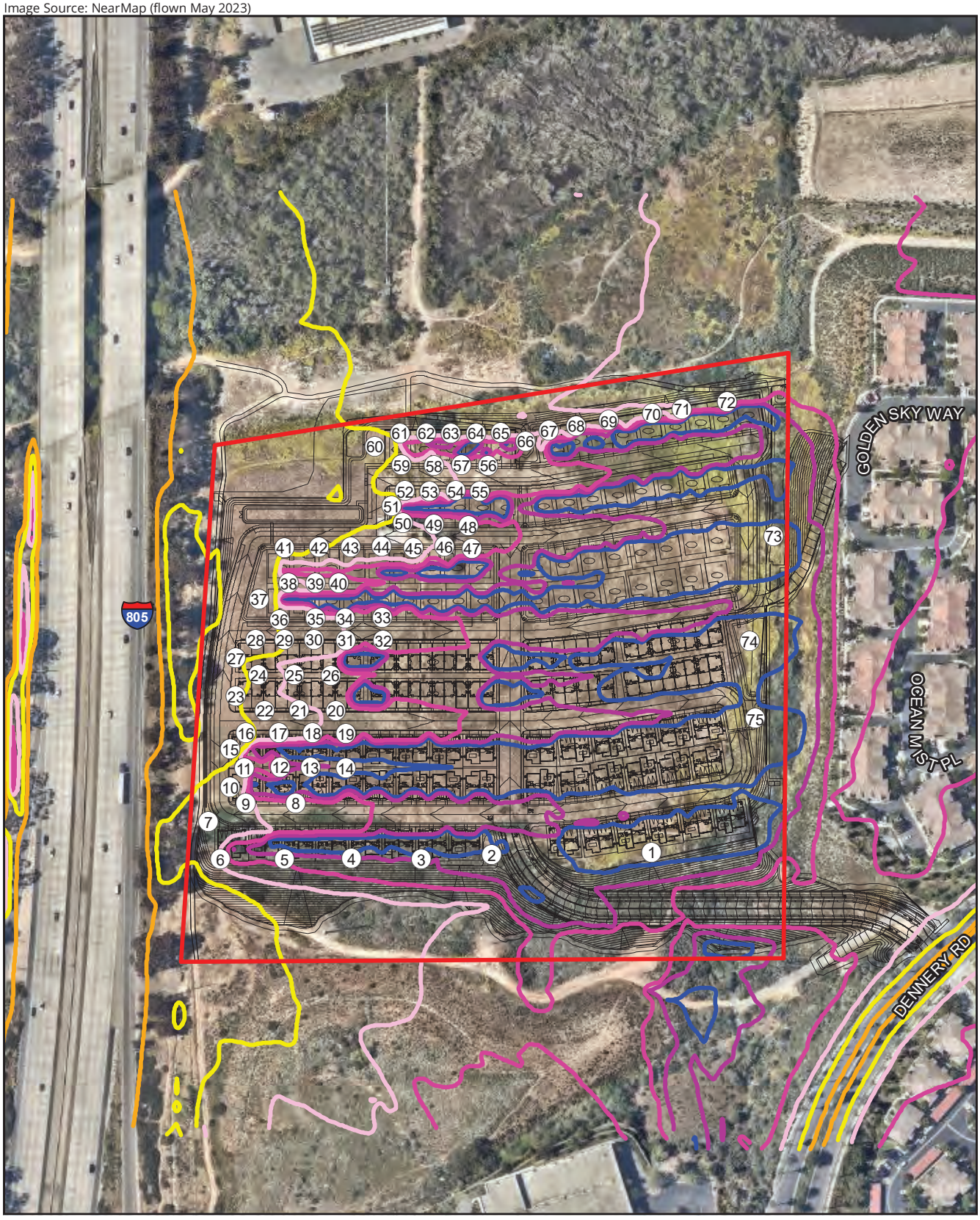
As detailed in Section 4.1.2.2.b, the City of Chula Vista General Plan Noise Element establishes allowable noise levels for outdoor usable space according to the type of land use. For new residential development the standard is an annual CNEL of 65 dB.

The main source of traffic noise at the project site is from existing vehicle traffic on I-805 and Dennery Road. The SoundPLAN program, which uses the Federal Highway Administration Traffic Noise Model algorithms and reference levels to calculate noise levels at selected receiver locations, was used to calculate on-site vehicle traffic noise levels. Details of the model inputs and sources of future traffic volumes are discussed in the Noise Technical Report prepared for the project (see Appendix L). Calculated vehicle traffic noise level contours considered shielding provided by proposed buildings, topography, and proposed grading (Figure 4.1-1). As shown, first-floor noise levels would exceed 70 CNEL across the western portion project site closest to I-805. Noise levels would be less than 65 CNEL across the eastern half of the project site.

To determine exterior noise levels at the exterior use areas and the first-, second-, and third-floor building façades, noise levels were modeled at seventy-five (75) specific receiver locations, as shown in Figure 4.1-1. Exterior noise levels were modeled at first- through third-floor elevations. The results are summarized in Table 4.1-3. SoundPLAN data are provided in Attachment 6 of Appendix L.

The City of Chula Vista's exterior noise level standard for exterior use areas of residential uses is 65 CNEL. The interior noise level standard is 45 CNEL. As shown in Table 4.1-3, exterior noise levels are projected to range from 44 to 75 CNEL. The exterior use areas include the mini parks (Receivers 2, 60, and 66), the backyards of the duplexes (Receivers 1, 3 through 6, and 11 through 14), and detached condominiums (Receivers 38 through 40, 52 through 55, 61 through 65, and 67 through 72). As shown in Table 4.1-3, exterior noise levels are projected to exceed the residential standard of 65 CNEL at the mini park closest to I-805 (Receiver 60) and at the backyards closest to I-805 (Receivers 11, 38, 52, 53, 61 through 65, and 67 through 70). To reduce exterior noise levels at these locations, the project incorporates six-foot barriers as shown in Figure 4.1-2. Noise levels with the barriers were modeled and the resulting noise levels at the exterior use areas were reduced to be consistent with the residential standard of 65 CNEL at all receiver spots, except for the mini park which still exceeds the standard. Reduction results are summarized in Table 4.1-4.

Image Source: NearMap (flown May 2023)



Project Site
Receivers
Site Plan

Vehicle Traffic Noise
50 CNEL
55 CNEL
60 CNEL
65 CNEL
70 CNEL
75 CNEL

0 Feet 250

RECON

M:\JOBS\3396-1\common_gis\Reports\EIR\Fig4.1-1.mxd 09/08/2023 bma

FIGURE 4.1-1
Future Vehicle Traffic Noise Contours

Image Source: NearMap (flown May 2023)



Project Site
Receivers
6-Foot Backyard Barrier
6-Foot Park Barrier
Site Plan

0 Feet 200

RECON

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FIGURE 4.1-2
Noise Barriers

As shown in Table 4.1-4, without incorporation of the six-foot barriers shown in Figure 4.1-2, exterior noise levels at the proposed backyards would exceed 65 CNEL at Receivers 11, 38, 52, 53, 61 through 65, and 67 through 70. With the incorporation of noise barriers, noise levels at the mini park would be reduced, but not to 65 CNEL or less. However, as discussed in Section 4.1.2.2.b, the minimum amount of required exterior use space shall meet the 65 CNEL criteria, with any additional area being exempt from this requirement. As the mini park is in excess of minimum required exterior use space, it is not subject to the 65 CNEL exterior noise level. Construction of the six-foot backyard barriers identified in Figure 4.1-2 would be required to reduce exterior noise levels at the backyards to 65 CNEL or less.

To ensure exterior use areas on-site meet City of Chula Vista Noise Element standards, a project design feature has been incorporated into Chapter 3.0 Project Description, Section 3.6.2.1.a. This project design feature requires the incorporation of barriers, in the form of six-foot sound walls in the locations identified on Figure 4.1-2. Installation of barriers would reduce exterior noise levels at the backyards of receivers 11, 38, 52, 53, 61 through 65, and 67 through 70 to meet the City of Chula Vista's 65 CNEL requirement for residential uses. The sound attenuation walls must be solid and free of cracks or holes. They can be constructed of masonry, wood, plastic, plexiglass, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least one-inch total thickness or have a density of at least 3.5 pounds per square foot. With the incorporation of the project design feature PDF-NOS-1 detailed in Section 3.6.1.a, exterior noise levels at all backyards would be reduced to the City of Chula Vista's compatibility standard of 65 CNEL or below.

Table 4.1-3
Future Vehicle Traffic Noise Levels

Receiver	Location	Exterior Noise Level (CNEL)		
		First Floor	Second Floor	Third Floor
1	Duplex Backyard	47	51	54
2	Mini Park	51	54	58
3	Duplex Backyard	55	56	58
4	Duplex Backyard	59	58	60
5	Duplex Backyard	59	61	64
6	Duplex Backyard	63	67	70
7	Building Façade	67	69	72
8	Building Façade	63	64	66
9	Building Façade	64	67	69
10	Building Façade	68	71	73
11	Duplex Backyard	**66**	68	69
12	Duplex Backyard	58	59	62
13	Duplex Backyard	56	57	60
14	Duplex Backyard	54	56	59
15	Building Façade	70	73	74
16	Building Façade	69	71	72
17	Building Façade	67	68	69
18	Building Façade	65	65	66

Table 4.1-3
Future Vehicle Traffic Noise Levels

Receiver	Location	Exterior Noise Level (CNEL)		
		First Floor	Second Floor	Third Floor
19	Building Façade	63	64	65
20	Building Façade	64	65	66
21	Building Façade	65	66	67
22	Building Façade	67	68	69
23	Building Façade	72	74	75
24	Building Façade	67	68	69
25	Building Façade	64	64	65
26	Building Façade	61	62	63
27	Building Façade	73	74	75
28	Building Façade	70	71	72
29	Building Façade	67	69	70
30	Building Façade	65	66	67
31	Building Façade	63	64	65
32	Building Façade	61	62	63
33	Building Façade	62	62	64
34	Building Façade	63	64	66
35	Building Façade	64	65	67
36	Building Façade	68	69	71
37	Building Façade	72	73	74
38	Condo Backyard	**66**	67	69
39	Condo Backyard	62	63	65
40	Condo Backyard	61	62	64
41	Building Façade	70	70	71
42	Building Façade	70	70	70
43	Building Façade	70	70	70
44	Building Façade	69	69	69
45	Building Façade	67	67	67
46	Building Façade	63	64	64
47	Building Façade	60	61	62
48	Building Façade	60	61	63
49	Building Façade	63	63	64
50	Building Façade	66	66	67
51	Building Façade	70	71	71
52	Condo Backyard	**69**	69	69
53	Condo Backyard	**66**	67	66
54	Condo Backyard	64	65	65
55	Condo Backyard	63	64	64
56	Building Façade	61	63	63
57	Building Façade	63	64	64
58	Building Façade	65	65	66
59	Building Façade	67	67	68
60	Mini Park	**71**	71	71

Table 4.1-3
Future Vehicle Traffic Noise Levels

Receiver	Location	Exterior Noise Level (CNEL)		
		First Floor	Second Floor	Third Floor
61	Condo Backyard	**69**	69	69
62	Condo Backyard	**69**	68	68
63	Condo Backyard	**68**	68	68
64	Condo Backyard	**68**	67	67
65	Condo Backyard	**67**	67	67
66	Mini Park	63	62	63
67	Condo Backyard	**67**	67	66
68	Condo Backyard	**66**	66	66
69	Condo Backyard	**66**	66	66
70	Condo Backyard	**66**	65	65
71	Condo Backyard	65	65	65
72	Condo Backyard	65	64	64
73	Eastern Property Line	48	49	52
74	Eastern Property Line	48	50	53
75	Eastern Property Line	44	46	51

Bold = Exceeds 65 CNEL at exterior use area

Table 4.1-4
Unmitigated and Mitigated Noise Levels at Exterior Use Areas

Receiver		Exterior Noise Level (CNEL)	
		Without Barrier	With Barrier
1	Duplex Backyard	47	47
2	Mini Park	51	51
3	Duplex Backyard	55	55
4	Duplex Backyard	59	59
5	Duplex Backyard	59	59
6	Duplex Backyard	63	63
11	Duplex Backyard	**66**	64
12	Duplex Backyard	58	58
13	Duplex Backyard	56	56
14	Duplex Backyard	54	54
38	Condo Backyard	**66**	65
39	Condo Backyard	62	63
40	Condo Backyard	61	61
52	Condo Backyard	**69**	65
53	Condo Backyard	**66**	63
54	Condo Backyard	64	63
55	Condo Backyard	63	62
60	Mini Park	**71**	**67**
61	Condo Backyard	**69**	63
62	Condo Backyard	**69**	62

Table 4.1-4
Unmitigated and Mitigated Noise Levels at Exterior Use Areas

Receiver		Exterior Noise Level (CNEL)	
		Without Barrier	With Barrier
63	Condo Backyard	**68**	62
64	Condo Backyard	**68**	61
65	Condo Backyard	**67**	61
66	Mini Park	63	62
67	Condo Backyard	**67**	59
68	Condo Backyard	**66**	63
69	Condo Backyard	**66**	62
70	Condo Backyard	**66**	60
71	Condo Backyard	65	58
72	Condo Backyard	65	57
Bold = Exceeds 65 CNEL at exterior use area			

Otay Valley Regional Park Concept Plan

The project site is within the OVRP Concept Plan as detailed on Figure 2-7. As the OVRP Concept Plan does not change existing zoning or planned land uses, add new development regulations, or preclude private development, the project would not conflict with the plan. Furthermore, the residential project incorporates substantial recreational amenities through pocket parks and trail improvements that provide public linkages to the OVRP trail system. Additionally, the project includes trail improvements within the OVRP just north of the project parcel. OVRP trail improvements include placement of decomposed granite to define formal 8-foot-wide trail alignments with peeler pole fencing on each side of the trail. Refer to Chapter 3.0 Project Description, Section 3.4.4 for recreational and trail improvements incorporated into the project design. Incorporation of enhancements to the OVRP trail network and providing connectivity through the site to provide public connections to the OVRP would ensure consistency with the OVRP Concept Plan.

Brown Field ALUCP

The project is located within the Brown Field Airport Influence Area (Review Area 2 as shown in Figure 2-8). However, the project site is outside of the Brown Field safety compatibility map areas and is not within a Part 77 Airspace Protection, Overflight, and Overflight Notification area. Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight areas. A notice was sent to the Airport Land Use Commission on September 16, 2021. In response, it was noted that the project site is outside the noise contours and safety zones of the Brown Field Municipal Airport ALUCP and accordingly requires no action from the ALUC for a determination of consistency with the ALUCP. The project would not result in any conflicts with the Brown Field ALUCP.

LAFCO Consistency/Cortese-Knox-Hertzberg Local Government Reorganization Act/California Government Code Sections 56000 – 57550

Under the No Annexation Scenario, the project site would stay in the City of Chula Vista, but out-of-agency service agreements would need to be approved through LAFCO to provide key services to the project site including water and sewer services through the City of San Diego. The project site would remain within the Otay Water District service boundaries, but LAFCO approval of an out-of-agency service agreement with the City of San Diego would be required to allow use of City of San Diego water and sewer facilities and pipelines. As the No Annexation Scenario would not require any Sphere of Influence or jurisdictional boundary changes, policies related to the protection of prime agricultural lands and open space detailed in Section 4.1.2.1.c would not apply.

However, in Annexation Scenario 2b, a sphere of influence revision would be required to ultimately annex the site into San Diego. Refer to Section 4.1.4.2.b for a discussion of LAFCO consistency as it relates to annexation.

c. Significance of Impacts

Under the No Annexation Scenario and Annexation Scenario 2b, with the inclusion of noise walls specified in project design feature PDF-NOS-1 detailed in Chapter 3.0 Project Description, Section 3.6.1.a, the project would be consistent with the City of Chula Vista Noise Element. No conflicts with applicable land use plans or policies have been identified for the No Annexation Scenario or Annexation Scenario 2b. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.1.4.2 Annexation Scenario 2a

a. Thresholds of Significance

San Diego has identified the following issue questions related to plan consistency:

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

- Would the project result in land uses which are not compatible with an adopted airport Comprehensive Land Use Plan (CLUP)?

According to the City of San Diego's Significance Determination Thresholds (2022), an inconsistency with a plan is not in and of itself a significant impact; the inconsistency would have to relate to an environmental issue (i.e., cause a direct or indirect physical change in the environment) to be considered significant under CEQA. Land use impacts may be significant if a project would:

- Be inconsistent or conflict with an adopted land use designation or intensity and result in indirect or secondary environmental impacts;
- Be inconsistent or conflict with the environmental goals and/or objectives of a community or general plan;
- Be substantially incompatible with an adopted plan;
- Result in development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use; or
- Be incompatible with uses as defined in an airport's CLUP.

b. Impact Analysis

Under the Annexation Scenario 2a, the project site would be annexed into and developed in the City of San Diego. Consistency with City of San Diego plans and policies in addition to consistency with LAFCO policy is discussed below.

City of San Diego General Plan Land Use Element and Otay Mesa Community Plan

The City of San Diego General Plan provides goals and policies that guide the development of Community Plans, as well as growth and development citywide. The project site is currently not within the City of San Diego or its sphere of influence. However, due to the site's location being surrounded on three sides by developed land in the City of San Diego, in addition to the site's access from City of San Diego roadways, annexation to the City of San Diego is considered a logical reorganization of jurisdictional boundaries. To ensure consistency with City of San Diego plans and policies specifically relating to environmental resources, a consistency analysis was undertaken and is provided in Table 2 of Appendix B. As detailed therein, the project would be compatible with the City of San Diego General Plan and OMCP. Any indirect or secondary environmental impacts that could result from the proposed General Plan Amendment and amendment to the OMCP are addressed throughout this EIR and potentially significant impacts are avoided or reduced through implementation of mitigation measures to the extent feasible.

The City of San Diego does not currently have any general plan or community plan designation on the project site; therefore, the project would not conflict with a community plan designated open space or prime farmland. The project would be compatible with the City of San Diego General Plan and the OMCP as detailed in Table 2 of Appendix B.

General Plan Noise Element Land Use- Noise Compatibility

Under the Annexation Scenario 2a, the project would be required to show consistency with the City of San Diego General Plan Noise Element land use consistency standards. While land use compatibility is not itself a CEQA issue, this analysis focuses on whether the inclusion of sound attenuation measures would result in environmental impacts.

The SoundPLAN noise level contours described in Section 4.1.4.1.b were used in this analysis. Pursuant to the City of San Diego Noise Element, multi-family residential uses are "compatible" with exterior noise levels up to 60 CNEL, and "conditionally compatible" with exterior noise levels up to 70 CNEL. In "conditionally compatible" areas, feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable, and building structures must attenuate exterior noise levels to an indoor noise level of 45 CNEL. Any future residential use exposed to noise levels up to 75 CNEL must include attenuation measures to ensure an interior noise level of 45 CNEL and be in an area where a community plan allows multi-family or mixed-use residential uses. The project would also include pocket parks. Parks are "compatible" in areas up to 70 CNEL and "conditionally compatible" in areas up to 75 CNEL.

As shown in Figure 4.1-1 and Table 4.1-3, exterior noise levels are projected to exceed 70 CNEL only at the receivers located closest to I-805 (Receivers 23, 27, 37, and 60). However, Receivers 23, 27, and 37 do not represent exterior use areas, and were modeled for the purposes of the interior noise analysis. Noise levels at Receiver 60 (Mini Park) would exceed the park compatibility level of 70 CNEL and noise levels at the residential exterior use areas would be exposed to the "conditionally compatible" range of 60 to 70 CNEL at (Receivers 11, 38, 52, 53, 61 through 65, and 67 through 70). To ensure the project is consistent with City of San Diego Noise Element standards, the project incorporates a project design feature, which is referenced in Chapter 3.0 Project Description, Section 3.6.2.a. The project design feature (PDF-NOS-1) requires exterior noise levels at backyards and at park uses to be reduced to the City of San Diego noise compatibility standards for residential and park uses (60 CNEL and 70 CNEL, respectively) through incorporation of six-foot noise barriers. As detailed in Appendix B, the inclusion of noise attenuation walls would be consistent with City policies including NE-B.3, which requires ne development to include noise reducing site design measures to ensure acceptable noise limits), and NE-I.1 and NE-I.2, which require noise attenuation measures, as needed, to ensure consistency with California's Noise Insulation standards (CCR Title 24). Six-foot sound walls as identified on Figure 4.1-2 shall be constructed using the materials and specifications detailed in the project design feature detailed in Section 3.6.2.a (PDF-NOS-1).

As shown in Table 4.1-4, construction of the six-foot park barrier would reduce noise levels to 67 CNEL at the mini park (Receiver 60) which would result in noise compatible with the City's exterior noise level standard for parks. For the receivers located in areas exposed to the "conditionally compatible" range of 60 to 70 CNEL, construction of the six-foot backyard barriers shown in Figure 4.1-2 would reduce exterior noise levels to 65 CNEL or less.

Overall, with the inclusion of PDF-NOS-1, the project would comply with the City's land use-noise compatibility standards, avoiding any potential environmental impacts.

General Plan 2021-2029 Housing Element

The City of San Diego General Plan Housing Element contains policies that focus on ensuring the provision of sufficient housing for all income groups to accommodate the City of San Diego's anticipated share of regional growth over the 2021-2029 Housing Element cycle. As summarized in Appendix B, the project would comply with relevant Housing Element goals, objectives, and policies. As detailed therein, the project would be consistent with policies HE-I.1, HE-I.2, and HE-I.3, which require housing accessibility to lower income residents by providing 10 percent of the total units, or 22 units, as affordable. Specifically, a total of 11 units would be affordable-to-low-income households (five percent of the total) and 11 units would be affordable-to-moderate income households (five percent of the total).

Goal 5 of the Housing Element states, "The City is dedicated to addressing and mitigating climate change impacts through sustainable land use and transportation planning and strives to be a leader in sustainable development. By building complete communities where people can work, shop, and recreate without the use of a car, the City can reduce vehicle miles traveled, GHG emissions, and air pollution…" The City of San Diego Complete Communities: Housing Solutions and Mobility Choices supports Goal 5 through the promotion of sustainable land use and transportation planning. Objective O states that housing policies should align with state and local emissions reduction and climate adaptation strategies. The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** outlined in Section 4.5.3.2.d in addition to project design features (PDF-GHG-1 through PDF-GHG-9) detailed in Section 3.6.3.c in accordance with Objective O. However, as discussed in Section 4.5.3.2, Greenhouse Gas Emissions (Annexation Scenario 2a), these measures are expected to reduce GHG emissions; however, GHG emissions are considered significant because the project site is not currently within the City of San Diego and associated emissions were not accounted for in the City of San Diego CAP. Per the CAP, a project that was not accounted for in the CAP could have a significant impact with regard to GHG emissions because the proposed development would result in densities that are more intensive than existing assumptions for the site since the City does not currently have any development assumptions for the site. Therefore, the project would not be consistent with the growth projections used in the development of the CAP. To meet the assumptions in the CAP, the project would have to obtain net zero or negative GHG emissions. While the inclusion of proposed PDF-GHG-1 through PDF-GHG-9 and mitigation measures **GHG-SD-1** through **GHG-SD-4** would reduce GHG emissions, the associated reduction cannot be shown to result in net zero emissions and it cannot be demonstrated that the project would achieve emissions consistent with the CAP. As such, the project would not be consistent with the CAP and the project would not be consistent with Goal 5 of the Housing Element.

Otay Valley Regional Park Concept Plan

As discussed under Section 4.1.2.1.e above, the project would incorporate enhancements to the OVRP. As detailed in Chapter 3.0 Project Description, the project would include additional trail connections on and off the project site as well as an overlook area in accordance with the OVRP. Refer to Section 4.1.4.1.b above for additional information regarding the project's consistency with the OVRP Concept Plan.

Brown Field ALUCP

As discussed under Section 4.1.2.1.d above, the project is located within the Brown Field Airport Influence Area (see Figure 2-8) and would not result in any conflicts with the Brown Field ALUCP. Refer to Section 4.1.4.1.b above for additional information. Although the project site is located within the "Review Area 2" Airport Influence Area per Exhibit III-6 of the Brown Field Municipal ALUCP (SDCRAA 2010), the project site is located outside of the 55 CNEL future aviation noise contour and thus well below the 65 CNEL compatibility standard.

City of San Diego Climate Action Plan

The City of San Diego CAP includes a CAP Consistency Checklist to provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The CAP Consistency Checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG emissions reduction targets. Projects that are consistent with the CAP as determined through the use of this checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this checklist to the extent feasible.

As detailed in Section 4.5, Greenhouse Gas Emissions, although the project would include project design features and implement mitigation measures to reduce GHG emissions, the project would not be consistent with the City of San Diego CAP. The project site is not currently within the City of San Diego and associated emissions were not accounted for in the City of San Diego CAP. To meet the assumptions in the CAP, the project would have to obtain net zero or negative GHG emissions. While the proposed project design features and mitigation measures would reduce GHG emissions, the associated reduction would not achieve net zero GHG emissions (see Section 4.5.4.2.b). Therefore, the project would not be consistent with the CAP.

LAFCO Consistency/Cortese-Knox-Hertzberg Local Government Reorganization Act/California Government Code Sections 56000 – 57550

Under the Annexation Scenarios, the project site would be reorganized through an application to LAFCO to achieve detachment from the City of Chula Vista and the Otay Water District and annexation into the City of San Diego. The LAFCO considers several factors in reviewing a proposal for annexation. As the Annexation Scenario would require a Sphere of Influence and jurisdictional boundary change to add the project site to the City of San Diego, the San Diego LAFCO policies related to the protection of prime agricultural lands and open space detailed in Section 4.1.2.1.c would apply to the project site.

San Diego LAFCO Policy L-101 supports protection of open space and agricultural lands and includes definitions for each. Appendix A of Legislative Policy L-101 defines open space as any parcel or area of land or water that is substantially unimproved and devoted to an open-space use and designated

on a local, regional, or state open space plan as any of the conditions described in Section 65560(b)(1) through (6) (San Diego LAFCO 2021). The overarching open space plan for the project site would be the City of Chula Vista MSCP Subarea Plan. While the project site is zoned for agriculture in the City of Chula Vista General Plan, that designation does not preclude development or represent a plan for conservation of open space. The City of Chula Vista Subarea Plan designated the site as "Development Area Outside Covered Projects," in other words it is not designated a preserve or conservation area. Additionally, the project site is not immediately adjacent to any 75% or 100% Conservation Areas as defined by the City of Chula Vista Subarea Plan. While the project site is unimproved, it is surrounded on three sides by development and is not designated as open space in the City of Chula Vista or City of San Diego Subarea Plan. Therefore, development of the project site would not conflict with San Diego LAFCO Legislative Policy L-101 related to the protection of open space.

Regarding protection of agricultural lands, Legislative Policy L-101 discourages proposals that would convert agricultural lands, particularly prime agricultural land to other uses. Appendix A of Legislative Policy L-101 defines agricultural lands as land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program (San Diego LAFCO 2021). The project site has not had any active agricultural use since around 2010, is not part of a crop rotational program, and is not enrolled in an agricultural subsidy or set-aside program. Therefore, the project would not convert agricultural land as defined by San Diego LAFCO Policy L-101.

Appendix A of Legislative Policy L-101 defines prime agricultural lands as land that has not been developed for a use other than agricultural use and that meets any of the following qualifications:

1. Land that, if irrigated, qualifies for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification whether or not the land is actually irrigated, provided that irrigation is feasible;

2. Land that qualifies for rating 80 through 100 Storie Index Rating;

3. Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July 1967, developed pursuant to Public Law 46, December 1935;

4. Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a non-bearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre; or

5. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.

As detailed above, the project site has not been in agricultural use since around 2010; therefore, it does not support livestock, fruit bearing trees or other agricultural products that have returned any revenues in the past five years. However, the project site supports Salinas clay loam, 0 to 2 percent slopes which is considered prime farmland, if irrigated. This soil type has a storie index of 1 (80 to 100) and land capability classification of 1, if irrigated and 3c, if not irrigated. The site also supports small areas of Olivenhain cobbly loam and riverwash which have lower value as agricultural land (Figure 4.1-3). Based on the presence of the Salinas clay loam, the site meets the definition of prime agricultural land as defined by Legislative Policy L-101. Although the site meets the definition of prime agricultural land, the site has not been used for agricultural purposes since around 2010. Pursuant to the "no harm provisions" of Legislative Policy L-101, "lands otherwise qualifying as agricultural under Gov Code Section 56016 and prime agriculture under Gov Code Section 56064 shall not be subject to this policy and its limitations on conversions if left fallow, unsown, or disused for agricultural purposes at the present time and for more than 60 consecutive months" (San Diego LAFCO 2021). Therefore, the project would not conflict with San Diego LAFCO Legislative Policy L-101.

c. Significance of Impacts

Under Annexation Scenario 2a, the City of San Diego would require implementation of project design feature PDF-NOS-SD-1 to ensure consistency with the City of San Diego Noise Element. No conflicts or inconsistencies have been identified with any City of San Diego General Plan Land Use Element, OMCP, or LAFCO land use plans or policies. Additionally, no conflicts or inconsistencies would occur related to the OVRP Concept Plan or the Brown Field ALUCP.

However, as discussed above and in Section 4.1.4.2.b, the project would conflict with goals, objectives and policies contained within the City of San Diego General Plan Housing Element that requires housing to be consistent with the City of San Diego's CAP. Additionally, as detailed in Section 4.5, although the project would include PDF-GHG-1 through PDF-GHG-9, and would implement mitigation measures **GHG-SD-1** through **GHG-SD-6**, the project would remain inconsistent with the Housing Element and CAP resulting in environmental impacts that would not be reduced to below a level of significance. Therefore, impacts related to consistency with the CAP and CAP related Housing Element goals would be considered significant.

d. Mitigation Measures

The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** described in Section 4.5.3.2.d.

Image Source: Nearmap (flown May 2023)



Project Site

Off-site Improvements

Soil Type

Olivenhain cobbly loam, 9 to 30 percent slopes,
Not Prime Farmland,
Storie Index: Grade 4 - Poor,
Land Capability Classification: 6e

Salinas clay loam, 0 to 2 percent slopes,
Prime Farmland if Irrigated,
Storie Index: Grade 1- Excellent,
Land Capability Classification: 1 (irr), 3c (non-irr)

Riverwash,
Not Prime Farmland,
Storie Index: Not Rated,
Land Capability Classification: 8 (non-irr)

0 Feet 200

RECON

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FIGURE 4.1-3
Soil Types

e. Significance after Mitigation

The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** outlined in Section 4.5.3.2.d in addition to project design features (PDF-GHG-1 through PDF-GHG-9) detailed in Section 3.6.3.c of this EIR. While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the City of San Diego CAP. As a result, the project would not be consistent with City of San Diego General Plan Housing Element Goal 5. No additional mitigation measures are available to avoid this impact; the impact associated with land use plan consistency would remain significant.

4.1.5 Issue 3: Consistency with Multiple Species Conservation Plans

4.1.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The City of Chula Vista has identified the following issue questions related to project consistency with the City of Chula Vista's MSCP Subarea Plan:

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

b. Impact Analysis

Refer to the Biological Resources Section 4.3.6.1.b for a discussion of consistency with the City of Chula Vista MSCP Subarea Plan. As detailed therein, the project site is designated as "Development Area Outside Covered Projects" (i.e., not designated a preserve or conservation area) and is not immediately adjacent to any 75% or 100% Conservation Areas. The off-site area associated with roadway improvements would remain in the City of San Diego and continue to be subject to the City of San Diego MSCP Subarea Plan. The project would be subject to the MSCP Conditions for Coverage for covered species, which is consistent between both Subarea Plans. Refer to Attachment 11 of the Biological Resources Technical Report (see Appendix D) for additional discussion of Subarea Plan consistency.

c. Significance of Impacts

No conflicts or inconsistencies have been identified with the City of Chula Vista Subarea Plan. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.1.5.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue questions related to project consistency with the City of San Diego's MSCP Subarea Plan:

- Would the project conflict with the provisions of the City of San Diego's Multiple Species Conservation Program Subarea Plan or other approved local, regional or state habitat conservation plan?

According to the City of San Diego's Significance Determination Thresholds (2022), a land use impact may be considered significant if the project would be inconsistent or conflict with adopted environmental plans for an area. For example, a use incompatible with the MSCP for development within the MHPA would fall into this category.

b. Impact Analysis

Refer to the Biological Resources Section 4.3.6.2.b for a detailed discussion of consistency with the City of San Diego MSCP Subarea Plan. The project site is currently located within the City of Chula Vista Subarea Plan. Under Annexation Scenario 2a, the project site would be annexed into and developed within the City of San Diego. In both Annexation Scenarios, a Subarea Plan amendment revision would be processed after annexation to include the project site as part of the City of San Diego MSCP Subarea Plan area. As the conditions of coverage for covered species is consistent between both the City of Chula Vista and City of San Diego plans, and neither plan designates the project site or adjacent area as conservation or preserve land, there would be no conflict with the City of San Diego MSCP Subarea Plan. Therefore, the project site would be equally protected under both Subarea Plans and the transfer of the project site from the City of Chula Vista MSCP Subarea Plan to the City of San Diego MSCP Subarea Plan would be consistent with the conservation goals of the MSCP Subregional Plan. In addition, the project would not impact any City of San Diego MHPA. Refer to Attachment 11 of the Biological Resources Technical Report (see Appendix D) for additional discussion of Subarea Plan consistency.

c. Significance of Impacts

As detailed further in Section 4.3.6.2.b, the project would be consistent with the provisions of the City of San Diego MSCP Subarea Plan. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.1.6 Issue 4: Deviation or Variance

4.1.6.1 No Annexation Scenario and Annexation Scenario 2b

This issue does not apply to the City of Chula Vista and therefore is only addressed under Annexation Scenario 2a.

4.1.6.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego San Diego has identified the following issue questions related to resulting physical impacts due to required deviation or variance:

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

According to the City of San Diego's Significance Determination Thresholds (2022), a land use impact may be considered significant if the project would conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts could occur.

b. Impact Analysis

As detailed in Section 3.4.1.2, Annexation Scenario 2a, would be implemented through City of San Diego base zone regulations including deviations. The project would request the following two deviations from the SDMC:

- Allow a 10-foot side yard setback where up to 50 percent of the length of the building envelope on one side of the premises may observe the minimum 5-foot side setback, provided the remaining percentage of the building envelope length observe at least the standard side setback of 5 feet or 10 percent of the lot width (100 feet), whichever is greater pursuant to SDMC 131.0443(d)(2)(A), Table 131-04G.

- Allow retaining wall heights up to 20 feet outside of the setback where the maximum allowed is 12 feet pursuant to SDMC Section 142.0340(e).

As discussed in Section 2.3.2 and shown in Figure 2-4, surrounding land uses include residential development, RiverEdge Terrace, immediately adjacent to the project site on the east. This development is set at the top of a manufactured slope. South of the project site are Kaiser Permanente Otay Mesa medical offices. Due to changes in elevations, the project site, including buildings setbacks and retaining walls would not be substantially visible to the adjacent development. The proposed setback deviations would result in a development density consistent with the RiverEdge Terrace project to the east.

As detailed in Figure 3-11, two of the proposed retaining walls would exceed City of San Diego maximum allowance, triggering the request for the wall height deviation. The retaining wall

proposed in the southeast corner of the project site would have a maximum of 23.6 feet of exposed wall height. This wall would be located just east of residential Lot 14 in the southeast portion of the project site and would integrate into the surrounding manufactured slopes and minimize the need for additional grading into steep slopes. Additionally, the stepped design of the wall would result in a wall design that does not appear monotonous or massive. The wall would not be visible from any public viewing area. A second retaining wall proposed along the main project access road (Private Street A) would likewise exceed City of San Diego regulatory standards. This concrete masonry block wall would be visible to motorists along the roadway; however, the wall would be screened by both street trees and parkway plantings in addition to vining plants that would be planted to climb and screen the wall.

As detailed in Section 4.11.5.2.b, the project with these deviations would result in less than significant aesthetic impacts. As deviations requested would not affect any other environmental issue or sensitive resource, it would not result in a physical impact on the environment. While allowable deviations are requested, they would not result in a conflict or a secondary physical environmental impact.

c. Significance of Impacts

The requested SDMC deviations would not result in an adverse effect to any environmental issue or sensitive resource, and they would not result in a physical impact on the environment. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2 Air Quality

This section evaluates potential impacts associated with air quality. The impact analysis is based on the Air Quality Analysis prepared by RECON Environmental, Inc., included as Appendix C of this Environmental Impact Report (EIR). The Air Quality Analysis also includes a Health Risk Assessment (HRA) prepared to disclose the potential health risks to future residents on the project site associated with air contaminants generated by vehicle emissions from Interstate 805 (I-805) located just west of the project site. An additional HRA is included in Appendix H-4 to determine whether windblown dust from the adjacent Davies property would contain enough burn ash to result in a negative effect on adjacent residents (see also Section 4.6.3). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for approving project implementation with the exception of the off-site grading and City of San Diego sewer line that are under the purview of the City of San Diego. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds, as the City of San Diego would be responsible for approving project implementation of all on-site and off-site components in this scenario.

4.2.1 Existing Conditions

4.2.1.1 Regional Setting

The project area is within the San Diego Air Basin (SDAB) and is subject to the San Diego Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is one of 15 air basins that geographically divide the state of California. The weather of the San Diego region, as in most of southern California, is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters.

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

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

4.2.1.2 Meteorological and Topographical Conditions

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

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses can also trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone (O_3), commonly known as smog.

Light daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_X) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days when O_3 concentrations are lower.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County (County). This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from the Los Angeles region to San Diego County has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

The local climate in the southern part of the County is characterized as semi-arid with consistently mild, warmer temperatures throughout the year. The average summertime high temperature in the region is approximately 81 degrees Fahrenheit (°F), with highs approaching 80°F in August on average, and record highs approaching 104°F in August. The average wintertime low temperature is approximately 43.8°F, although record lows have approached 32°F in January. Average precipitation in the local area is approximately 9.7 inches per year, with the bulk of precipitation falling between December and March.

4.2.1.3 Criteria Air Pollutants

The U.S. Environmental Protection Agency (U.S. EPA) has identified six pollutants of key concern known as “criteria pollutants.” These criteria pollutants are each common in outdoor environments across the United States and each pose a threat to human health. Criteria pollutants include O_3, CO, NO_2, sulfur dioxide (SO_2), particulate matter (PM; PM with a diameter of 10 microns and less [PM_{10}] and PM with a diameter of 2.5 microns and less [$PM_{2.5}$]), and lead (Pb). The following is a discussion of the criteria air pollutants.

a. Ozone

Ozone is the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of NO_X and reactive organic

gases (ROGs) (also known as volatile organic chemicals [VOC] or reactive organic compounds) in the presence of sunlight. The adverse health effects associated with exposure to ozone pertain primarily to the respiratory system. Scientific evidence indicates that ambient levels of ozone affect not only sensitive receptors, such as asthma sufferers and children, but healthy adults as well. Exposure to ozone has been found to significantly alter lung functions by increasing respiratory rates and pulmonary resistance, decreasing tidal volumes (the amount of air inhaled and exhaled), and impairing respiratory mechanics. Symptomatic responses include throat dryness, chest tightness, headache, and nausea. About half of smog-forming emissions come from automobiles.

b. Carbon Monoxide

Carbon monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, resulting in a drastic reduction in the amount of oxygen available to the cells. Adverse health effects associated with exposure to CO concentrations include such symptoms as dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases.

Small-scale, localized concentrations of CO above the federal and state Ambient Air Quality Standards (AAQS) may occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as “CO hotspots” and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

c. Nitrogen Dioxide

Nitrogen dioxide is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Inhalation is the most common route of exposure to NO_2. Because NO_2 has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of the adverse health effects depends primarily on the concentration inhaled rather than the duration of exposure. An individual may experience a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation during or shortly after exposure. After a period of approximately 4 to 12 hours, an exposed individual may experience chemical pneumonitis or pulmonary edema with breathing abnormalities, cough, cyanosis, chest pain, and rapid heartbeat.

d. Sulfur Dioxide

Sulfur dioxide is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. SO_2 is also a product of diesel engine combustion. The health effects of SO_2 include lung disease and breathing problems for people with asthma. SO_2 in the atmosphere contributes to the formation of acid rain.

e. Inhalable Coarse Particles

PM_{10} is PM with an aerodynamic diameter of 10 microns or less. Ten microns is about one-seventh of the diameter of a human hair. PM is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Under typical conditions (i.e., no wildfires) particles classified under the PM_{10} category are mainly emitted directly from activities that disturb the soil, including travel on roads and construction, mining, or agricultural operations. Other sources include windblown dust, salts, brake dust, and tire wear.

Health studies have shown a significant association between exposure to PM and premature death in people with heart or lung diseases. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and irregular heartbeat.

f. Inhalable Fine Particles

Airborne, inhalable particles with aerodynamic diameter of 2.5 microns or less have been recognized as an air quality concern requiring regular monitoring. Federal regulations required that $PM_{2.5}$ monitoring begin January 1, 1999. Similar to PM_{10}, $PM_{2.5}$ is also inhaled into the lungs and causes serious health problems.

g. Lead

Lead is a metal found naturally in the environment as well as in manufactured products. At high levels of exposure, lead can have detrimental effects on the central nervous system. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase out of leaded gasoline, metal processing is currently the primary source of lead emissions.

4.2.1.4 Non-Criteria Air Pollutants

a. Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. Diesel-exhaust particulate matter emissions have been established as TACs. 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. Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII. Of particular concern statewide are diesel-exhaust particulate matter emissions. Following the identification of diesel particulate matter (DPM) as a TAC in 1998, the California Air Resources Board (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). CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the

handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

b. Odor

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

c. Valley Fever

Coccidioidomycosis, more commonly known as "valley fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. When fungal spores are present, any activity that disturbs the soil, such as digging, grading, or other earthmoving operations, can cause the spores to become airborne and thereby increase the risk of exposure. Valley fever is not considered highly endemic to San Diego. Per the County Health and Human Services Agency, the 10-year average (2009–2018) for coccidioidomycosis cases in the County is 5.5 cases per 100,000 people per year. The project area is wholly contained within the 92154-zip code. For the 92154-zip code, there were 113 cases of coccidioidomycosis between 2009 and 2018, which is equivalent to a rate of 13.5 cases per 100,000 people. Statewide incidences in 2018 were 18.8 per 100,000 people.

4.2.1.5 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses). The SDAPCD identifies sensitive receptors as those who are especially susceptible to adverse health effects from exposure to TACs, such as children, the elderly, and the ill. Sensitive receptors include schools (grades Kindergarten through 12), day care centers, nursing homes, retirement homes, health clinics, and hospitals within two kilometers of the facility. The City

of San Diego specifically defines sensitive receptors as 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 impacted by air pollutants (City of San Diego 2022). The closest sensitive receptors to the proposed project are residences adjacent to the property boundary and the Kaiser Permanente Otay Mesa medical offices approximately 340 feet to the south.

4.2.1.6 Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. Local ambient air quality is monitored by SDAPCD. SDAPCD operates a network of ambient air monitoring stations throughout the County, which measure ambient concentrations of pollutants and determine whether the ambient air quality meets the California AAQS (CAAQS) and the National AAQS (NAAQS). The nearest SDAPCD-operated monitoring station is the Chula Vista monitoring station, which is approximately 3 miles northwest of the project site. This monitoring station was used to show the background ambient air quality for O_3, PM_{10}, $PM_{2.5}$, and NO_2. The closest monitoring site that measures CO and SO_2 is the First Street monitoring station in El Cajon, which is about 14 miles northeast of the project site. The most recent background ambient air quality data and numbers of days exceeding the ambient air quality standards from 2019 to 2021 are presented in Table 4.2-1.

4.2.2 Regulatory Framework

4.2.2.1 Federal Regulations

The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the U.S. EPA developed primary and secondary NAAQS. Six criteria pollutants of primary concern have been designated: ozone, CO, SO_2, NO_2, lead, and PM. The NAAQS "protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 USC 7409(b)(2)]. NAAQS are presented in Table 4.2-2.

The U.S. EPA issues area designations for each criteria pollutant based on local monitoring data. In California, federal area designations typically apply to the state's 15 geographic air basins. Areas that meet NAAQS are designated as attainment areas. Similarly, areas that are expected to be meeting the standard despite a lack of monitoring data are designated as "unclassifiable attainment". Areas that do not meet NAAQS may be designated as nonattainment areas. Following designation as a nonattainment area, state and local governments must develop implementation plans outlining how the area will attain and maintain NAAQS. Once a nonattainment area has achieved the NAAQS, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for a specified period and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the CAA. Areas that have been redesignated to attainment are called maintenance areas. The SDAB is a nonattainment area for the federal ozone standard.

Table 4.2-1
Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year			
					2019	2020	2021		2019	2020	2021
Ozone (O_3) – Chula Vista											
Maximum 1-hour concentration	ppm	State	0.09		0.090	0.106	0.084		0	1	0
Maximum 8-hour concentration	ppm	State	0.070		0.076	0.086	0.067		2	4	0
		Federal	0.070		0.076	0.086	0.066		2	4	0
Nitrogen Dioxide (NO_2) – Chula Vista											
Maximum 1-hour concentration	ppm	State	0.18		0.050	0.045	0.046		0	0	0
		Federal	0.100		0.050	0.045	0.046		0	0	0
Annual concentration	ppm	State	0.030		0.008	0.009	0.009		—	—	—
		Federal	0.053		0.008	0.009	0.008		—	—	—
Carbon Monoxide (CO) – El Cajon											
Maximum 1-hour concentration	ppm	State	20		1.3	1.5	1.2		0	0	0
		Federal	35		1.3	1.5	1.2		0	0	0
Maximum 8-hour concentration	ppm	State	9.0		1.0	1.4	1.1		0	0	0
		Federal	9		1.0	1.4	1.1		0	0	0
Sulfur Dioxide (SO_2) – El Cajon											
Maximum 1-hour concentration	ppm	Federal	0.075		0.0008	0.0010	0.0016		0	0	0
Maximum 24-hour concentration	ppm	Federal	0.14		0.0003	0.0004	0.0003		0	0	0
Annual concentration	ppm	Federal	0.030		0.0007	0.0001	0.00006		0	0	0
Coarse Particulate Matter (PM_{10})[a] – Chula Vista											
Maximum 24-hour concentration	µg/m³	State	50		69.4	—	—		— (1)	—	—
		Federal	150		68.2	—	—		0.0 (0)	—	—
Annual concentration	µg/m³	State	20		—	—	—		— (1)	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] – Chula Vista											
Maximum 24-hour concentration	µg/m³	Federal	35		18.6	46.7	24.9		0	6.1	0.0 (0)
Annual concentration	µg/m³	State	12		—	—	—		—	—	—
		Federal	12.0		8.1	10.7	—		0	0	0

SOURCES: CARB 2023; U.S. EPA 2023.
NOTES: ppm = parts per million; — = no data available; µg/m³ = micrograms per cubic meter.
Data taken from CARB's iADAM (http://www.arb.ca.gov/adam) and EPA's AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.
Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.
Chula Vista monitoring station is at 80 East J Street, Chula Vista, California.
El Cajon monitoring station is at Lexington Elementary School, at 533 First Street, El Cajon, California.
[a]Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Table 4.2-2
Ambient Air Quality Standards

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

Table 4.2-2
Ambient Air Quality Standards

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SOURCE: CARB 2016.

4.2.2.2 State Regulations

a. California Ambient Air Quality Standards

The state of California has developed the CAAQS and generally has set more strict standards for criteria pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the state classifies specific geographic areas as either "attainment," "unclassified," or "nonattainment" areas for each pollutant based on the comparison of measured data with the CAAQS. CAAQS are presented in Table 4.2-2. The SDAB is a non-attainment area for the state ozone standards, the state PM_{10} standard, and the state $PM_{2.5}$ standard.

b. State Implementation Plan

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

4.2.2.3 Regional Regulations

a. San Diego Air Pollution Control District

The SDAPCD is the agency that regulates air quality in the SDAB. The SDAPCD prepared the Regional Air Quality Strategy (RAQS) in response to the requirements set forth in the California CAA Assembly Bill (AB) 2595 (SDAPCD 1992) and the federal CAA. Motor vehicles are San Diego County's leading source of air pollution (SDAPCD 2013). In addition to these sources, other mobile sources include construction equipment, trains, and airplanes. Reducing mobile source emissions requires the technological improvement of existing mobile sources and the examination of future mobile sources, such as those associated with new or modification projects (e.g., retrofitting older vehicles with cleaner emission technologies). In addition to mobile sources, stationary sources also contribute to air pollution in the SDAB. Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources of air pollution are regulated by the local air pollution control or management district, in this case the SDAPCD.

The SDAPCD is responsible for preparing and implementing the RAQS. As part of the RAQS, the SDAPCD developed Transportation Control Measures (TCMs) for the air quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The RAQS and TCM set forth the steps needed to accomplish attainment of NAAQS and CAAQS. The RAQS and

corresponding TCM are reviewed and updated periodically. The most recent 2022 RAQS was adopted in March 2023.

The SDAPCD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Development projects in the SDAB are subject to the following SDAPCD rules (as well as others):

- Rule 51, Nuisance: prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause injury or damage to business or property.
- Rule 52, Particulate Matter: establishes limits to the discharge of any PM from non-stationary sources.
- Rule 54, Dust and Fumes: establishes limits to the amount of dust or fume discharged into the atmosphere in any 1 hour.
- Rule 55, Fugitive Dust Control: sets restrictions on visible fugitive dust from construction and demolition projects.
- Rule 67, Architectural Coatings: establishes limits to the VOC content for coatings applied within the SDAPCD.

b. San Diego Association of Governments

SANDAG is the regional planning agency for the County and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SANDAG serves as the federally designated metropolitan planning organization for the County. With respect to air quality planning and other regional issues, SANDAG's San Diego Forward: The 2021 Regional Plan (Regional Plan) was adopted by the SANDAG Board of Directors on December 10, 2021. The Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The plan identifies five big moves including Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and Next Operating System as key strategies for a more vibrant, connected region. SANDAG, as the region's metropolitan planning organization, must make a transportation air quality conformity determination for regional transportation plans (RTPs) and regional transportation improvement programs. The purpose of transportation conformity is to ensure that federally funded or approved activities are consistent with the SIP. This ensures that no transportation activities will cause or contribute to new air quality violations, worsen existing violations, or delay the attainment of any relevant NAAQS. Appendix C of the Regional Plan documents conformity for the 2008 and 2015 ozone NAAQS for the 2021 Regional Plan and air quality analysis for the 2021 Regional Transportation Improvement Program Amendment No. 06. The 2021 Regional Plan serves as the region's RTP.

4.2.2.4 Local Regulations – City of Chula Vista

In the Environmental Element of the Chula Vista General Plan, the following policies related to air quality are found in Section 3.1.6 of the Environmental Element in the Chula Vista General Plan:

Objective E 6: Improve local air quality and reduce greenhouse gas emissions by minimizing the release of air pollutants and toxic air contaminants and limiting the exposure of people to such pollutants.

Policy E 6A: Explore opportunities for improving indoor air quality.

Policy E 6B: Prioritize greening efforts to keep air, water, and land clean.

Policy E 6.1: Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit.

Policy E 6.2: Promote and facilitate transit system improvements in order to increase transit use and reduce dependency on the automobile.

Policy E 6.3: Facilitate the use of alternative fuel and low- and zero-emission vehicles and equipment in the community.

Policy E 6.7: Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City's Air Quality Improvement Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.

Policy E 6.9: Discourage the use of landscaping equipment powered by two-stroke gasoline engines within the City and promote less-polluting alternatives to their use.

Policy E 6.10: The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the California Environmental Quality Act (CEQA) review of the project. Attendant health risks identified in the health risk assessment (HRA) shall be feasibly mitigated to the maximum extent practicable, in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

Policy E 6.11: Develop strategies to minimize CO hot spots that address all modes of transportation.

Policy E 6.12: Promote clean fuel sources that help reduce the exposure of sensitive uses to pollutants.

Policy E 6.13: Encourage programs and infrastructure to increase the availability and usage of energy-efficient vehicles, such as hybrid electric vehicles, electric vehicles, or those that run on alternative fuels.

Policy E 6.15: Site industries and other stationary emitters in a way that minimizes the potential impacts of poor air quality on homes, schools, hospitals, and other land uses where people congregate, and disadvantaged populations.

Policy E 6.16: Encourage the use of bicycles through support of bike share opportunities, community bike programs, and the provision of bicycle parking opportunities such as bike racks and bike lockers.

4.2.2.5 Local Regulations – City of San Diego

a. City of San Diego General Plan

The **Conservation Element** of the City of San Diego General Plan (City of San Diego 2008) discusses air quality and the background of air quality in the region. Appendix B provides a discussion of the project's consistency with relevant City of San Diego General Plan policies The following are policies related to air quality:

Goal: Regional air quality which meet state and federal standards.

Policy CE-F.4: Preserve and plant trees, and vegetation that are consistent with habitat and water conservation policies and that absorb carbon dioxide and pollutants.

Policy CE-F.5: Promote technological innovations to help reduce automobile, truck, and other motorized equipment emissions.

Policy CE-F.6: Encourage and provide incentives for the use of alternatives to single-occupancy vehicle use, including using public transit, carpooling, teleworking, bicycling, and walking. Continue to implement programs to provide City employees with incentives for the use of alternatives to single-occupancy vehicles.

The **Land Use and Community Planning Element** of the City of San Diego General Plan (City of San Diego 2015) includes the following policy regarding toxic air emissions and associated health risks:

Policy LU-I.14: As part of community plan updates or amendments that involve land use or intensity changes, evaluate public health risks associated with identified sources of hazardous substances and toxic air emissions (see also Conservation Element, Section F). Create adequate distance separation, based on documents such as those recommended by the California Air Resources Board and site-specific analysis, between sensitive receptor land use designations and potential identified sources of hazardous substances such as freeways, industrial operations or areas such as warehouses, train depots, port facilities, etc.

b. Otay Mesa Community Plan

Under the Annexation Scenarios, the project would become part of the Otay Mesa community planning area. The following Otay Mesa Community Plan goals and policies are related to air quality (City of San Diego 2014):

Goal: Safe and healthy air quality within Otay Mesa.

> **Policy 8.5-1:** Ensure the overall tree cover and other vegetation throughout Otay Mesa is no less than 20 percent in urban residential areas and 10 percent in the business areas so that the natural landscape is sufficient in mass to provide significant benefits to the city in terms of air and water management.
>
> **Policy 8.7-8:** Encourage street tree and private tree planting programs throughout the community to increase absorption of carbon dioxide and pollutants.

There are also numerous policies within the Land Use, Mobility, and Urban Design elements that encourage pedestrian connectivity, the use of public transit, the planting of street trees, and energy efficient and sustainable design that would also improve air quality in the Otay Mesa community planning area.

c. San Diego Municipal Code

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

4.2.3 Issue 1: Air Quality Plan Implementation

4.2.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to air quality plan implementation in Chula Vista:

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

b. Impact Analysis

The RAQS is the applicable regional air quality plan that sets forth the SDAPCD's strategies for achieving the NAAQS and CAAQS. The SDAB is designated nonattainment for the federal and state ozone standard. Accordingly, the RAQS was developed to identify feasible emission control

measures and provide expeditious progress toward attaining the standards for ozone. The two pollutants addressed in the RAQS are ROG and NO_X, which are precursors to the formation of ozone. Projected increases in motor vehicle usage, population, and growth create challenges in controlling emissions and by extension to maintaining and improving air quality. The 2022 RAQS, in conjunction with the TCM, were most recently adopted in 2023 as the air quality plan for the region.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the RTPs and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the general plan would not conflict with the RAQS. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

Under both the No Annexation Scenario and Annexation Scenario 2b, the project would be developed in the City of Chula Vista; therefore, the land use plans of the City of Chula Vista are considered in relation to air quality plan consistency. The City of Chula Vista's General Plan Land Use Element designates the project site Open Space (OS), which is intended for lands to be protected from urban development, including floodplains; canyon; mountain; and agricultural uses. These lands may include unique natural conditions; provide scenic vistas; or are areas to be set aside that have potential exposure to hazards such as earthquakes; landslides; fires; floods; erosion; or even high levels of roadway noise. Passive recreation uses such as trails; staging areas; scenic overlooks; and picnic areas, may occur within these areas (City of Chula Vista 2005). Additionally, the project site is currently zoned as A-8 Agricultural, which allows for agriculture activities as defined by the City of Chula Vista Municipal Code, or single-family homes with a minimum of 8-acre plots or public parks. The criteria air pollutant emissions associated with operation of an open space, agriculture, or low density residential would be less than those for the project. Thus, development of the project would result in greater emissions than those accounted for in the RAQS. However, this does not imply that the project would conflict with implementation of the RAQS. Project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants (see Issue 2 in Section 4.2.4.1.b); therefore, the project would not contribute to existing air quality violations or result in regional emissions than would exceed the NAAQS or CAAQS, or result in a cumulatively considerable net increase in criteria pollutants, including ozone precursors (ROG and NO_X). Additionally, the project would be consistent with the surrounding land uses, which include single- and multi-family residential and commercial uses.

Further, the project would provide much needed regional housing near a major transit stop, a regional shopping center, medical uses, and parks. The project site is 0.25 mile from a bus stop at the corner of Palm Avenue and Dennery Road, which provides transit to the Palm Avenue trolley station three miles to the west. The project would involve development of a mix of up to 221 single-family and multi-family residential units. Based on the SANDAG 13 forecast, the average persons per household in San Diego is 3.22. Thus, the project would result in 712 persons. SANDAG Series 13 estimates the population in the City of Chula Vista would grow from 287,173 in 2020 to 326,625 in

2035. This would equate to an additional 2,630 persons per year from 2020 to 2035. Furthermore, SANDAG Series 13 estimates that housing would increase from 89,176 units in 2020 to 101,188 units in 2035. This would equate to an additional 801 units per year from 2020 to 2035. Thus, the addition of 221 residential units in 2025 would provide balanced and diverse housing to the City of Chula Vista and would provide housing to accommodate the City of Chula Vista's future growth projections.

c. Significance of Impacts

The project would provide housing to accommodate the City of Chula Vista's future growth projections. The project would not stimulate population growth or a population concentration or housing above what is assumed in local and regional land use plans, or projections made by regional planning authorities. Further, project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants. Therefore, the project would not conflict with or obstruct implementation of the RAQS, and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.3.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022) identifies the following questions to provide guidance in determining potential significance of impacts related to air quality plan implementation:

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

b. Impact Analysis

Under Annexation Scenario 2a, the project site would be annexed into and developed via grading and construction permits from the City of San Diego; therefore, the land use plans of the City of San Diego are considered in relation to air quality plan consistency. SANDAG Series 13 estimates the population in the City of San Diego would grow from 1,453,267 in 2020 to 1,665,609 in 2035. This would equate to an additional 14,156 people per year from 2020 to 2035. Additionally, SANDAG Series 13 estimates that the City of San Diego would have 559,143 residential units in 2020 and 640,668 residential units in 2035 (SANDAG 2013). This would equate to an additional 5,435 units per year from 2020 to 2035. Implementation of the project would result in an increase in 221 residential units in a location assumed to be open space in SANDAG's growth projections. While the project would include residential in an area previously planned for open space, this would be accommodated in the regional growth projections. As discussed in the City of San Diego General Plan Housing Element 2021-2029 the City of San Diego is currently experiencing a housing shortage and, as a result, in urgent need of additional housing. The City of San Diego's assigned target of the Regional Housing Needs Allocation (RHNA) target for the 2021-2029 RHNA Cycle is 108,036 homes.

Although the City of San Diego is planning for additional housing to meet current need, during the fifth RHNA Cycle (2010-2020) the City of San Diego was assigned a target of permitting 88,096 new housing units and less than half of those units were constructed (42,275) as of December 2019. The proposed construction of 221 units is not anticipated to result in an unplanned population increase beyond SANDAG Regional Population and Housing Forecast considering there is a shortage of housing to accommodate the existing and planned population. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Thus, the project would not directly induce substantial unplanned population growth to the area.

Further, the project would not result in any indirect impacts because project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants (see Issue 2 in Section 4.2.4.1.b); therefore, the project would not contribute to existing air quality violations or result in regional emissions than would exceed the NAAQS or CAAQS, or result in a cumulatively considerable net increase in criteria pollutants, including ozone precursors (ROG and NO_X). Additionally, the project would be consistent with the surrounding land uses, which include single- and multi-family residential and commercial uses. Therefore, the project would not conflict with SANDAG's regional growth forecast, which accounts for residential growth in the City of San Diego.

c. Significance of Impacts

The project would not result in impacts to air quality plan implementation based on the significance thresholds identified above. The project would not stimulate population growth or a population concentration or housing above what is assumed in local and regional land use plans, or projections made by regional planning authorities. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Additionally, the project would not exceed the construction and operational screening thresholds established by the City of San Diego. Therefore, the project would not conflict with or obstruct implementation of the RAQS, and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.4 Issue 2: Air Quality Standards

4.2.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to air quality standards and violations in Chula Vista:

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

The City of Chula Vista evaluates project emissions based on the quantitative emission thresholds established by the South Coast Air Quality Management District (SCAQMD). Air quality emission thresholds have not been adopted by the City of Chula Vista for land development projects and the San Diego Air Pollution Control District has not issued guidance for assessing air quality impacts from land use development projects. Thus, in the absence of a threshold of significance, the City of Chula Vista evaluates the significance of air quality emissions based on the recommendation from the next closest air district, the SCAQMD. The thresholds listed in Table 4.2-3 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 4.2-3, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on ambient air quality.

Table 4.2-3
City of Chula Vista Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)
VOCs	75	55
NO_X	100	55
CO	550	550
SO_X	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3

SOURCE: SCAQMD 2023.
NOTES: VOC = volatile organic compound; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
Greenhouse gas emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not included in this table, as they are addressed within the greenhouse gas emissions analysis and not the air quality study.
[a]The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

b. Impact Analysis

Construction Emissions

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

Implementation of the project would generate air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, and asphalt pavement application. Criteria air pollutant emissions associated with construction activity were quantified using California Emissions Estimator Model (CalEEMod) version 2022.1 (California Air Pollution Control Officers Association 2022). The construction equipment mix used for estimating the construction emissions of the project was generated by CalEEMod default and is shown in Table 4.2-4.

Table 4.2-4
Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site preparation	18	0	0	Tractors/loaders/ backhoes	4	8
				Rubber-tired dozers	3	8
Grading	20	0	44	Excavators	2	8
				Graders	1	8
				Rubber-tired dozers	1	8
				Scrapers	2	8
				Tractors/loaders/ backhoes	2	8
Building construction	135	24	0	Cranes	1	7
				Forklifts	3	8
				Tractors/loaders/ backhoes	3	7
				Generator sets	1	8
				Welders	1	8
Paving	15	0	0	Pavers	2	8
				Rollers	2	8
				Paving equipment	2	8
Architectural coating	27	0	0	Air compressors	1	6

SOURCE: Appendix C.
NOTE: Construction-worker and vendor estimates by construction phase were generated by CalEEMod.

Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project is subject to SDAPCD Rule 55,

Fugitive Dust Control (SDAPCD 2009). This rule requires that the project take steps to restrict visible emissions of fugitive dust beyond the property line. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) generated during grading and construction activities. The project also incorporates design features (see Chapter 3.6.2 for air quality design features) which would specifically require that the project be watered at least three times daily depending on weather conditions and that vehicle speeds be reduced to 15 miles per hour over unpaved surfaces during construction. To account for dust control measures in the calculations, it was assumed that the active sites would be watered at least three times daily, resulting in an approximately 61 percent reduction of particulate matter.

The application of architectural coatings, such as exterior/interior paint and other finishes, would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SDAPCD Rule 67.0.1, Architectural Coatings.

Table 4.2-5 summarizes the estimated maximum daily construction emissions associated with construction of the project. As shown, construction emissions are projected to be less than the applicable City of Chula Vista significance thresholds for all criteria pollutants.

Table 4.2-5
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions
(pounds per day)

Year	Pollutant					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2024	4	39	34	<1	9	5
2025	44	19	30	<1	2	1
Maximum Daily Emissions	**44**	**39**	**34**	**<1**	**9**	**5**
Chula Vista Threshold	75	100	550	150	150	55
San Diego Threshold	137	250	550	250	100	55
Thresholds Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: Appendix C.
NOTES: VOC = volatile organic compound; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. Although not considered mitigation, these emissions reflect CalEEMod "mitigated" output, which accounts for the compliance with required watering three times per day to limit fugitive dust (see PDF-AQ-1 in Chapter 3.0, Section 3.6.3.b of this EIR).

Operational Emissions

Operation of the project would generate VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicle trips; area sources (consumer products, landscape maintenance equipment, and architectural coatings). As noted in PDF-AQ-2 and PDF-GHG-3, the project would include all electric appliances and heating systems and would not be served by natural gas.

The daily maximum weekday trip rates were taken from the Local Mobility Analysis Report for the project (see Appendix M-2). The maximum weekday trip rate from the Local Mobility Analysis Report is 1,902 trips per day. It is noted that this traffic volume data is considered conservative, as the Local Mobility Analysis utilized a 221-unit project scenario that has higher volumes than the proposed

215-unit project. The weekend trip generation rates were obtained by proportionally adjusting the CalEEMod default trips rates. CalEEMod default data, including temperature, trip distances, variable start information, and emissions factors, were conservatively used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use of light-duty vehicles for the residents. Emission factors representing the vehicle mix and emissions for 2025 were used to estimate emissions associated with vehicular sources.

Area sources are defined as direct sources of operational emissions at the project site; these include consumer product use and architectural coatings. Fireplaces and landscaping equipment are also an area source of emissions; however, as noted in the discussion of project design features, the project would not include any wood stoves or wood-burning or natural gas fireplaces (PDF-AQ-2) and would include electric landscaping equipment (PDF-GHG-6). Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. VOC off-gassing emissions result from evaporation of solvents contained in architectural coatings, such as in paints and primers used during building maintenance. Although SDAPCD Rule 67.0.1 regulates the VOC content of coatings sold in the region, future residents may purchase coatings outside the region; therefore, CalEEMod defaults were assumed for the application of architectural coatings during operation, as that would not be controlled by the project applicant. Additionally, the project would include all electric appliances and heating system as detailed in PDF-GHG-3. However, CalEEMod default calculations include other miscellaneous sources of natural gas from other equipment ranging from portable fans to wine coolers to aquariums based on the California Energy Commission's Residential Appliance Saturation Study (California Air Pollution Control Officers Association 2021); thus, the calculations still include some minimal emissions from natural gas even though the project would not be served by natural gas. It is therefore a conservative analysis for both the purposes of this air quality analysis and the greenhouse gas analysis. Also note that future residents may use propane grills. However, propane is a relatively clean burning gas and based on U.S. EPA AP-42 emission factors (U.S. EPA 1972) would not result in measurable emissions of criteria air pollutants.

Table 4.2-6 summarizes the estimated maximum daily operational emissions associated with the project. As shown, operational emissions are projected to be less than the applicable City of Chula Vista significance thresholds for all criteria pollutants.

Table 4.2-6
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions
(pounds per day)

Emission Source	Pollutant					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	7	0	0	0	0	0
Energy	<1	1	<1	<1	<1	<1
Mobile	8	6	55	<1	11	3
Total	**15**	**7**	**55**	**<1**	**11**	**3**
Chula Vista Threshold	*55*	*55*	*550*	*150*	*150*	*55*
San Diego Threshold	*137*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: Appendix C.
NOTES: VOC = volatile organic compound; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
Columns may not total precisely due to rounding.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with Rule 67.0.1 (Architectural Coatings).

c. Significance of Impacts

As shown in Tables 4.2-5 and 4.2-6, construction and operational emissions would be less than the applicable City of Chula Vista significance thresholds for all criteria pollutants. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.4.2 Annexation Scenario 2a

a. Threshold of Significance

San Diego has identified the following question to provide guidance in determining potential significance of impacts related to air quality standards:

- Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation

To determine the significance of the proposed project's emissions on the environment, the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022) were used. Per the thresholds, the project would have a significant impact on air quality if the project would:

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

Consistent with the City of San Diego's CEQA Significance Determination Thresholds, project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable screening thresholds presented in Table 4.2-7 are exceeded. As CalEEMod reports emissions in the most common unit of expressing the emissions rate, the pounds per day unit is the threshold that is assessed in the analysis.

Table 4.2-7
City of San Diego Air Quality Impact Screening Thresholds

Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM_{10}	—	100	15
$PM_{2.5}$[a]	—	55	10
NO_X	25	250	40
SO_X	25	250	40
CO	100	550	100
Lead and Lead Compounds	—	3.2	0.6
VOCs	—	137	15

SOURCE: SDAPCD, Rules 20.1, 20.2, and 20.3; City of San Diego 2022.
NOTES: VOC = volatile organic compound; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; — = not available.
[a]The City of San Diego does not specify a threshold for $PM_{2.5}$. Threshold here is based on SDAPCD, Rules 20.1, 20.2, and 20.3.

b. Impact Analysis

Construction Emissions

Construction emissions under Annexation Scenario 2a would be the same as those calculated for the No Annexation Scenario and Annexation Scenario 2b. Table 4.2-5 summarizes the estimated maximum daily construction emissions associated with construction of the project. As shown, construction emissions are projected to be less than the applicable City of San Diego significance thresholds for all criteria pollutants.

Operational Emissions

Operational emissions under Annexation Scenario 2a would be the same as those calculated for the No Annexation Scenario and Annexation Scenario 2b. Table 4.2-6 summarizes the estimated maximum daily operational emissions associated with the project. As shown, operational emissions are projected to be less than the applicable City of San Diego significance thresholds for all criteria pollutants.

c. Significance of Impacts

As shown in Tables 4.2-5 and 4.2-6, construction and operational emissions would be less than the applicable City of San Diego significance thresholds for all criteria pollutants. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.5 Issue 3: Sensitive Receptors

4.2.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to sensitive receptors in Chula Vista:

- Would the project expose sensitive receptors to substantial pollutant concentrations?

b. Impact Analysis

People most likely to be affected by air pollution, as identified by CARB, include children, elderly people, athletes, and people with cardiovascular and chronic respiratory diseases. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptors to the project site are residences 115 feet from the eastern property boundaries and the Kaiser Permanente Otay Mesa medical offices approximately 340 feet to the south. The project would also introduce new on-site sensitive receptors to the area.

Diesel Particulate Matter – Construction

"Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-

carcinogenic effects. TACs that would potentially be emitted during construction activities would be DPM emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB Airborne Toxic Control Measures (ATCMs) to reduce DPM emissions. According to the OEHHA, HRAs should be based on a 30-year exposure duration based on typical residency period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, the duration of proposed construction activities (approximately 2 years) would only constitute a small percentage of the total long-term exposure period and would not result in exposure of proximate sensitive receptors to substantial TACs.

Furthermore, the closest sensitive receptors to the proposed project site are residences located 115 feet east of the project site and the Kaiser Permanente Otay Mesa medical offices approximately 340 feet to the south. The heavy-duty construction equipment is subject to a CARB ATCM for in-use diesel construction equipment to reduce diesel particulate emissions, and diesel trucks are subject to a CARB ATCM that limits idling of equipment and trucks during loading and unloading to 5 minutes and requires that electric auxiliary power units be used whenever possible. Also, construction equipment is subject to CARB In-Use Off-Road Diesel Regulation that requires specific fleet average requirements be met for particulate matter emissions and apply Best Available Control Technology requirements. The duration of construction of the project would be approximately two years and would therefore constitute only a small percentage of the total long-term exposure period and would not result in exposure of sensitive receptors in the vicinity of the project site to substantial pollutant concentrations resulting from on-site construction activities.

Diesel Particulate Matter – Freeway

As required by Policy E 6.10 in the City of Chula Vista's General Plan Environmental Element (City of Chula Vista 2005), the siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of an HRA as part of the CEQA review of the project. The project residences would be located adjacent to Interstate 805 (I-805); therefore, the project is subject to this requirement. A detailed HRA was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index for residential receptors as a result of diesel emissions from I-805 on future sensitive receptors of the project.

In accordance with California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369, Case No. S213478, which states:

> In light of CEQA's text, statutory structure, and purpose, we conclude that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." Notwithstanding "special CEQA requirements [that] apply to certain airport, school and housing construction projects[,]" the Court held "that ordinary CEQA analysis is

concerned with a project's impact on the environment, rather than with the environment's impact on a projects and its users or residents.

The project would not exacerbate environmental hazards caused by vehicles traveling on the I-805 freeway because project-related trips added to I-805 (approximately 1,255 vehicles per day and up to 80 vehicles per peak hour) would be a small fraction of the existing freeway volumes, mobile emissions associated with project traffic would be less than the applicable significance thresholds, and as a residential project, it would not result in a significant increase in diesel-fueled vehicles to I-805. Therefore, this HRA was prepared for informational purposes only and does not contribute to the significance determination.

Air dispersion modeling was performed using the U.S. EPA's Air Quality Dispersion Modeling Version 21112 modeling system. The health risk calculations were performed using the Hot Spots Analysis and Reporting Program Air Dispersion Modeling and Risk Tool. Detailed modeling methodology is provided in the Air Quality Analysis prepared for the project (see Appendix C).

Traffic data for I-805 was attained from California Department of Transportation Traffic Census Program data. Both heavy-duty diesel trucks and light-duty diesel-fueled vehicles (non-heavy-duty trucks) were included in the roadway HRA. Data from the U.S. EPA approved version of CARB's mobile source emission inventory, EMFAC2021, was used to determine the emission factors and composition of diesel vehicles within the overall vehicle fleet for San Diego County. The vehicle emission factors for San Diego County and calendar year 2024 was assumed for the entire exposure period of 30 years, which represents a conservative analysis as vehicle DPM emission factors would decrease over time due to regulatory requirements and fleet turnover and the volume of diesel vehicles will also decrease over time as more zero and near-zero emissions vehicles enter the fleet. MERV 13 filters are required for residential construction in accordance with the 2022 Title 24 building code and the reduction in PM_{10} and associated DPM emissions were included in the emission estimates for the freeway source.

Results of the roadway HRA are presented in Table 4.2-8.

Table 4.2.8
Roadway Health Risk Assessment Results

Impact Parameter	Units	Impact Level
Maximum Individual Cancer Risk – Residential	Per Million	25.60
Chronic Hazard Index – Residential	Index Value	0.007
SOURCE: SDAPCD 2019; see Appendix C.		

As shown, the DPM emissions from I-805 would result in a Residential Maximum Individual Cancer Risk of 25.60 in 1 million which would exceed 10 in 1 million, which is the level at which SDAPCD generally requires public notification for stationary sources of emissions. The Residential Chronic Hazard Index of 0.007 would be below the level of 1.0 at which adverse non-cancer health risks would be anticipated.

Carbon Monoxide Hotspots

Mobile-source impacts occur on two basic scales of motion. Regionally, project-related travel will add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SDAB. Locally, project traffic will be added primarily to the City of San Diego's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles cold-started and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

Projects contributing to adverse traffic congestion may result in the formation of CO hotspots. To verify that the project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. A Local Mobility Analysis evaluated the level of service (LOS) (i.e., increased congestion) at intersections affected by the project (see Appendix M-2) in accordance with the City of San Diego's Transportation Study Manual. The potential for CO hotspots was evaluated based on the results of the report. As neither city has CO hotspot guidelines, the County of San Diego's Guidelines (County of San Diego 2007) CO hotspot screening guidance was followed to determine whether the project would require a site-specific hotspot analysis. The County recommends that a quantitative analysis of CO hotspots be performed for intersections that are operating at or below an LOS of E and that have peak-hour trips exceeding 3,000 trips.

The two key study intersections included in the analysis are (1) Palm Avenue and Dennery Road (LOS F in AM and PM peak hours) and (2) Palm Avenue and I-805 Northbound Ramps (LOS E in PM peak hours). The remaining key intersections are projected to operate at acceptable LOS conditions in the Existing Plus Project scenario. Four receptor locations were modeled at each intersection to determine CO ambient concentrations. The highest 1-hour measurement in the last three years was used as the projected future 1-hour CO background concentration for the analysis.

The maximum CO concentration predicted for the 1-hour averaging period at the studied intersections would be 1.7 parts per million (ppm), which is below the 1-hour CO CAAQS of 20 ppm. The maximum predicted 8-hour CO concentration of 1.37 ppm at the studied intersections would be below the 8-hour CO CAAQS of 9.0 ppm. Neither the 1-hour nor the 8-hour CAAQS would be equaled or exceeded at any of the intersections studied. Accordingly, the project would not cause or contribute to violations of the CAAQS and would not result in exposure of sensitive receptors to localized high concentrations of CO.

Criteria Air Pollutants

Construction and operation of the project would not result in emissions that exceed the emission thresholds for any criteria air pollutants.

Some VOCs are associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances

of the SDAPCD's thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings.

In addition, VOCs and NO_X are precursors to ozone, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by EPA as an attainment area for the 1-hour ozone NAAQS and the 1997 8-hour NAAQS). The health effects associated with ozone are generally associated with reduced lung function. The contribution of VOCs and NO_X to regional ambient ozone concentrations is the result of complex photochemistry. The increases in ozone concentrations in the SDAB due to ozone precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive ozone concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the ozone NAAQS and CAAQS tend to occur between April and October when solar radiation is highest.

The holistic effect of a single project's emissions of ozone precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_X emissions associated with project construction and operations could minimally contribute to regional ozone concentrations and the associated health impacts. Due to the minimal contribution during construction and operation, as well as the existing good air quality in coastal SDAB areas, no adverse health impacts are anticipated.

Regarding NO_2, according to the construction emissions analysis, construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. NO_2 and NO_X health impacts are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these construction activities would be relatively short term. Additionally, off-road construction equipment would operate at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the proposed project would not require any stationary emission sources that would create substantial localized NO_X impacts.

The VOC and NO_X emissions, as described previously, would minimally contribute to regional ozone concentrations and its associated health effects. In addition to ozone, NO_X emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 4.2-1, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the project's operational NO_X emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects.

CO tends to be a localized impact associated with congested intersections. As discussed above under the Carbon Monoxide Hotspots heading, CO at intersections would not result in localized high concentrations of CO.

PM_{10} and $PM_{2.5}$ emissions from the proposed project would be less than the applicable emission thresholds and would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects associated with particulates.

Valley Fever Exposure

Valley fever is not highly endemic to the County and the incidence rate in the project area is below the County average and the statewide average. Construction of the project would incorporate the project design feature PDF-AQ-1 (detailed in Chapter 3.0, Section 3.6.2 of this EIR) and comply with SDAPCD Rule 55, which limits the amount of fugitive dust generated during construction. Strategies the project would implement to comply with SDAPCD Rule 55 and control dust include watering at least three times per day, using magnesium chloride for dust suppression on unpaved roads, and limiting speed on unpaved roads to 15 miles per hour.

Burn Ash

Due to the potential presence of burn ash within the adjacent Davies property, there is a potential for the project site to be exposed to windblown dust containing burn ash identified within the Davies property that could affect future project residents. An additional HRA (see Appendix H-4) was performed to determine whether windblown dust from the Davies property would contain enough total suspended particulate emissions to result in a negative effect on adjacent residents. Based on dispersion modelling the HRA concluded that impacts related to dispersion of burn ash from the Davies property would not affect adjacent sensitive receptors (see Section 4.6.3).

c. Significance of Impacts

Construction activities would not generate emissions in excess of the site-specific mass daily thresholds; therefore, site-specific construction impacts during construction of the project would be less than significant. In addition, diesel equipment would also be subject to the CARB's ATCM for in-use off-road diesel fleets, which would minimize DPM emissions.

The project would not expose nearby sensitive receptors to substantial DPM concentrations during construction or operation. The project would not negatively affect the LOS of intersections on or in proximity to the project site, and therefore would not result in a CO hotspot. Additionally, potential impacts due to windblown burn ash originating from the Davies property would be less than significant. Overall, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.5.2 Annexation Scenario 2a

a. Threshold of Significance

San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to sensitive receptors:

- Would the project expose sensitive receptors to substantial pollutant concentrations?

To determine the significance of the proposed project's emissions on the environment, the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022) were used. Per the thresholds, the project would have a significant impact on air quality if the project would:

- Expose sensitive receptors to substantial pollutant concentration including air toxics such as diesel particulates. As adopted by the SCAQMD in their CEQA Air Quality Handbook (Chapter 4), a sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant than is the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, toxic air contaminants or odors are of particular concern. Examples include long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playground, childcare centers, and athletic facilities.

b. Impact Analysis

The analysis of impacts to sensitive receptors under Annexation Scenario 2a would be the same as those identified under the No Annexation Scenario and Annexation Scenario 2b. The project would not exacerbate environmental hazards caused by vehicles traveling on the I-805 freeway because project-related trips added to I-805 (approximately 1,255 vehicles per day and up to 80 vehicles per peak hour) would be a small fraction of the existing freeway volumes, mobile emissions associated with project traffic would be less than the applicable significance thresholds, and as a residential project, it would not result in a significant increase in diesel-fueled vehicles to I-805. As discussed in Section 4.2.5.1.c, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant. City of San Diego Policy LU-I.14 requires the evaluation of public health risks associated with toxic air emissions for community plan updates and amendments that involve land use or intensity changes. The purpose of the policy is to ensure health risk potentials are considered in the realm of land use compatibility. And while there is no corresponding CEQA significance determination, the following represents the required land use compatibility discussion (see also Land Use Consistency Table, EIR Appendix B, Table 2).

Although it was not a factor assessed as part of the significance of impacts, a HRA (see Appendix C) consistent with the City of San Diego General Plan Policy LU-I.14, was prepared for the project. The project would not exacerbate environmental hazards caused by vehicle traveling on I-805. Therefore, this HRA was prepared for land use consistency analysis only and does not contribute to the CEQA significance determination. While CARB indicates residential uses should be over 500 feet away from a freeway such as I-805, approximately half of the project site is located within 500 feet of I-805, and therefore there is a potential health risk issue that is in conflict with City of San Diego General Plan Policy LU-I.14.

The HRA was prepared to disclose the potential health risks to future residents on the project site associated with air contaminants generated by vehicle emissions from I-805 and was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index from I-805 on future sensitive receptors within the project. The HRA finds that the roadway-generated toxic air contaminant emissions would result in a potential excess cancer risk at the maximally exposed residential receptor of 25.60 in a million. As discussed in Appendix C, and shown in Table 4.2-8, this exposure risk would exceed the SDAPCD threshold of 10 in 1 million. As also shown in Table 4.2-8,

the project's Residential Chronic Hazard Index of 0.007 would be below the level of 1.0 at which adverse non-cancer health risks would be anticipated. The analysis factors in the typical amount of time spent indoors as well as the provision of MERV-13 filters as required by Title 24.

Notwithstanding the inclusion of MERV-13 filters and the project's requirement to adhere to all Title 24 regulations, health risk would continue to exceed the 10-in-a-million cancer risk. Approximately half of the project site is located within 500 feet of I-805 and therefore, there is a potential health risk issue that is in conflict with City of San Diego General Plan Policy LU-I.14.

c. Significance of Impacts

Construction activities would not generate emissions in excess of the site-specific mass daily thresholds; therefore, site-specific construction impacts during construction of the project would be less than significant. In addition, diesel equipment would also be subject to the CARB's ATCM for in-use off-road diesel fleets, which would minimize DPM emissions.

The project would not expose nearby sensitive receptors to substantial DPM concentrations during construction or operation. The project would not negatively affect the level of service of intersections on or in proximity to the project site and therefore would not result in a CO hotspot. Impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.6 Issue 4: Odor and Other Emissions

4.2.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to odor and other emissions in Chula Vista:

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

b. Impact Analysis

The State of California Health and Safety Code, Division 26, Part 4, Chapter 3, Section 41700 and SDAPCD Rule 51, commonly referred to as public nuisance law, prohibits emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits

from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

Section 19.66.090, Odors, of the Chula Vista Municipal Code requires that no emission shall be permitted of odorous gases or other odorous matter in such quantities as to be readily detectable at the points of measurement specified in Chula Vista Municipal Code Section 19.66.060(A). Any process that may involve the creation or emission of any odors shall be provided with an adequate secondary safeguard system of control, so that control will be maintained if the primary safeguard system should fail. SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are very subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. As a result, this guideline is qualitative and will focus on the existing and potential surrounding uses and the location of sensitive receptors.

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

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally would occur at magnitudes that would not affect substantial numbers of people.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities. The project does not include any of the land uses typically associated with odor complaints.

c. Significance of Impacts

Based on the significance threshold identified above, exposure to odors associated with project construction would be short term and temporary in nature. Residential projects are not generally associated with adverse odor. Therefore, impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.6.2 Annexation Scenario 2a

a. Threshold of Significance

San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to odor and other emissions:

- Would the project result in the creation of objectionable odors affecting a substantial number of people?

To determine the significance of the potential odor generation, the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022) were used. The City states that the significance of potential odor impacts should be determined based on what is known about the quantity of the odor compound(s) that would result from the project's proposed use(s), the types of neighboring uses potentially affected, the distance(s) between the project's point source(s) and the neighboring uses such as sensitive receptors, and the resultant concentration(s) at the receptors.

b. Impact Analysis

San Diego Municipal Code Division 7, Off-Site Development Impact Regulations, Section 142.0710, states the following: "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."

The project would not result in the generation of smoke, charred paper, soot, grime, carbon, noxious acids, or toxic fumes. As demonstrated in Tables 4.2-5 and 4.2-6, criteria air pollutants, including particulate matter, during construction and operation of the project would be below City of San Diego thresholds of significance and therefore would not represent a release substantial quantities of air contaminants beyond the project boundaries.

As discussed in Section 4.2.5.1.b, construction of the proposed project would not require any stationary emission sources that would create substantial, localized NO_X impacts. Additionally, the VOC and NO_X emissions, as described previously, would minimally contribute to regional O_3 concentrations and its associated health effects. In addition to O_3, NO_X emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO_2. As shown in Table 4.2-1, the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the proposed project's operational NO_X emissions would result in exceedances of the NO_2 standards or contribute to the associated health effects. CO tends to be a localized impact associated with congested intersections and the project's trips would not contribute to a CO hotspot. Likewise, PM_{10} and $PM_{2.5}$ would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects associated with particulates.

As previously discussed, odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during proposed construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people.

c. Significance of Impacts

Based on the significance threshold identified above, exposure to odors associated with project construction would be short term and temporary in nature. Residential projects are not generally associated with adverse odor. Therefore, impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.2.7 Issue 5: Air Movement

4.2.7.1 No Annexation Scenario and Annexation Scenario 2b

The City of Chula Vista does not have an applicable threshold related to alterations of air movement.

4.2.7.2 Annexation Scenario 2a

a. Threshold of Significance

San Diego has identified the following question to provide guidance in determining potential significance of impacts related to air movement:

- Would the project result in substantial alteration of air movement in the area of the project?

To determine the significance of the proposed project's emissions on the environment, the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022) were used.

b. Impact Analysis

This issue is usually associated with placement of tall structures in proximity to one another that can result in tunneling of air movement in an area that was previously unobstructed. In the case of the project, structures would be placed within an undeveloped site that is set at a lower elevation than the developed areas to the east, west, and south. Due to the fact that the project would not result in structures greater than 30 feet in height and the orientation of the buildings in relation to the surrounding area, no changes to air movement are anticipated. No substantial alteration of air movement would occur.

c. Significance of Impacts

Impacts relating to substantial alternations of air movement would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.3 Biological Resources

This section analyzes potential impacts that could occur related to biological resources. The impact analysis is based on the Biological Resources Technical Report prepared by RECON Environmental, Inc. (RECON) (Appendix D). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for approving project implementation with the exception of the off-site grading and City of San Diego sewer line that are under the purview of the City of San Diego. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds, as the City of San Diego would be responsible for approving project implementation of all on-site and off-site components in this scenario.

4.3.1 Existing Conditions

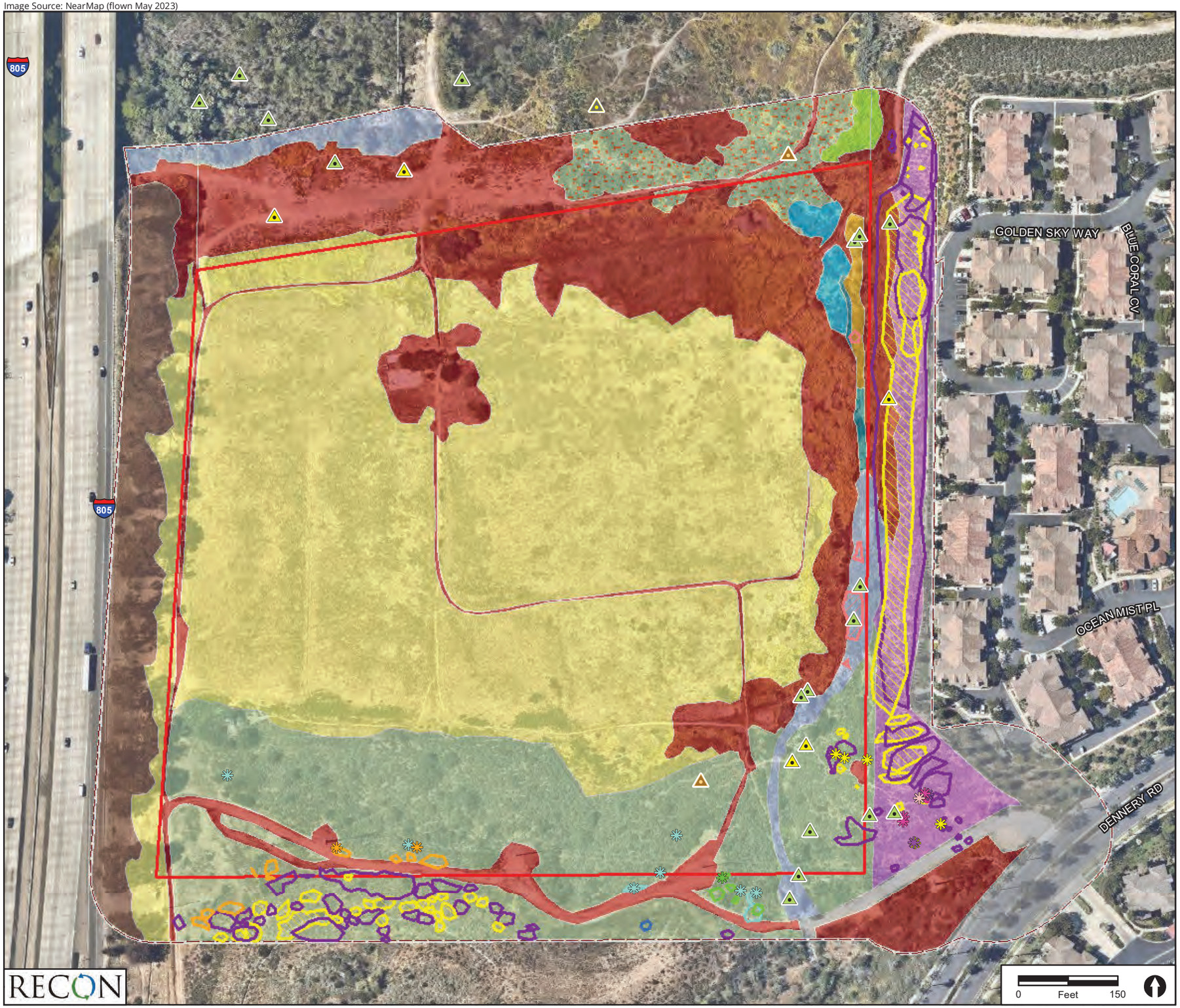
4.3.1.1 Vegetation Communities and Land Cover Types

RECON completed a general biological survey of the project site and the surrounding area. Vegetation communities/land cover types occurring within the survey area are shown in Figure 4.3-1. Table 4.3-1 lists acreages per vegetation community/land cover type, and each vegetation/land cover type's classification according to both City of Chula Vista and City of San Diego. Specifically, vegetation communities are classified according to each city's Multiple Species Conservation Program (MSCP) Subarea Plan and those considered sensitive are listed as wetlands, Tier I, Tier II, or Tier III/IIIB.

Table 4.3-1
Vegetation Communities and Land Cover Types in the Survey Area

Vegetation Community/Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	City of Chula Vista Subarea Plan Tier	City of San Diego Biological Guidelines Tier	Total Survey Area (acres)
Upland Vegetation Communities				
Diegan coastal sage scrub	Coastal sage scrub	II	II	6.55
Diegan coastal sage scrub: *Baccharis*-dominated	Coastal sage scrub	II	II	0.92
Non-native grassland	Non-native grassland	III	IIIB	14.78
Wetland Vegetation Communities				
Arundo-dominated riparian	Riparian scrub	Wetlands	Wetlands	0.12
Mule fat scrub	Riparian scrub	Wetlands	Wetlands	0.11
Southern willow scrub	Riparian scrub	Wetlands	Wetlands	0.82
Emergent wetland	Riparian scrub	Wetlands	Wetlands	0.18
Disturbed wetland	Disturbed wetlands	Wetlands	Wetlands	0.05
Land Covers				
Disturbed habitat	Disturbed land	IV	IV	8.13
Eucalyptus woodland	Eucalyptus woodland	IV	IV	1.80
Ornamental	Disturbed land	IV	IV	1.86
Urban/developed	Disturbed land	N/A	IV	1.53
Total				36.85

Image Source: NearMap (flown May 2023)



Project Site
Survey Area

Sensitive Wildlife

- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Yellow-breasted Chat (*Icteria virens*)
- Yellow Warbler (*Setophaga petechia*)

Sensitive Plants

- California Adolphia (*Adolphia californica*)
- Otay Tarplant (*Deinandra conjugens*)
- San Diego County Viguiera (*Bahiopsis lacniata*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)
- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
- Ashy Spike-moss (*Selaginella cinerascens*)
- Small-flowered Microseris (*Microseris douglasii* ssp. *platycarpha*)
- San Diego Marsh-elder (*Iva hayesiana*)
- South Coast Saltscale (*Atriplex pacifica*)

Vegetation Communities

- Arundo-Dominated Riparian
- Diegan Coastal Sage Scrub
- Diegan Coastal Sage Scrub: Baccharis-dominated
- Disturbed Habitat
- Disturbed Wetland
- Emergent Wetland
- Eucalyptus Woodland
- Mule Fat Scrub
- Non-Native Grassland
- Ornamental
- Southern Willow Scrub
- Urban/Developed

RECON

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FIGURE 4.3-1
Biological Resources

As detailed in Table 4.3-1, the 12 vegetation communities/land cover types occur within the survey area include Diegan coastal sage scrub, Diegan coastal sage scrub: *Baccharis*-dominated, non-native grassland, *Arundo*-dominated riparian, mule fat scrub, southern willow scrub, emergent wetland, disturbed wetland, disturbed habitat, eucalyptus woodland, ornamental, and urban/developed. A general description of each vegetation community and land cover type is provided below.

a. Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a native vegetation community that is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*). As shown in Figure 4.3-1, Diegan coastal sage scrub occupies a total of 6.55 acres occurring on the southern portion of the survey area.

b. Diegan Coastal Sage Scrub: *Baccharis*-Dominated

Diegan coastal sage scrub: *Baccharis*-dominated is similar to Diegan coastal sage scrub except that it is dominated by Baccharis species (*broom baccharis* [*B. sarothroides*]) and/or coyote brush (*B. pilularis*). This community typically occurs on disturbed sites or those with nutrient-poor soils and is often found within other forms of Diegan coastal sage scrub and on upper terraces of river valleys. This community is distributed along coastal and foothill areas in San Diego County. As shown in Figure 4.3-1, Diegan coastal sage scrub: *Baccharis*-dominated occupies a total of 0.92 acre within the northeastern portion of the survey area.

c. Non-native Grassland

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height. In San Diego County the presence of wild oat (*Avena fatua*), bromes (*Bromus* spp.), stork's bills (*Erodium* spp.), and mustards (*Brassica* spp.) are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate. As shown in Figure 4.3-1, non-native grassland is the most dominant community, occupying a total of 14.78 acres within the central portion of the survey area.

d. *Arundo*-dominated Riparian

The *Arundo*-dominated riparian vegetation community is composed of monotypic or nearly monotypic stands of giant reed (*Arundo donax*) that are fairly widespread in southern California. Typically, it occurs on moist soils and in streambeds and may be related directly to soil disturbance or the introduction of propagules by grading or flooding. As shown in Figure 4.3-1, the area mapped as *Arundo*-dominated riparian occupies 0.12 acre within the survey area and occurs entirely within the 100-foot survey buffer.

e. Southern Willow Scrub

Southern willow scrub is a dense, broad-leafed, winter-deciduous riparian thicket dominated by several willow species (*Salix* spp.), with scattered emergent western cottonwood (*Populus fremontii* ssp. *fremontii*) and western sycamore (*Platanus racemosa*). This community was formerly extensive along the major rivers of coastal Southern California but is now much reduced. As shown in Figure 4.3-1, the areas mapped as southern willow scrub occupy 0.82 acre within the survey area, occurring along the eastern boundary within the project site and off-site area within the City of San Diego.

f. Mule Fat Scrub

Mule fat scrub is a depauperate, tall, herbaceous riparian scrub strongly dominated by mule fat (*Baccharis salicifolia* ssp. *salicifolia*). This early seral community is maintained by frequent flooding. Site factors include intermittent stream channels with fairly coarse substrate and moderate depth to the water table. As shown in Figure 4.3-1, the area mapped as mule fat scrub occupies 0.11 acre within the survey area, occurring along the eastern boundary within the project site.

g. Disturbed Wetland

Disturbed wetlands are characterized by areas permanently or periodically inundated by water, which have been significantly modified by human activity. Characteristic species for this community include giant reed, tamarisk (*Tamarix* spp.), and fan palms; though it may also be composed of bare ground or contain native wetland plants such as willows (*Salix* spp.). As shown in Figure 4.3-1, the areas mapped as disturbed wetland occupy 0.05 acre within the survey area, occurring along the eastern project boundary.

h. Emergent Wetland

Emergent wetlands are generally persistent wetlands dominated by low growing, perennial wetland species. They can occur along channels and floodplains, often in previously disturbed areas where wetlands are emerging. Characteristic species include curly dock (*Rumex* spp.). As shown in Figure 4.3-1, the areas mapped as emergent wetland occupy 0.18 acre within the survey area, occurring along the northeastern project boundary.

i. Disturbed Habitat

Disturbed habitats are areas that have been physically disturbed and are no longer recognizable as a native or naturalized vegetation. These areas may continue to retain soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species. As shown in Figure 4.3-1, disturbed habitat occupies a total of 8.13 acres within the survey area (see Figure 3-1). This land cover occurs within the project site, and off-site within both the City of Chula Vista and City of San Diego.

j. Eucalyptus Woodland

Eucalyptus woodland is a "naturalized" vegetation community that is fairly widespread in Southern California and is considered a woodland habitat. It typically consists of monotypic stands of introduced Australian eucalyptus trees (*Eucalyptus* spp.). The understory is either depauperate (i.e., lacking species variety) or absent, owing to high leaf litter. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species (see Appendix D). As shown in Figure 4.3-1, eucalyptus woodland occupies a total of 1.80 acres within the survey area, entirely within the 100-foot survey buffer.

k. Ornamental

Ornamental land cover consists of species planted for landscaping purposes, and totals 1.86 acres within the survey area. As shown in Figure 4.3-1, areas mapped as ornamental are located along the slope to the east of the project site along the RiverEdge Terrace development. As documented in the as-built plans for that development, the adjacent slope to the project site was graded and subsequently planted utilizing hydroseed mix to reduce erosion along the slope.

l. Urban/Developed

Urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. As shown in Figure 4.3-1, areas mapped as urban/developed land occupy 1.53 acres of the survey area occurring in the southeastern corner of the project site.

4.3.1.2 Sensitive Resources

For the purposes of analyzing biological impacts to sensitive resources, species will be considered sensitive if they are any of the following: (1) covered species under the City of Chula Vista or City of San Diego MSCP Subarea Plan; (2) listed by state or federal agencies as threatened or endangered or are proposed for listing; (3) on California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range) or CRPR 2B (considered endangered in California but more common elsewhere), CRPR 3 (more information about the plant's distribution and rarity needed), and CRPR 4 (plants of limited distribution) of the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California (2022). Ranks at each level also include a threat rank, determined as follows: 0.1–Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat); 0.2–Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat); and 0.3–Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known). For example, a plant with a rank presented as CRPR 4.3 would represent a plant with a CRPR of 4, and a 0.3 threat rank (California Native Plant Society 2022).

A species will also be considered sensitive if it is designated by the City of Chula Vista or City of San Diego as a narrow endemic species.

a. Special Status Plants

A total of 112 species of native or naturalized plants, 59 native (52 percent) and 53 non-native (48 percent), were recorded during the biological surveys for the project. A list of all common and sensitive plant species observed in the project area is provided in Attachment 7 of the Biological Resources Technical Report (see Appendix D). Of these plants, nine sensitive plant species were observed within the project area. A comprehensive list of sensitive plant species with potential for occurrence within the project area is presented in Attachment 8 of the Biological Resources Technical Report (see Appendix D); a summary is provided below.

Otay Tarplant

Otay tarplant *(Deinandra conjugens*) is federally listed as threatened, state endangered, City of Chula Vista and City of San Diego MSCP covered species and narrow endemic and has a CRPR of 1B.1. As shown in Figure 4.3-1, a small population, totaling between 4 and 14 individuals based on surveys conducted in 2020 and 2022 occurs within the off-site area associated with roadway improvements in the City of San Diego. This population occurs outside of any Conservation Areas and the Multi-Habitat Planning Area (MHPA) and does not represent a significant population of this species.

South Coast Saltscale

South Coast saltscale (*Atriplex pacifica)* has a CRPR of 1B.2. As shown in Figure 4.3-1, South Coast saltscale was observed within the off-site area associated with roadway improvements in the City of San Diego.

San Diego Barrel Cactus

San Diego barrel cactus (*Ferocactus viridescens*) has a CRPR of 2B.1 and is a City of Chula Vista and City of San Diego MSCP Subarea Plan covered species. This species blooms May through July. As shown in Figure 4.3-1, approximately 24 San Diego barrel cactus individuals were observed within non-native grassland in the southeastern portion of the survey area.

California Adolphia

California adolphia (*Adolphia californica*) has a CRPR of 2B.1. This species' blooming period is between December and May. As shown in Figure 4.3-1, approximately 74 California adolphia individuals were observed within Diegan coastal sage scrub and disturbed habitat in the southwestern corner of the survey area.

San Diego Bur-Sage

San Diego bur-sage (*Ambrosia chenopodiifolia*) has a CRPR of 2B.1. This species' blooming period is between April and June.

As shown in Figure 4.3-1, approximately 858 San Diego bur-sage individuals were observed within Diegan coastal sage scrub in the southwestern corner and along the eastern boundary of the survey area.

San Diego Marsh-Elder

San Diego marsh-elder (*Iva hayesiana*) has a CRPR of 2B.2. As shown in Figure 4.3-1, San Diego marsh-elder was observed within southern willow scrub and mule fat scrub habitat in the eastern portion of the survey area. San Diego marsh-elder on-site totals approximately 0.05 acre.

Ashy Spike-Moss

Ashy spike-moss (*Selaginella cinerascens*) has a CRPR of 4.1. As shown in Figure 4.3-1, ashy spike-moss was observed within Diegan coastal sage scrub, non-native grassland, and disturbed habitat in the southern portion of the survey area within the 100-foot survey buffer. Ashy spike-moss on-site totals approximately 0.02 acre.

San Diego County Viguiera

San Diego County viguiera (*Bahiopsis laciniata*) has a CRPR of 4.2. This shrub is found at elevations ranging from 200 to 2,460 feet above mean sea level in chaparral and coastal scrub. This species typically blooms February through June. As shown in Figure 4.3-1, approximately 2,196 San Diego sunflower individuals were observed within Diegan coastal sage scrub, non-native grassland, and disturbed habitat along the southern and eastern boundaries of the project area. The individuals observed along the eastern boundary within the 100-foot survey buffer occur on previously graded slopes associated with the RiverEdge Terrace development that were hydroseeded for erosion control.

Small-Flowered Microseris

Small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*) has a CRPR of 4.3. This species' blooming period is between March and May. As shown in Figure 4.3-1, a total of six small-flowered microseris individuals were observed within Diegan coastal sage scrub in one area in the southern portion of the project area.

b. Special Status Wildlife Species

The project area supports habitat primarily for upland species within coastal sage scrub, non-native grassland, and disturbed habitat. These upland habitats also provide foraging and nesting habitat for migratory and resident bird species and other wildlife species. Suitable habitat for sensitive riparian species is present within riparian scrub (southern willow scrub and mule fat scrub) habitats along the eastern edge of the project area. The range of vegetated communities in the project area also likely provides cover and foraging opportunities for wildlife species, including reptiles and mammals.

A total of 66 wildlife species, including 51 birds, 7 butterflies, 5 mammals, 2 reptiles, and 1 amphibian, were recorded during the biological surveys for the project area. A list of all common

and sensitive wildlife species observed in the project area is provided in Attachment 7 of the Biological Resources Technical Report (see Appendix D).

Of these wildlife species, five sensitive wildlife species were observed during biological surveys: coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*) (observed off-site), and western bluebird (*Sialia mexicana*). Special-status wildlife species determined to have a moderate potential to occur within the project area include the following: orange-throated whiptail (*Aspidoscelis hyperythra*), San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*), Cooper's hawk (*Accipiter cooperii*), pallid bat (*Antrozous pallidus*) (foraging only), Mexican long-tongued bat (*Choeronycteris mexicana*) (foraging only), western mastiff bat (*Eumops perotis californicus*) (foraging only). Additionally, two special-status wildlife species, burrowing owl (*Athene cunicularia*) and Crotch's bumble bee (*Bombus crotchii*), were determined to have a low to moderate potential to occur within the project area.

It is also noted that the project site is within U.S. Fish and Wildlife Services (USFWS) Quino checkerspot butterfly (*Euphydryas editha quino*) survey area, but outside the City of Chula Vista's MSCP Subarea Plan 2000 Quino checkerspot butterfly survey area. Although Quino checkerspot butterfly is not expected to occur within the project area based on lack of suitable habitat and surrounding urban development, a summary is included below.

A comprehensive list of sensitive wildlife species with potential for occurrence within the project area is presented in Attachment 10 of the Biological Resources Technical Report (see Appendix D); a summary is provided below.

Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally threatened bird species, a California Department of Fish and Wildlife (CDFW) species of special concern, and a City of San Diego and City of Chula Vista MSCP Subarea Plan covered species. As shown in Figure 4.3-1, one pair of coastal California gnatcatcher was identified during all three protocol surveys in 2020. The pair was found both visually and acoustically each survey visit in the farthest south-central portion of the site. Since it was breeding season, the male was identified by the fine narrow black cap, and the female was observed close by. Additionally, coastal California gnatcatcher was incidentally detected in the southeastern portion of the project area and in the 100-foot survey buffer during protocol riparian bird surveys in July 2020 and the biological verification survey in March 2022. Attachment 2 of the Biological Resources Technical Report (see Appendix D) includes the methods and results of the coastal California gnatcatcher 2020 protocol-level survey.

Least Bell's Vireo

Least Bell's vireo is federally endangered, state endangered, and a City of San Diego and City of Chula Vista MSCP Subarea Plan covered bird species. As shown in Figure 4.3-1, least Bell's vireo was observed during focused rare plant surveys and protocol riparian bird surveys in May 2020. Least Bell's vireo was observed only on the eastern side of the site within the southern willow scrub, mule fat scrub, and disturbed habitat adjacent to the *Arundo*-dominated riparian. Two male least Bell's vireo were detected as attempting to establish breeding territories within the protocol survey area.

Areas with high potential for least Bell's vireo to nest on-site include the eastern side of the project site within the southern willow scrub habitat. Attachment 3 of the Biological Resources Technical Report (see Appendix D) includes the methods and results of the least Bell's vireo 2020 protocol -level survey.

Yellow Warbler

Yellow warbler is a CDFW bird species of special concern. As shown in Figure 4.3-1, yellow warbler was observed during riparian bird surveys in June 2020. This species has a high potential to nest within the southern willow scrub in the eastern portion of the project area.

Yellow-Breasted Chat

Yellow-breasted chat is a CDFW bird species of special concern. As shown in Figure 4.3-1, yellow-breasted chat was observed off-site during riparian bird surveys in June 2020. This species has a high potential to nest within the southern willow scrub and mule fat scrub in the eastern portion of the project area.

Western Bluebird

Western bluebird is a City of Chula Vista and City of San Diego MSCP covered bird species. Western bluebird was observed during riparian bird surveys in June 2020 (see Figure 3-1). As shown in Figure 4.3-1, this species was observed foraging within the project area; however, the project area lacks suitable large trees with cavities for nesting.

Orange-Throated Whiptail

Orange-throated whiptail is a City of Chula Vista and City of San Diego MSCP Subarea Plan covered reptile species. Orange-throated whiptail has a moderate potential to occur within the Diegan coastal sage scrub in the project area.

San Diego Tiger Whiptail

San Diego tiger whiptail is a CDFW reptile species of special concern. San Diego tiger whiptail has a moderate potential to occur within areas of open habitat in the project area, primarily the Diegan coastal sage scrub and non-native grassland.

Cooper's Hawk

Cooper's hawk is a City of Chula Vista and City of San Diego MSCP Subarea Plan covered bird species. Cooper's hawk has a moderate potential to nest within the southern willow scrub and eucalyptus woodland within the project area.

Pallid Bat

Pallid bat is a CDFW mammal species of special concern. Pallid bat has a moderate potential to forage within the project area but is not expected to roost due to lack of rocky outcrops and man-made structures.

Mexican Long-Tongued Bat

Mexican long-tongued bat is a CDFW mammal species of special concern. Mexican long-tongued bat has a moderate potential to forage within the project area but is not expected to roost due to lack of suitable caves, mines, and buildings.

Western Mastiff Bat

Western mastiff bat is a CDFW mammal species of special concern. Western mastiff bat has a moderate potential to forage within the project area but is not expected to roost due to lack of suitable rock crevices and cliffs.

Burrowing Owl

Burrowing owl is CDFW bird species of special concern and a City of San Diego and City of Chula Vista MSCP Subarea Plan covered species. In California, burrowing owls are year-round residents of flat, open, dry grassland and desert habitats at lower elevations. While none were observed, burrowing owl has a low potential to nest within the non-native grassland within the project area based on current site conditions, which lack suitable burrows for nesting and ground squirrel activity. However, portions of the non-native grassland have suitable vegetation structure and species occurrence records are known from the general vicinity (e.g., Otay Mesa area). Therefore, this species could subsequently occupy the project area should suitable burrows develop in the future.

Quino Checkerspot Butterfly

Quino checkerspot butterfly is a federally endangered species and is covered under the City of Chula Vista MSCP Subarea Plan, although it is not covered under the City of San Diego's MSCP Subarea Plan. This species requires host plants within these vegetation communities for feeding and reproduction. The primary larval host plant is dot seed plantain (*Plantago erecta*); however, several other species have been documented as important larval host plants. The project site occurs within the USFWS Quino checkerspot butterfly survey area but outside the City of Chula Vista's MSCP Subarea Plan 2000 Quino checkerspot butterfly survey area. Quino checkerspot butterfly is not expected to occur within the project area based on lack of suitable habitat and surrounding urban development. The habitats on-site lack this species' host plant, dot-seed plantain. In addition, the non-native grassland and disturbed habitat on-site have been subject to historic disturbance from agriculture, are characterized by dense, non-native species and lack suitable openings for this species. The project site is also surrounded by dense urban development on three sides, including Interstate 805 (I-805), and lacks connectivity to suitable habitat in the vicinity. Surveys were conducted in 2005 and Quino checkerspot butterfly was absent. Additional focused surveys were not deemed necessary based on coordination with USFWS and the low likelihood of the species being present.

Crotch's Bumble Bee

Crotch's bumble bee is a state candidate for listing as endangered. This species prefers open grassland and shrub habitats. In California, its distribution is exclusive to coastal areas from San Diego towards the Sierra-Cascade Crest. Nesting occurs primarily underground, often in abandoned

holes made by rodents or occasionally abandoned bird nests typical of most bumble bee species. The potential for Crotch's bumble bee was evaluated based on guidance from CDFW. As a candidate for listing, the species is temporarily afforded the same protections as a state-listed endangered or threatened species. The habitat on-site was evaluated for Crotch's bumble bee based on the general biological and botanical surveys conducted between 2020 and 2022. During these surveys, a complete list of botanical resources, including potential host and nectar plants, were recorded. In addition, potential nesting resources were also evaluated. An updated records search of the California Natural Diversity Database (CNDDB) was also conducted in 2023 to encompass data provided by the Bumble Bees of North America database contributed in 2022. No Crotch's bumble bee records occur within five miles of the project site.

The project site consists of non-native grassland, wetland communities, and non-native land cover types dominated by riparian and non-native species (e.g., short-pod mustard [*Hirschfeldia incana*], crown daisy [*Glebionis coronaria*]) with limited known floral resources for foraging, and supports limited nesting habitat due to dense thatch of non-native grasses and forbs present throughout the project site. Nectar plants are present in low densities (<1% relative cover) including fiddleneck (*Amsinckia* spp.), wild Canterbury-bell (*Phacelia minor*), and California buckwheat within the coastal sage scrub on the slopes in the southern portion of the project site (4.65 acres). Bare ground is primarily limited to dirt access roads and footpaths, and the project site lacks suitable abandoned burrows for nesting based on surveys conducted between 2020 and 2022. While no Crotch's bumble bee were observed, the species has a moderate potential to forage within the project site based on the species range and available nectar sources on-site. The project site lacks adjacency to high-quality foraging habitat, although potential floral resources for foraging are present on the vegetated manufactured slopes south and east of the project site. Based on this information, the bumble bee has a moderate potential to forage within the project site based on the species range and available nectar sources on-site. This species has a low potential to nest on-site as the majority of the disturbed land and non-native grassland on-site are densely vegetated and lack suitable openings or burrows for nesting and lacks adjacency to high-quality foraging or nesting habitat.

4.3.1.3 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability by (1) ensuring the continual exchange of genes between populations, which helps maintain genetic diversity; (2) providing access to adjacent habitat areas, representing additional territory for foraging and mating; (3) allowing for a greater carrying capacity; and (4) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires).

Due to the limited amount of native habitat and its proximity to existing residential and commercial development, the project area is unlikely to be a wildlife corridor. Habitat associated with Otay River may support wildlife species movement; however, the river is outside the project area. Wildlife could move in an east–west direction through the Otay River riparian corridor, along the northern boundary of the project area; however, movement south through the project area would be restricted by development and major roads and freeways. Because the project area does not join two larger patches of habitat, functioning more to support live-in habitat for smaller wildlife species

or stopover habitat for species using the Otay River corridor—albeit with limited native habitat—it would not be considered a habitat linkage.

4.3.1.4 Jurisdictional Resources

A wetland/waters delineation was performed on-site according to the guidelines set forth by the U.S. Army Corps of Engineers (USACE). A wetland/waters delineation is used to identify and map the extent of the wetlands and waters of the U.S. and provide information regarding jurisdictional issues. Figure 4.3-2 shows the potential jurisdictional boundaries within the survey area. The survey area contains *Arundo*-dominated riparian under the jurisdiction of CDFW. Additionally, the survey area contains mule fat scrub, southern willow scrub, emergent wetland, and disturbed wetlands which are under the jurisdiction of USACE, Regional Water Quality Control Board (RWQCB), and CDFW.

a. Federal Waters of the United States

Under CWA Section 404, the USACE is authorized to regulate waters of the U.S. The currently accepted regulations defining waters of the U.S. follow the September 8, 2023 publishment of the final rule: *Revised Definition of "Waters of the U.S.", Conforming*. Notably, this new rule provides a new interpretation of the term "adjacent" whereas wetlands must contain a surface hydrologic connection to other waters of the U.S. to be considered adjacent waters of the U.S. Additionally, this new rule eliminates the applicability of the significant nexus standard for "non-relatively permanent waters," so ephemeral features are no longer likely to be considered waters of the U.S.

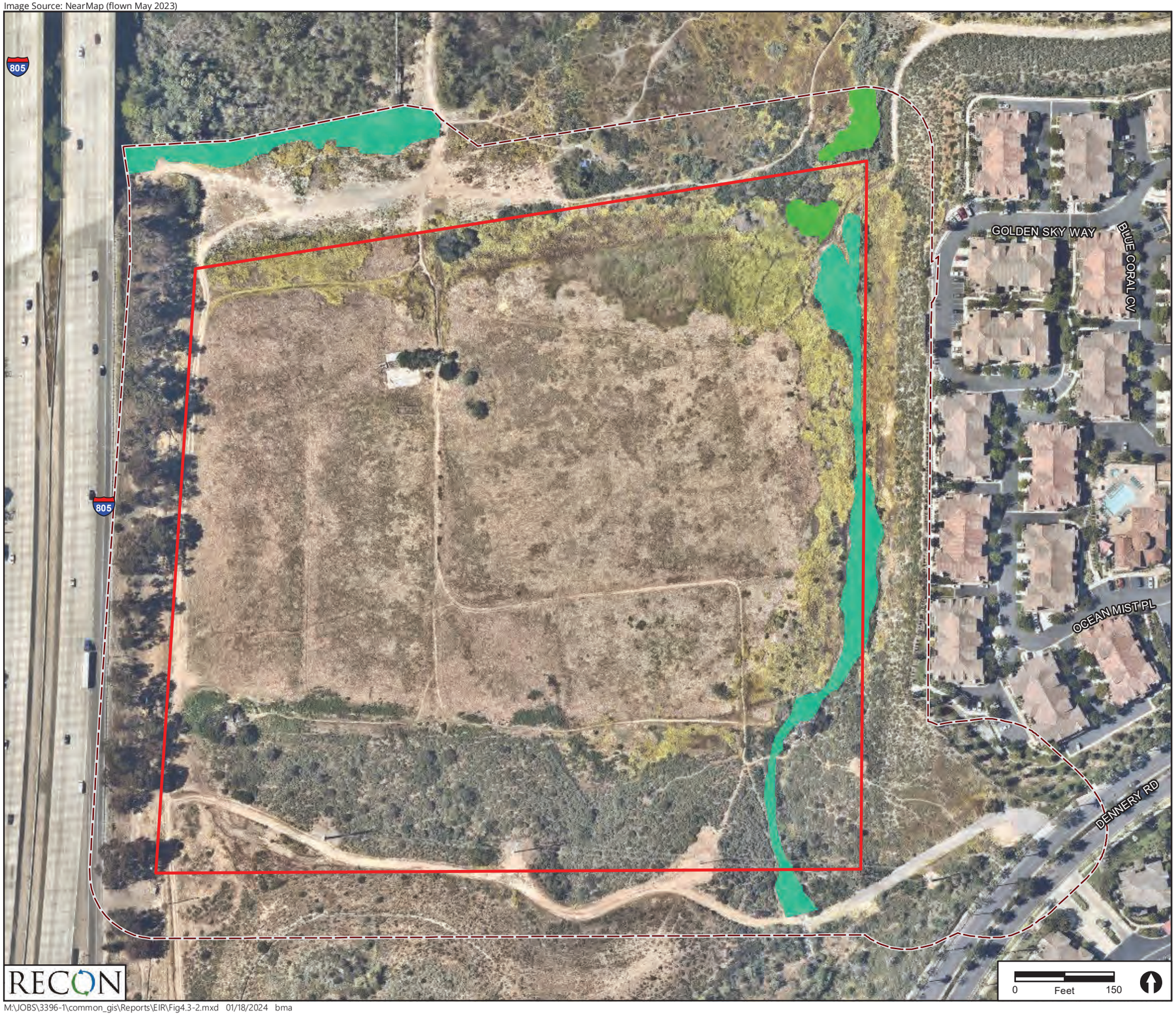
The southern willow scrub, mule fat scrub, disturbed wetland, and emergent wetland associated with the channel in the eastern portion of the survey area support an ephemeral flow regime and would be considered a "non relatively permanent water." Although it has connectivity to the Otay River, the lack of at least intermittent flow would likely preclude it from being considered waters of the U.S.

b. Waters of the State

The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes waters of the State and all waters of the U.S. as mandated by both CWA Section 401 and the California Porter-Cologne Water Quality Control Act.

Jurisdictional waters are delineated by using the three-perimeter definition similar to the federal definition requiring a predominance of hydrophytic vegetation, hydric soils, and hydrology. As shown in Figure 4.3-2, the potential RWQCB wetland waters of the State include 0.66 acre within the survey area. These waters are equivalent to the USACE wetland waters.

Image Source: NearMap (flown May 2023)



Project Site

Survey Area

RWQCB Wetland Waters of the State/ CDFW Riparian/ City of San Diego Wetland/ City of Chula Vista Wetland

CDFW Riparian/ City of San Diego Wetland/ City of Chula Vista Wetland

RECON

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FIGURE 4.3-2
Jurisdictional Resources

c. CDFW State Waters

Under Sections 1600–1607 of the California Fish and Game Code (CFGC), the 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. Jurisdictional waters are delineated by the outer edge of wetland vegetation, riparian habitat, or at the top of the bank of streams or lakes, whichever is wider. All streambeds and associated wetlands are considered sensitive. These areas fall under the jurisdiction of the CDFW (Section 1600 of the CFGC). The CDFW jurisdictional areas extend to the outer edge of wetland vegetation or to the top of the bank of streams or lakes, whichever is wider.

As shown in Figure 4.3-2, the potential CDFW jurisdictional waters within the survey area totals 0.78 acre, including CDFW riparian. The CDFW riparian includes 0.12 acre of *Arundo*-dominated riparian located off-site in the survey buffer area in addition to the RWQCB wetland waters in the on-site project area.

d. City of San Diego and City of Chula Vista Wetlands

Potential City of San Diego and City of Chula Vista wetlands occur on-site where CDFW riparian and RWQCB wetland waters were delineated. The total City of Chula Vista and City of San Diego wetlands within the survey area is 0.78 acre. Under the No Annexation Scenario and Annexation Scenario 2b, the City of Chula Vista would take jurisdiction over the CDFW riparian/RWQCB wetlands within the project site. Under the Annexation Scenario 2a, the City of San Diego would take jurisdiction over the CDFW riparian/RWQCB wetlands within the project site.

4.3.2 Regulatory Setting

4.3.2.1 Federal Regulations

a. Federal Endangered Species Act

The federal Endangered Species Act (FESA) (16 United States Code [USC] §1531 et seq.) is implemented by the USFWS through a program that identifies and provides protection of various species of fish, wildlife, and plants deemed to be in danger of or threatened with extinction. As part of this regulatory act, the FESA provides for designation of critical habitat, defined in FESA Section 1532(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and that “may require special management considerations or protection.” Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless “essential for the conservation of the species.”

There is no USFWS critical habitat within the project area.

b. Clean Water Act

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into "waters of the United States." The currently accepted regulations defining waters of the U.S. follow the September 8, 2023, publication of the final rule: *Revised Definition of "Waters of the U.S.", Conforming*. The agencies' definition of "waters of the United States" provides jurisdiction over waterbodies that Congress intended to protect under the CWA, including traditional navigable waters (e.g., certain large rivers and lakes), territorial seas, and interstate waters. Notably, this new rule provides a new interpretation of the term "adjacent" whereas wetlands must contain a surface hydrologic connection to other waters of the U.S. to be considered adjacent waters of the U.S. and eliminates the applicability of the significant nexus standard for "non-relatively permanent waters."

c. Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC §703 et seq.) prohibits the intentional take of any migratory bird or any part, nest, or eggs of any migratory bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. On October 4, 2021, the USFWS published a revision of interpretation of the MBTA. With the final rule, USFWS has effectively reinstated its position that "incidental take" (e.g., pursuing, hunting, shooting, capturing, collecting, harming, killing) that results from, but is not the purpose of, carrying out otherwise lawful activity is prohibited by the MBTA.

4.3.2.2 State Regulations

a. California Endangered Species Act

The CDFW administers the California Endangered Species Act (CESA) (CFGC Section 2050 et seq.), which prohibits the take of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

b. California Fish and Game Code

The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the State. Important applicable sections include the following:

- Sections 1900-1913, Native Plant Protection Act directs the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State."
- Section 1602, et seq. regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. A Streambed Alteration Agreement is required for impacts on jurisdictional resources, including streambeds and associated riparian habitat.
- Section 3503 affords protection over the destruction of nests or eggs of native bird species and it states that no birds of prey can be taken, possessed, or destroyed.

c. Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act of 1969 (Porter-Cologne Act) (California Water Code Section 13000 et seq.) established the principal California legal and regulatory framework for water quality control. Under this law, the State Water Resources Control Board develops statewide water quality plans applicable to both surface water and groundwater. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter–Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a CWA Section 401 certification for waters of the U.S. and Waste Discharge Requirements for waters of the State.

4.3.2.3 Regional Regulations

a. County of San Diego Multiple Species Conservation Program Subregional Plan

The municipalities of southwestern San Diego County collaborated in producing the MSCP Subregional Plan. The MSCP Subregional Plan is implemented through individual Subarea Plans adopted by each jurisdiction. The MSCP serves as a Habitat Conservation Plan (HCP) pursuant to FESA Section 1539(a)(1)(B), as well as a Natural Communities Conservation Plan (NCCP) under the Natural Communities Conservation Planning Act of 2001.

The MSCP, as implemented through the Subarea Plans, allows the participating jurisdictions to authorize take of plant and wildlife species identified within the plan area. USFWS and CDFW (collectively referred to as the Wildlife Agencies), have authority to regulate the take of threatened, endangered, and rare species. Under the MSCP, the Wildlife Agencies have granted take authorization to the local jurisdictions, including the City of Chula Vista and City of San Diego, for

otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside the designated preserve areas, in exchange for the assembly and management of a coordinated MSCP Preserve. Both the City of Chula Vista and City of San Diego are participants in the San Diego MSCP through their respective Subarea Plans, which are described under Sections 4.3.2.4 and 4.3.2.5.

The MSCP Subregional Plan established a regional preserve system designed to conserve large blocks of interconnected habitat having high biological value that are delineated in MHPAs. To provide a framework for the establishment of MHPAs through Subarea Plans, the MSCP Subregional Plan identified Biological Core Areas and habitat linkages containing high concentrations of sensitive biological resources. As stated in Section 2.2 of the MSCP Subregional Plan (County of San Diego 1998):

> The core and linkages map was developed as an analytical tool to assist in testing preserve design criteria and levels of species conservation. It is not a regulatory map …While the entire acreage within a core area may not be important for preservation, the core and linkage configuration assists in visualizing a framework for a regional preserve network. Jurisdictions and other agencies prepared subarea plans with specific preserve boundaries by maximizing inclusion of unfragmented core resource areas and linkages in their preserve designs, given other parameters and objectives … Although this map was used to identify important biological areas and linkages, the habitat evaluation map is not intended to replace site-specific field survey data and evaluations.

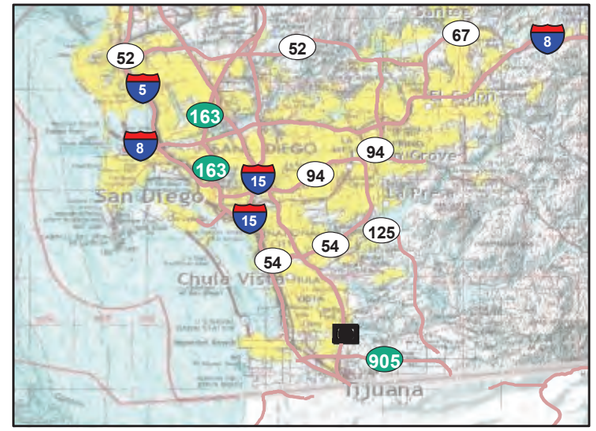
As shown in Figure 4.3-3, the project area is located within the MSCP Subregional Plan Biological Core Area 4 and Habitat Linkage M (County of San Diego 1998). However, neither of these areas, where they overlap the project area, were included within the City of Chula Vista or City of San Diego MSCP Subarea Plan's MHPA boundaries.

MSCP Conditions of Coverage

Pursuant to the MSCP Subregional Plan, based on preserve configuration, conservation targets, and implementation of habitat management plans, 85 species are adequately conserved and covered by the plan. Subarea plans are required to demonstrate consistency with the MSCP Subregional Plan, and once an individual subarea plan is approved, that local agency receives permits and/or management authorization to directly "take" these 85 species pursuant to its approved plan and implementation agreement. For all species evaluated for coverage under the MSCP, area specific management directives are included to provide guidelines for managing and monitoring covered species and their habitats. These conditions for coverage are listed in Table 5 of the Subregional Plan and incorporated by reference into both the City of Chula Vista and City of San Diego Subarea Plans.

Image Source: NearMap (flown May 2023)





Project Site

Off-site Improvements

City Limit

City of San Diego MSCP
Habitat Linkages and Biological Core Areas

Biological Core Area 4

Biological Linkage M

0 Feet 500

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FIGURE 4.3-3
MSCP Subregional Plan Habitat
Linkages and Biological Core Areas

The project, under all scenarios, would be required to comply with all conditions of coverage of MSCP covered species. As detailed under Section 4.3.1.2, four MSCP covered species were observed within the project area: least Bell's vireo, coastal California gnatcatcher, Otay tarplant, and San Diego barrel cactus. Additionally, three MSCP covered species have potential to occur within the project area: Cooper's hawk, burrowing owl, and orange-throated whiptail. A summary of the conditions of coverage which would be conditions of project approval are provided below. Additional details are included in the Biological Resources Technical Report (see Appendix D).

- Least Bell's Vireo – The MSCP conditions for coverage for least Bell's vireo require measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the breeding period),

- Coastal California Gnatcatcher – The MSCP conditions for coverage include avoiding clearing of occupied habitat within MSCP preserve areas between March 1 and August 15, as well as management directives to reduce edge effects and minimize disturbance during the nesting period.

- Otay Tarplant – The MSCP conditions for coverage include management directives for monitoring of populations and adaptive management of preserves (taking into consideration the extreme population fluctuations from year to year), and specific measures to protect against detrimental edge effects to this species.

- San Diego Barrel Cactus – The MSCP conditions for coverage include management directives to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle.

- Cooper's Hawk – The MSCP conditions of coverage for Cooper's hawk include establishment of 300-foot impact avoidance areas around active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

- Orange-throated Whiptail – The condition for coverage of orange-throated whiptail under the MSCP requires area specific management directives to address edge effects.

- Burrowing Owl – The MSCP conditions of coverage for burrowing owl include avoiding impacts to the species to the maximum extent practicable. This species has a low potential to occur in the project area due to lack of suitable burrows. However, to ensure consistency with this condition, the project includes measures to avoid impacts to burrowing owl, including preconstruction surveys to ensure this species does not occur in the project area at the time of construction.

4.3.2.4 Local Regulations - City of Chula Vista

a. City of Chula Vista MSCP Subarea Plan

The MSCP is implemented in the City of Chula Vista through the City of Chula Vista's approved MSCP Subarea Plan. As shown in Figure 4.3-4, within the City of Chula Vista's MSCP Subarea Plan, the project area is designated as "Development Area Outside Covered Projects" (i.e., not designated a

preserve or conservation area) and is not located immediately adjacent to any 75% or 100% Conservation Areas. The closest Conservation Area (75%) is located approximately 197 feet north of the project area within the Otay River. As defined by the City of Chula Vista Subarea Plan, projects within the Development Area Outside Covered Projects planning area shall adhere to the City of Chula Vista's Habitat Loss and Incidental Take (HLIT) Ordinance (CVMC Chapter 17.35; City of Chula Vista 2003).

b. Habitat Loss and Incidental Take Ordinance

In compliance with the MSCP Subregional Plan and the Subarea Plan, the City of Chula Vista established development standards in the HLIT Ordinance, as a condition of issuance of take authorization by the Wildlife Agencies. The HLIT is consistent with the conservation and mitigation goals of the 1998 MSCP Subregional Plan and the City of Chula Vista MSCP Subarea Plan. Furthermore, the HLIT provides standards for development, identifies specific impact thresholds for special-status resources, and defines the mitigation requirements for impacts to native and some non-native communities.

The HLIT Ordinance provides for the protection of narrow endemic species and outlines specific impact avoidance/minimization requirements. Projects sited within development areas outside covered projects shall avoid impacts to narrow endemic species to the maximum extent practicable and where unavoidable, shall be limited to 20 percent of the species population as approved by the City of Chula Vista, USFWS, and CDFW. If greater than 20 percent population impacts to narrow endemic species are anticipated as a result of the project, equivalency findings shall be prepared and approved prior to project approval.

c. Wetland Protection

In accordance with the City of Chula Vista MSCP Subarea Plan and HLIT Ordinance, development projects that contain wetlands are required to demonstrate that impacts to wetlands have been avoided to the greatest extent practicable and, where impacts are nonetheless proposed, that such impacts have been minimized. For unavoidable impacts to wetlands, the mitigation ratio will be in accordance with the wetlands mitigation ratios identified in the City of Chula Vista MSCP Subarea Plan and impacts will be subject to no-net-loss wetland policies. The wetlands mitigation ratios provide a standard for each habitat type but may be adjusted depending on both the functions and values of the impacted wetlands and the wetlands mitigation proposed by the project.

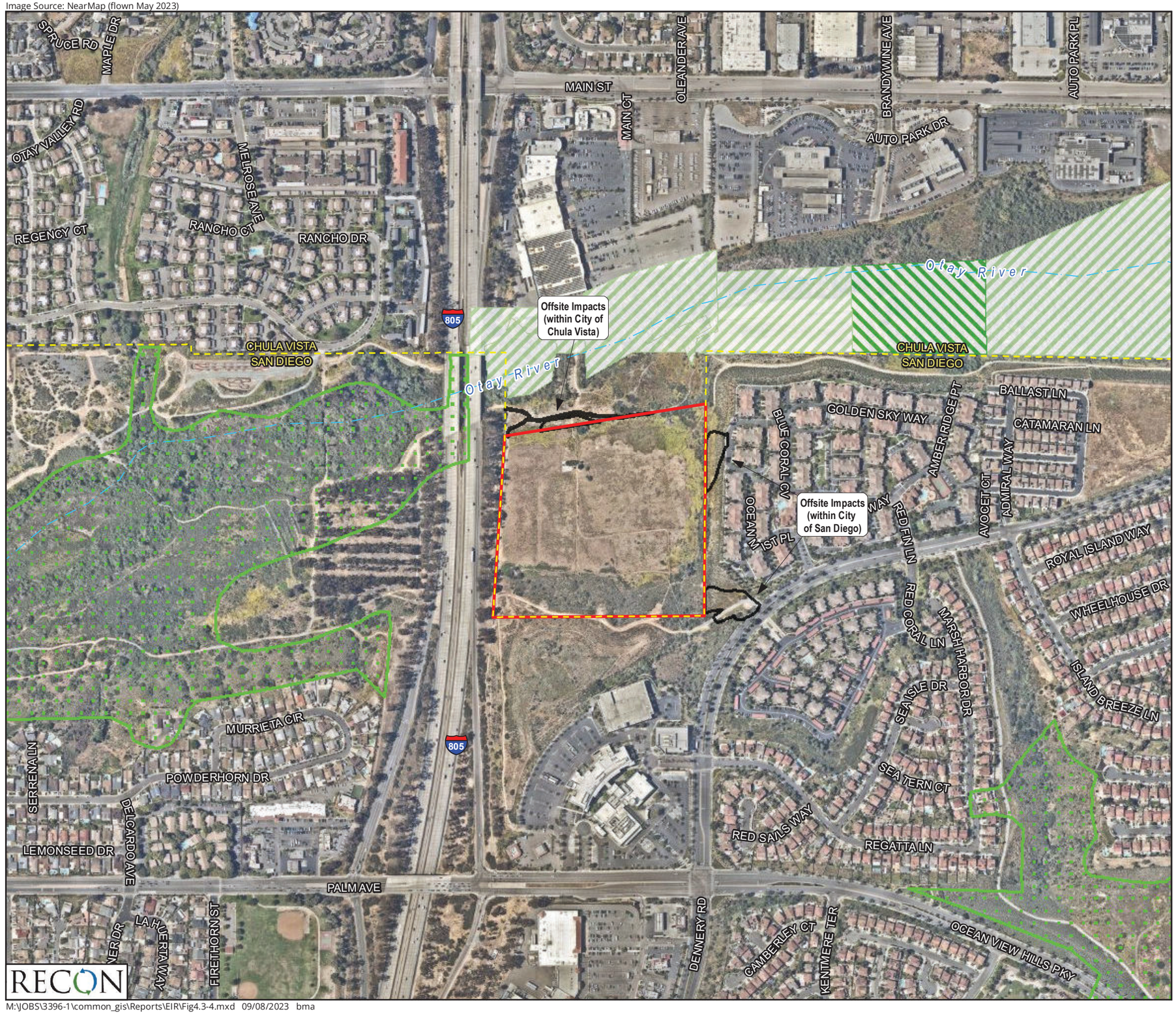
d. City of Chula Vista General Plan: Environmental Element

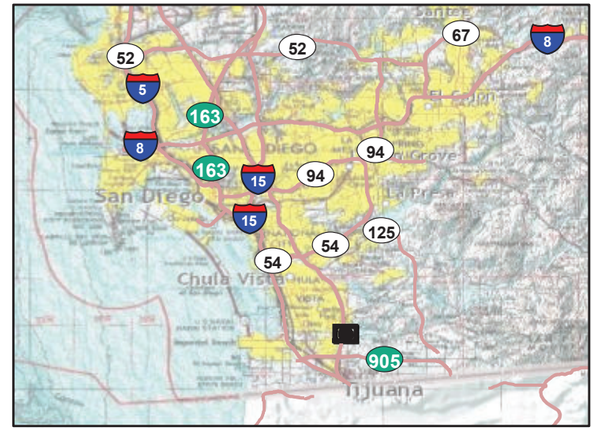
The Environmental Element establishes the policy framework for improving sustainability through the responsible stewardship of the City of Chula Vista's natural resources. The following Objective and policy applies to the project's preservation of biological resources:

Objective E 1: Conserve Chula Vista's sensitive biological resources.

Policy E 1.1: Implement the City of Chula Vista MSCP Subarea Plan.

Image Source: NearMap (flown May 2023)





Project Site

Off-site Improvements

City Limit

City of San Diego MSCP Subarea Plan

City of San Diego MHPA

City of Chula Vista MSCP Subarea Plan

75% Conservation Area - Habitat Preserve

100% Conservation Area - Habitat Preserve

0 Feet 500

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FIGURE 4.3-4

City of San Diego MHPA and
City of Chula Vista Conservation Areas

4.3.2.5 Local Regulations - City of San Diego

a. City of San Diego MSCP Subarea Plan

The MSCP Subregional Plan is implemented in the City of San Diego through the City of San Diego's MSCP Subarea Plan. The City of San Diego's MSCP Subarea Plan identifies lands designated as MHPA, which is a "hard-line" preserve developed by the City of San Diego in cooperation with the wildlife agencies, developers, property owners, and various environmental groups. Within the MHPA, biological core resource areas and corridors targeted for conservation are identified and discussed, in which development restrictions may occur (City of San Diego 1997).

As shown in Figure 4.3-4, the project area with the exception of the off-site access area located within the City of San Diego, is located outside the City of San Diego Subarea Plan. The nearest MHPA is approximately 180 feet west of the project area, across I-805.

b. Environmentally Sensitive Lands Regulations

As outlined in the City of San Diego's Municipal Code (SDMC) Chapter 14, Article 3, Division 1), Environmentally Sensitive Lands (ESL) include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs and 100-year floodplains. Impacts to biological resources within and outside the MHPA must comply with the ESL Regulations, which also serve as standards for the determination of biological impacts and mitigation under the California Environmental Quality Act (CEQA) in the City of San Diego.

The project would be subject to the ESL Regulations, which require 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. In all scenarios, the City of San Diego would require a Site Development Permit for the off-site improvement areas due to the presence of ESL on land within the City of San Diego. In Annexation Scenario 2a, the City of San Diego would address compliance with the ESL regulations for the portions of the project currently within the City of Chula Vista through the proposed annexation agreement and uncodified ordinance (see Section 3.5.2).

c. Wetland Regulations

The extent of City of San Diego wetland jurisdiction is determined based on the definition of "wetland" provided under the ESL Regulations (SDMC Section 143.0141[b]), which defines wetlands as areas which are characterized by any of the following conditions:

- All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;
- Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation or catastrophic or recurring natural events or processes have acted to

preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats;

- Areas lacking wetland vegetation communities, hydric soils and wetland hydrology due to non-permitted filling of previously existing wetlands;
- Areas mapped as wetlands on Map No. C-713 as shown in SDMC Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. Where impacts are unavoidable, deviation findings under the Biologically Superior Option must be made in accordance with SDMC Section 143.0150. 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. In the No Annexation Scenario and Scenario 2b, a wetland deviation would not be required by the City of San Diego because all wetland impacts are proposed within the on-site portions of the project site and impacts would be addressed through City of Chula Vista regulations. In Annexation Scenario 2a, the City of San Diego would ensure compliance with the ESL regulations for the design of the project, mitigation and the uncodified ordinance.

The City of San Diego uses the criteria listed in Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330) to apply an appropriate buffer around wetlands that serves to protect the function and value of the wetland.

According to the City of San Diego's Biology Guidelines (see below), a wetland buffer is an area surrounding a wetland that helps protect the function and value of the adjacent wetland by reducing physical disturbance; provides a transition zone where one habitat phases into another; and acts to slow floodwaters for flood and erosion control, sediment filtration, water purification, and groundwater recharge. The width of the buffer is determined by factors such as type and size of development, sensitivity of the wetland resource to edge effects, topography, and the need for upland transition (City of San Diego 2018). There are no set buffer widths required for wetlands delineated outside the Coastal Zone.

d. City of San Diego Biology Guidelines

The City of San Diego's Biology Guidelines (City of San Diego 2018) presented in the Land Development Manual have been developed "to aid in the implementation and interpretation of the ESL Regulations, Vernal Pool Habitat Conservation Plan, San Diego Land Development Code, and the Open Space Residential (OR-1-2) Zone. The Biology Guidelines also provide standards for the determination of impact and mitigation under CEQA and the California Coastal Act.

Sensitive biological resources, as defined by the ESL Regulations, include lands within the MHPA as well as other lands outside the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA, or IIIB; habitat for rare, endangered, or threatened species; or narrow endemic species. The most sensitive habitats are classified as Tier I, with the least sensitive classified as Tier IV, and varying mitigation ratios and requirements that mitigation be in tier or in kind are based on the sensitivity of the habitat being affected.

The site contains wetlands and Tier II and IIB habitat, as well as species addressed in the City of San Diego Biology Guidelines. The site is not located in the Coastal Zone.

e. City of San Diego General Plan: Conservation Element

The **Conservation Element** (CE) of the City of San Diego General Plan (City of San Diego 2008) contains the following biological resource related policies applicable to the project:

- **CE-B.1.** Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.
- **CE-B.2.** Apply the appropriate zoning and ESL regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands.
- **CE-G.1.** Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability.
- **CE-G.3.** Implement the conservation goals/policies of the City's MSCP Subarea Plan, such as providing connectivity between habitats and limiting recreational access and use to appropriate areas.
- **CE-G.5.** Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.
- **CE-H.4.** Support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values.
- **CE-H.7.** Encourage site planning that maximizes the potential biological, historic, hydrological, and land use benefits of wetlands.
- **CE-H.8.** Implement a "no net loss" approach to wetlands conservation in accordance with all city, state, and federal regulations.
- **CE-H.9.** Consider public health, access, and safety, including pest and vector control, on wetland creation and enhancement sites.

f. City of San Diego Otay Mesa Community Plan

- **8.1-1.** Implement the Environmentally Sensitive Lands Regulations related to biological resources and steep hillsides for all new development.
- **8.1-3.** Plan development to minimize grading and relate to the topography and natural features of Otay Mesa.

4.3.3 Issues 1 and 2: Sensitive Species and Habitats

4.3.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to sensitive species in the City of Chula Vista:

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

b. Impact Analysis

Biological surveys of the property were conducted in 2020 and 2022 to inventory the biological resources present, determine the occurrence potential for special status species, species considered "covered" under the City of Chula Vista and the City of San Diego MSCP Subarea Plans, and to document the jurisdictional area present within the project area. Focused and protocol surveys, consistent with CDFW and USFWS guidelines were performed as follows:

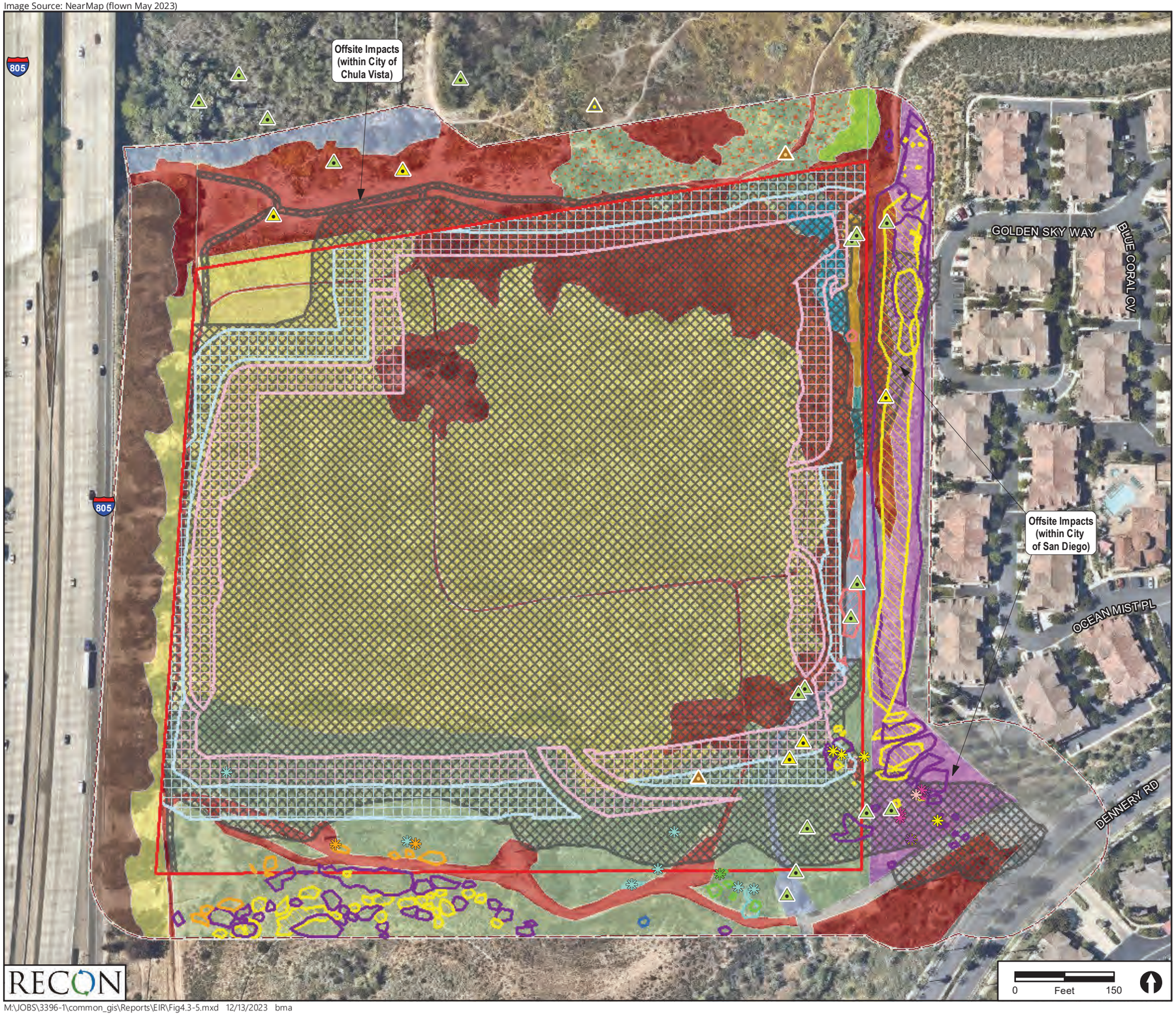
- Focused surveys for special-status plant species were conducted in May and June 2020 and updated in May 2022.
- Protocol surveys for coastal California gnatcatcher were performed within the project area between February and March 2020 by coastal California gnatcatcher-permitted biologists.
- Protocol surveys for least Bell's vireo and southwestern willow flycatcher were performed concurrently–initiated on May 22, 2020 and continued through July 31, 2020.
- A routine jurisdictional waters/wetland delineation, following the guidelines set forth by the USACE was performed on March 24, 2022 and updated June 30, 2023.

Sensitive Vegetation Communities and Land Cover Types

Direct Impacts

Impacts to vegetation communities and land cover types from project implementation total 23.37 acres. Of this total, 22.09 acres of impacts would occur in the City of Chula Vista associated with impacts within the project site and the off-site area to the north associated with remedial grading and trails. An additional 1.28 acres of impact would occur in the City of San Diego resulting from the off-site road improvements. Impacts to biological resources are shown in Figure 4.3-5 and Table 4.3-2 summarizes the impacts to each vegetation community and land cover type. Project impacts would be mitigated consistent with the City of Chula Vista Subarea Plan, with the exception that the off-site improvement areas in the City of San Diego which would remain in San Diego and would be mitigated consistent with the City of San Diego Subarea Plan.

Image Source: NearMap (flown May 2023)



Project Site
Survey Area
Project Impacts
BMZ Zone 1
BMZ Zone 2

Sensitive Wildlife

- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Yellow-breasted Chat (*Icteria virens*)
- Yellow Warbler (*Setophaga petechia*)

Sensitive Plants

- California Adolphia (*Adolphia californica*)
- Otay Tarplant (*Deinandra conjugens*)
- San Diego County Viguiera (*Bahiopsis lacniata*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)
- San Diego Bur-sage (*Ambrosia chenopodiifolia*)
- Ashy Spike-moss (*Selaginella cinerascens*)
- Small-flowered Microseris (*Microseris douglasii* ssp. *platycarpha*)
- San Diego Marsh-elder (*Iva hayesiana*)
- South Coast Saltscale (*Atriplex pacifica*)

Vegetation Communities

- Arundo-Dominated Riparian
- Diegan Coastal Sage Scrub
- Diegan Coastal Sage Scrub: Baccharis-dominated
- Disturbed Habitat
- Disturbed Wetland
- Emergent Wetland
- Eucalyptus Woodland
- Mule Fat Scrub
- Non-Native Grassland
- Ornamental
- Southern Willow Scrub
- Urban/Developed

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FIGURE 4.3-5
Impacts to Biological Resources

Table 4.3-2 Direct Impacts to Vegetation Communities and Land Cover Types (No Annexation Scenario and Annexation Scenario 2b)									
Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	City of Chula Vista MSCP Subarea Plan Tier	City of San Diego MSCP Subarea Plan Tier	Existing Project Area Acreage	City of Chula Vista Impacts			City of San Diego Impacts	Total Project Area Impacts (acres)
					Project Site (acres)	Off-site Impact Area (acres)	*Subtotal (Acres)*	Off-site Impact Area (acres)	
Upland Vegetation Communities									
Diegan coastal sage scrub	Coastal sage scrub	II	II	6.55	3.39	—	*3.39*	0.04	3.43
Diegan coastal sage scrub: *Baccharis*-dominated	Coastal sage scrub	II	II	0.92	0.16	0.01	*0.17*	—	0.17
Non-native grassland	Non-native grassland	III	IIIB	14.78	13.60	0.05	*13.65*	—	13.65
Wetland Vegetation Communities									
Arundo-dominated riparian	Riparian scrub	Wetlands	Wetlands	0.12	—	—	—	—	—
Mule fat scrub	Riparian scrub	Wetlands	Wetlands	0.11	0.03	—	*0.03*	—	0.03
Southern willow scrub	Riparian scrub	Wetlands	Wetlands	0.82	0.15	—	*0.15*	—	0.15
Emergent wetland	Natural flood channel	Wetlands	Wetlands	0.18	0.18	—	*0.18*	—	0.18
Disturbed wetland	Disturbed Wetland	Wetlands	Wetlands	0.05	0.04	—	*0.04*	—	0.04
Land Cover Types									
Disturbed habitat	Disturbed land	IV	IV	8.13	4.09	0.39	*4.48*	0.37	4.87
Eucalyptus woodland	Eucalyptus woodland	IV	IV	1.80	—	—	—	—	—
Ornamental	Disturbed land	N/A	IV	1.86	—	—	—	0.64	0.64
Urban/developed	Disturbed land	N/A	IV	1.53	—	—	—	0.23	0.23
Total				36.85	21.64	0.45	*22.09*	1.28	23.37

As shown in Table 4.3-2, project implementation would result in direct impacts to upland vegetation communities in the City of Chula Vista including 3.39 acres (Tier II) of Diegan coastal sage scrub, 0.17 acre of Diegan coastal sage scrub: Baccharis dominated (Tier II), and 13.65 acres of non-native grassland (Tier III). These vegetation communities are considered sensitive uplands by the City of Chula Vista MSCP Subarea Plan. An additional 0.04 acre of impact to Diegan coastal sage scrub (Tier II) would occur in the City of San Diego. As the impacts to Diegan coastal sage scrub within the City of San Diego are less than 0.10 acre, these impacts on their own would be less than significant per the City of San Diego's Biology Guidelines; therefore, these impact totals are added to the City of Chula Vista's impact totals and addressed as part of the City of Chula Vista impacts. Total impacts to Tier II and III sensitive vegetation communities including off-site portions are 17.25 acres.

Impacts to Tier IV land cover types (disturbed habitat, ornamental, and urban/developed lands) are not considered sensitive. Impacts to wetland vegetation communities are addressed in Section 4.3.4.

Indirect Impacts

The following sensitive vegetation communities are mapped adjacent to the impact areas: Diegan coastal sage scrub, Diegan coastal sage scrub: *Baccharis*-dominated, non-native grassland, mule fat scrub, southern willow scrub, and Arundo-dominated riparian. Indirect impacts to these vegetation communities as a result of dust, erosion, and runoff generated by construction activities could occur.

Special Status Plants

Direct Impacts

As shown in Figure 4.3-5, the project would result in direct impacts to six special-status plant species (described above in Section 4.3.1.2.a): Otay tarplant, San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera. Impacts to San Diego bur-sage, ashy spike-moss, and San Diego County viguiera would occur within the project site outside of City of Chula Vista Subarea Plan 75% and 100% Conservation Areas. Impacts to Otay tarplant, South Coast saltscale, San Diego bur-sage, and San Diego County viguiera would occur off-site in the City of San Diego, outside of the MHPA.

Direct impacts would occur to San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera within the project site and off-site area associated with road improvements. Project impacts would be limited to only a portion of the populations on and off-site within the development footprint. Thus, these species would persist both on-site within the Covenant of Easement area, as well as within off-site areas of habitat. In addition, suitable habitat within the project impact area is limited to 8.6 acres of Diegan coastal sage scrub (including *Baccharis*-dominated variant), disturbed habitat, and southern willow scrub which comprises a small fraction of the habitat available to this species identified in the MSCP Conservation Area both at a local level (1,595 acres in City Planning Component) and on a regional scale (3,314 acres total in the Subarea) (see Appendix D), and project impacts are not anticipated to reduce species' populations below self-sustaining levels.

Direct impacts to Otay tarplant, a narrow endemic under the City of San Diego MSCP Subarea Plan, would be limited to the off-site impact area within the City of San Diego. Otay tarplant populations vary year to year; however, based on 2022 surveys, impacts would occur to 14 individuals within 0.001 acre of occupied habitat.

Indirect Impacts

The following sensitive plants are mapped adjacent to the project impact area: California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss. Indirect impacts to these sensitive plants as a result of dust, erosion, and runoff generated by construction activities could occur due to project implementation.

Special Status Wildlife Species

Project implementation has potential to result in direct impacts to thirteen special-status wildlife species: least Bell's vireo, coastal California gnatcatcher, Cooper's hawk, burrowing owl, yellow-breasted chat, yellow warbler, western bluebird, orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, western mastiff bat, and Crotch's bumble bee (see Figure 4.3-5). Potential impacts to these thirteen species would occur within and adjacent to the project site. Impacts to special status wildlife species associated with the off-site road improvements in the City of San Diego would potentially occur to burrowing owl, orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, western mastiff bat, and Crotch's bumble bee. All impacts would occur outside of 75% and 100% Conservation Areas identified in the City of Chula Vista Subarea Plan and outside of areas mapped as MHPA in the City of San Diego Subarea Plan.

Least Bell's Vireo

Direct Impacts

Least Bell's vireo was observed within the project site and off-site areas within both the City of Chula Vista and City of San Diego and has a high potential to nest in suitable southern willow scrub, mule fat scrub, and *Arundo*-dominated riparian within the project impact area. Although the project would adhere to the MSCP conditions of coverage, direct impacts to any individuals occurring within this suitable habitat, as well as the removal of approximately 0.28 acre of available foraging and nesting habitat outside of the 75% and 100% Conservation Areas and MHPA could adversely impact the species.

Indirect Impacts

Indirect impacts to least Bell's vireo could occur if construction activities are conducted during this species' breeding season of March 15 to September 15. Occupied suitable habitat (southern willow scrub, mule fat scrub) for this species occurs adjacent to the project impact both inside and outside the 75% and 100% Conservation Areas and MHPA (see Figure 4.3-5) and construction activities are likely to cause noise levels within these adjacent habitat areas to exceed 60 A-weighted decibels [dB(A)] average sound level (L_{eq}). This level of noise could adversely affect breeding pairs within the adjacent occupied habitat.

Coastal California Gnatcatcher

Direct Impacts

Coastal California gnatcatcher was observed within the project site and surrounding area and has a high potential to nest within the Diegan coastal sage scrub and Diegan coastal sage scrub: Baccharis dominated within the project impact area. Although the project would adhere to the MSCP conditions of coverage, direct impacts could result from the removal of approximately 3.60 acres of available foraging and nesting habitat outside of the 75% and 100% Conservation Areas and MHPA.

Indirect Impacts

Indirect impacts to coastal California gnatcatcher outside the 75% and 100% Conservation Areas and MHPA could occur if construction activities are conducted during this species' breeding season of March 1 and August 15. Occupied suitable habitat (coastal sage scrub) for this species occurs adjacent to the project impact area (see Figure 4.3-5), which may be subject to construction-related noise. However, suitable habitat for this species in the project vicinity occurs entirely outside of any 75% and 100% Conservation Areas and the MHPA.

Cooper's Hawk

Cooper's hawk has a moderate potential to nest within the southern willow scrub within the project impact area outside of the 75% and 100% Conservation Areas and MHPA, as well as utilize the project impact area for foraging. Considering the abundance of foraging habitat in the area and large foraging range for Cooper's hawk, adequate habitat would remain for Cooper's hawk foraging after project development. Establishment of the 300-foot impact avoidance area would provide adequate spacing between nesting and foraging habitat and project construction and operation to ensure the species is not disturbed. Required consistency with MSCP regulations, including implementation of area specific management directives would ensure avoidance of direct and indirect impacts to Cooper's hawk.

Burrowing Owl

Burrowing owl has a moderate potential to occur within the non-native grassland and disturbed habitat within the project impact area and within the disturbed habitat and non-native grassland adjacent to the project impact area. Though the project impact area lacks suitable burrows based on present site conditions, burrowing owl has a moderate potential to forage within disturbed habitat and non-native grassland within both the on- and off-site project areas. Although the project would adhere to the MSCP conditions of coverage, potential direct impacts and indirect impacts to this species could occur if burrowing owl were to be present during construction activities.

Yellow-Breasted Chat and Yellow Warbler

Yellow warbler and yellow-breasted chat were observed within the project impact area. These species have moderate potential to nest within the southern willow scrub and mule fat scrub habitats of the project impact area. Direct impacts to yellow-breasted chat and yellow warbler

habitat and nesting could occur due to habitat loss and during construction activities if active nests are present.

Western Bluebird

Western bluebird was observed within the project area; however, the project impact area lacks suitable large trees with cavities for nesting and thus no direct impacts would occur to nesting western bluebird. While the project site may provide habitat for western bluebird foraging, this species is adequately conserved by the MSCP and associated MHPA and impacts to foraging habitat would occur outside of the 75% and 100% Conservation Areas and MHPA.

Orange-Throated Whiptail and San Diego Tiger Whiptail

Orange-throated whiptail and San Diego tiger whiptail have a moderate potential to occur within the project impact areas. Development of the project could result in direct impacts to these species during construction activities and through the removal of suitable habitat. However, these species were not observed during biological surveys conducted between 2020 and 2022 and likely only occur on-site in low numbers, and thus the project would be expected to result in the loss of very few individuals, if any. Additionally, suitable habitat within the project impact area is limited to 3.6 acres of Diegan coastal sage scrub which comprises a small fraction of the coastal sage scrub habitat available to these species identified in the MSCP Conservation Area both at a local level (1,285 acres in the City Planning Component) and on a regional scale (2,481 acres total within the Subarea) (see Appendix D). Therefore, the potential loss of these individuals would not reduce the population to less than self-sustaining.

Pallid Bat, Mexican Long-Tongued Bat, and Western Mastiff Bat

Pallid bat, Mexican long-tongued bat, and western mastiff bat have a moderate potential to forage within the project impact area; however, none are expected to use any portion of the project impact area for roosting or for a maternity colony due to lack of rock crevices, cliffs, mines, or man-made structures suitable for roosting. Additionally, because no nighttime construction or maintenance activities would occur (during foraging), direct impacts to individuals during construction activities are unlikely. Suitable foraging habitat within the project impact area is limited to 17.65 acres of Diegan coastal sage scrub (including *Baccharis*-dominated variant), non-native grassland, and southern willow scrub which comprises a small fraction of the habitat available to this species identified in the MSCP MHPA both at a local level (1,663 acres in the City Planning Component) and on a regional scale (3,908 acres total) (see Appendix D). Therefore, the loss of the project site habitats would not reduce the population to less than self-sustaining.

Crotch's Bumble Bee

The potential for Crotch's bumble bee was evaluated based on guidance from CDFW. As a candidate for listing, the species is temporarily afforded the same protections as a state-listed endangered or threatened species. The habitat on-site was evaluated for Crotch's bumble bee based on the general biological and botanical surveys conducted between 2020 and 2022. During these surveys, a complete list of botanical resources, including potential host and nectar plants, were recorded. In addition, potential nesting resources were also evaluated. An updated records search of the CNDDB

was also conducted in 2023 to encompass data provided by the Bumble Bees of North America database contributed in 2022. No Crotch's bumble bee records occur within five miles of the project site.

The majority of the project site consists of non-native grassland, wetland communities, and non-native land cover types dominated by riparian and non-native species (e.g., short-pod mustard, crown daisy) with limited known floral resources for foraging. Some known nectar plants are present in low densities (<1% relative cover) including fiddleneck (*Amsinckia* spp.), wild Canterbury-bell (*Phacelia minor*), and California buckwheat within the coastal sage scrub on the slopes in the southern portion of the project site (4.65 acres). Overall, Crotch's bumble bee has a moderate potential to forage within the project site based on the species range and available nectar sources on-site. This species has a low potential to nest on-site as the majority of the disturbed land and non-native grassland on-site are densely vegetated and lack suitable openings or burrows for nesting and lacks adjacency to high-quality foraging or nesting habitat.

Crotch's bumble bee is a state candidate for listing with a moderate potential to forage and nest within the project impact area. Considering the project has a low potential to support nesting, the project would not result in impacts to Crotch's bumble bee nesting habitat. However, the project has the potential for direct impacts to any individuals occurring within suitable foraging habitat and would result in impacts to 4.65 acres of potential foraging habitat in the project impact area. If CDFW finds that the candidacy is not warranted and the species is removed from the list of candidate species and not otherwise considered a sensitive species at the time of the preconstruction meeting, then no avoidance measure would be required.

c. Significance of Impacts

Sensitive Vegetation Communities and Land Cover Types

Direct Impacts

The project would result in direct impacts to 17.25 acres of sensitive upland vegetation communities within the project site and off-site improvement areas. The 0.04-acre impact to Diegan coastal sage scrub within the off-site area in the City of San Diego is less than significant in the context of the City of San Diego's MSCP Subarea Plan, because impacts less than 0.10 acre are not significant pursuant to the City of San Diego's Biology Guidelines. Nonetheless, the 0.04-acre impact in the City of San Diego would be addressed by the City of Chula Vista and is accounted for in the project's overall 17.25-acre impact.

Impacts include 3.60 acres of Tier II vegetation communities (Diegan coastal sage scrubs) and 13.65 acres of Tier III vegetation communities (non-native grasslands). Impacts would be significant.

Indirect Impacts

Indirect impacts to sensitive vegetation communities adjacent to the development areas due to dust, erosion, and runoff generated by construction activities would be significant for grading within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego.

Special Status Plants

Direct Impacts

Direct impacts to San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera would occur outside of conservation areas and/or the MHPA and project impacts would not reduce the species' populations to below self-sustaining levels; therefore, impacts would be less than significant. Direct impacts to Otay tarplant, a narrow endemic under the City of San Diego MSCP Subarea Plan, would occur outside of conservation areas and/or the MHPA. Impacts to the 14 individuals or 0.001 acre of Otay tarplant habitat within the off-site impact area within the City of San Diego would be significant.

Indirect Impacts

Indirect impacts to sensitive plants mapped adjacent to the project impact area including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss due to dust, erosion, and runoff generated by construction activities would be significant for grading within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego.

Special Status Wildlife Species

Impacts to Coopers hawk and western bluebird would be less than significant as project impacts would be consistent with the conditions of the MSCP. Impacts to orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, and western mastiff bat would be less than significant as the project site is not anticipated to support significant populations of these species due to lack of prior observations and thus are not anticipated to reduce species' populations to less than self-sustaining levels. Impacts to least Bell's vireo, coastal California gnatcatcher, burrowing owl, yellow-breasted chat, yellow warbler, and Crotch's bumble bee would be significant, as detailed below.

Least Bell's Vireo

Direct impacts to least Bell's vireo would potentially result from the removal of 0.28 acre of foraging and nesting habitat for the species. Direct impacts would be significant for grading within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego.

Indirect impacts to least Bell's vireo may occur due to noise generation if construction activities are conducted during this species' breeding season of March 15 to September 15. Indirect impacts during construction for grading within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego would be significant.

Coastal California Gnatcatcher

Direct impacts resulting from the removal of approximately 3.60 acres of available foraging and nesting habitat for coastal California gnatcatcher outside of the MHPA would be significant for

grading within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego.

Indirect impacts to coastal California gnatcatcher would be less than significant since the indirectly impacted habitat is outside of 75% or 100% Conservation Areas.

Burrowing Owl

Due to project impacts to habitat with moderate potential for burrowing owl foraging, direct and indirect impacts to burrowing owl as a result of project construction would be significant within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego.

Yellow-Breasted Chat and Yellow Warbler

Direct impacts to yellow warbler and yellow-breasted chat would be significant as a result of project construction within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego due to their potential to nest within the southern willow scrub and mule fat scrub habitats.

Crotch's Bumble Bee

Direct impacts to Crotch's bumble bee during construction would be significant within both the City of Chula Vista grading areas and off-site grading areas within the City of San Diego due to their moderate potential to forage within the project impact area. Impacts to Crotch's bumble bee nesting habitat would be less than significant, as habitat on the site has no to low potential for nesting Crotch's bumble bee.

d. Mitigation Measures

The following mitigation measures would be required to address the project's significant impacts in accordance with the regulations of both the City of Chula Vista and the City of San Diego. Under the No Annexation Scenario and Annexation Scenario 2b, mitigation measures to offset project impacts to sensitive upland vegetation communities and special-status wildlife would be implemented by the City of Chula Vista. Mitigation for Otay tarplant would be administered by the City of San Diego because project impacts to Otay tarplant are limited to the off-site impact area in the City of San Diego.

Sensitive Vegetation Communities and Land Cover Types

Direct Impacts

Significant impacts to 17.25 acres of sensitive upland vegetation communities within all on-site and off-site project areas would be mitigated through implementation of **BIO-CV-1** and as detailed in Table 4.3-3.

Table 4.3-3
Mitigation for Significant Impacts to Sensitive Upland Vegetation Communities
(No Annexation Scenario and Annexation Scenario 2b)

Vegetation Community	Impact Acreage		City of Chula Vista Mitigation Ratio[b]		Proposed Mitigation (Inside MSCP Preserve[c])
	On-site	Off-site	Inside MSCP Preserve[c]	Outside MSCP Preserve[c]	
Diegan coastal sage scrub (Tier II)	3.39	0.04 [a]	1:1	1.5:1	3.43
Diegan coastal sage scrub: *Baccharis*-dominated (Tier II)	0.16	0.01	1:1	1.5:1	0.17
Non-native grassland (Tier III)	13.60	0.05 [a]	0.5:1	1:1	6.83
Total	17.15	0.10	—	—	10.43

[a] 0.04 acre of impacts to Diegan coastal sage scrub within the off-site area in the City of San Diego. These impacts to Diegan coastal sage scrub are less than significant in the context of the City of San Diego's MSCP Subarea Plan as they total than 0.10 acre. However, mitigation would be required to offset the project's total impact to 3.43 acres of Diegan coastal sage scrub. Therefore, mitigation for impacts within the City of San Diego are proposed to be accomplished with the project's overall upland mitigation, which would occur in the City of Chula Vista.
[b] Mitigation ratios are based on the City of Chula Vista's MSCP Subarea Plan (City of Chula Vista 2003) Tier I–IV ranking system for impacts outside of the MHPA. This report assumes that mitigation would occur inside the City of Chula Vista's Conservation Area. Ultimately the mitigation ratio would be dependent on the location of the mitigation as detailed in the City of Chula Vista's MSCP Subarea Plan (City of Chula Vista 2003).
[c] Defined as any Preserve areas identified via the MSCP Subregional Plan and implemented via MSCP Subarea Plans (e.g., City of Chula Vista 75% or 100% Conservation Area, City of San Diego MHPA, or County of San Diego Pre-Approved Mitigation Area)

Indirect Impacts

Significant indirect impacts to sensitive habitat within the on-site and off-site project components would be mitigated through implementation of **BIO-CV-2**, Biological Monitor and **BIO-CV-3**, Best Management Practices.

BIO-CV-1 **Sensitive Upland Vegetation in Chula Vista**. Prior to the issuance of any land development permits or development activities by the City of Chula Vista, including clearing, grubbing, grading, and/or construction permits, the project Applicant shall secure mitigation for direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1:1 mitigation ratio and non-native grassland at a 0.5:1 mitigation ratio if mitigated within the MSCP Preserve , or mitigate direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1.5:1 mitigation ratio and non-native grassland at a 1:1 mitigation ratio if mitigated outside the MSCP Preserve. Mitigation for direct impacts would be pursuant to the City of Chula Vista's Subarea Plan consistent with the ratios listed in Table 5-3 of the Subarea Plan. The applicant may meet this mitigation requirement through purchase of upland mitigation credits (e.g., Tier II credits at San Miguel Conservation Bank or Willow Road Mitigation Bank). The applicant is required to provide proof of mitigation credit purchase to the City of Chula Vista prior to issuance of any land development permits.

BIO-CV-2 **Biological Monitor**. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, for any areas adjacent to the Preserve and the off-site facilities located within the Preserve, the project Applicant shall provide written confirmation that a City of Chula Vista-approved biological monitor has been retained and shall be on-site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all preconstruction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas, and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the Chula Vista MSCP Subarea Plan and/or permits issued by any other agencies having jurisdictional authority over the project.

Before construction activities occur in areas containing sensitive biological resources within the off-site facilities area, all workers shall be educated by a City of Chula Vista-approved biologist to recognize and avoid those areas that have been marked as sensitive biological resources.

BIO-CV-3 **Best Management Practices**. Best management practices will be implemented during all grading activities to reduce potential indirect effects on special-status species and habitat. Best management practices shall include the following:

- Prior to ground disturbance, all permanent and temporary disturbance areas shall be clearly delineated by orange construction fencing and the identification of environmentally sensitive areas with flagging and/or fencing.
- All trash will be properly stored and removed from the site daily to prevent attracting wildlife to the construction area.
- Vehicles and equipment will be stored only on pre-designated staging areas in disturbed or developed areas. Fueling should be conducted in a manner that prevents spillage of fuel into riparian or wetland habitats.
- All maintenance of vehicles and equipment will be conducted in a manner so that oils and other hazardous materials will not discharge into riparian or wetland habitats.
- Dust control measures will be implemented to minimize the settling of dust on vegetation.
- Appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) will be available on the site during all phases of project construction, and appropriate fire prevention measures will be taken to help minimize the chance of human-caused wildfires.
- All construction will be performed between dawn and dusk to the degree feasible to minimize potential indirect effects (e.g., increased depredation) on the species beyond the limits of disturbance.

Special Status Plants

Direct Impacts

Impacts to 14 Otay tarplant individuals within off-site improvement areas in the City of San Diego would be mitigated at a 4:1 mitigation ratio as detailed in **BIO-SD-3**, Otay Tarplant Mitigation.

Indirect Impacts

Indirect impacts to special-status plant species within the on-site and off-site areas including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss would be mitigated through implementation of mitigation measures **BIO-CV-2** and **BIO-CV-3**.

BIO-SD-3 **Otay Tarplant Mitigation**. Prior to the issuance of construction permits for the off-site improvement areas by the City of San Diego, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including Otay tarplant (*Deinandra conjugens*) soils and seed bank, the project applicant shall prepare an Otay Tarplant Mitigation Plan demonstrating mitigation of impacted Otay Tarplant individuals at a 4:1 ratio for a total of 56 plants (see Appendix D, Attachment 17. The Otay Tarplant Mitigation Plan shall be written by a City of San Diego-approved biologist to the satisfaction of the Development Services Director (or their designee).

The Otay Tarplant Mitigation Plan shall, at a minimum, evaluate options for plant salvage and relocation, including selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within a suitable receptor site. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site and will be based on the most reliable methods of successful relocation. The Otay Tarplant Mitigation Plan shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. The Otay Tarplant Mitigation Plan shall be subject to the oversight of the City of San Diego Development Services Department (DSD) director (or their designee).

In lieu of the above Otay Tarplant Mitigation Plan, the applicant may also purchase equivalent mitigation credits at a City of San Diego-approved mitigation bank. The mitigation bank must contain an Otay tarplant population or have the species reintroduced for the purposes of mitigation. The applicant is required to provide proof of mitigation credit purchase to the City of San Diego prior to issuance of any land development permits for the off-site improvement areas in the City of San Diego.

Special Status Wildlife

Least Bell's Vireo

To mitigate for direct and indirect impacts to least Bell's vireo for the on-site components, mitigation measure **BIO-CV-5** shall be implemented by the City of Chula Vista.

Coastal California Gnatcatcher

Direct impacts to coastal California gnatcatcher for the on-site and off-site components would be mitigated through implementation of mitigation measures **BIO-CV-1** and **BIO-CV-4**.

Burrowing Owl

Direct impacts to burrowing owls for the on-site and off-site components would be addressed through habitat-based mitigation identified in **BIO-CV-1**. Indirect impacts to burrowing owls in the would be mitigated through implementation of **BIO-CV-6**, detailed below.

Yellow-Breasted Chat and Yellow Warbler

Impacts to yellow warbler and yellow-breasted chat nesting habitat would be mitigated through implementation of habitat-based mitigation detailed in **BIO-CV-1**. Potential impacts to yellow-breasted chat and yellow warbler associated with construction activities occurring during the breeding and nesting season for this species for the on-site components would be mitigated through implementation of preconstruction nesting bird surveys as detailed in **BIO-CV-4**.

Crotch's Bumble Bee

Habitat based impacts to Crotch's bumble bee would be addressed by habitat-based mitigation identified in **BIO-CV-1**. Potential direct impacts to Crotch's bumble bee during construction within the Chula Vista project areas would be mitigated through implementation of preconstruction Crotch's bumble bee avoidance requirements detailed in **BIO-CV-7**. If CDFW finds that the candidacy is not warranted and the species is removed from the list of candidate species, then no avoidance measures shall be required.

BIO-CV-4 **Preconstruction Nesting Bird Survey**. To avoid any direct impacts to raptors and/or any migratory birds protected under the MBTA, including nesting least Bell's vireo, burrowing owl, yellow warbler, and yellow-breasted chat, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species. The breeding season is defined as February 15–August 15 for coastal California gnatcatcher and other non-raptor birds and January 15–August 31 for raptor species. If removal of habitat on the proposed area of disturbance must occur during the breeding season, the project Applicant shall retain a City of Chula Vista-approved biologist to conduct a preconstruction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The preconstruction survey must be conducted within 10 calendar days prior to the start of construction, and the results must be submitted to the City of

Chula Vista for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the City of Chula Vista, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City of Chula Vista for review and approval and implemented to the satisfaction of the City of Chula Vista. The City of Chula Vista's mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

BIO-CV-5 **Least Bell's Vireo Avoidance**. For any work proposed between March 15 and September 15, a preconstruction survey for the least Bell's vireo shall be performed to reaffirm the presence and extent of occupied habitat. The preconstruction survey area for the species shall encompass all potentially suitable habitat within the project work zone, as well as a 300-foot survey buffer. The preconstruction survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a qualified biologist familiar with the City of Chula Vista MSCP Subarea Plan. The results of the preconstruction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If least Bell's vireo is detected, a minimum 300-foot buffer delineated by orange biological fencing shall be established around the detected species to ensure that no work shall occur within occupied habitat from March 15 through September 15. On-site noise reduction techniques shall be implemented to ensure that construction noise levels do not exceed 60 dB(A) L_{eq} at the location of any occupied sensitive habitat areas. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. If the results of the preconstruction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the preconstruction report.

BIO-CV-6 **Preconstruction Burrowing Owl Survey**. Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the project Applicant shall retain a City of Chula Vista-approved biologist to conduct focused preconstruction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the City of Chula Vista-approved biologist shall prepare a passive relocation mitigation plan subject to review and approval by the wildlife agencies and the City of Chula Vista, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.

BIO-CV-7 **Direct Impact Avoidance for Crotch's Bumble Bee.** The following shall be implemented to avoid potential impacts to Crotch's bumble bee, should this species be a state candidate for listing or state listed as threatened or endangered at the time of project construction. If CDFW finds that the candidacy is not warranted and

the species is removed from the list of candidate species, then no avoidance measures shall be required.

Prior to the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the following Crotch's Bumble Bee Avoidance Requirements shall be implemented:

A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

B. A Qualified Biologist must demonstrate the following qualifications, or those of an adopted CDFW protocol for Crotch's bumble bee: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.

C. The preconstruction survey shall be conducted during the colony active period between April 1 through August 31 by the Qualified Biologist prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and within one year prior to the initiation of project activities (including removal of vegetation). The preconstruction survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (ie, Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained, as described below. The surveys shall consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period.

D. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee,, then the qualified biologist shall be required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable. The Qualified Biologist/owner permittee shall submit the results (including positive or negative survey results) of the preconstruction survey to City DSD (Mitigation Monitoring and Coordination), City Planning Department (MSCP) staff and CDFW for review and written approval prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits.

E. If preconstruction surveys identify Crotch's bumble bee individuals onsite, the Qualified Biologist shall notify and consult with CDFW to determine whether project activities would result in impacts to Crotch's bumble bee, in which case an Incidental Take Permit ITP) may be required. If an ITP is required, it shall be obtained prior to issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and all necessary permit conditions shall be fulfilled prior to initiation of project activities. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA.

F. Survey data shall be submitted by the Qualified Biologist to the CNDDB in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

e. Significance of Impacts after Mitigation

Implementation of the mitigation measures detailed in Section 4.3.3.1.d would ensure that all significant impacts related to sensitive species and habitats would be reduced to less than significant levels.

4.3.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue questions related to sensitive species and sensitive habitats:

- Would the project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or USFWS?

- Would the project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

According to the City of San Diego's Significance Determination Thresholds (2022), potential impacts to biological resources are assessed through review of the project's consistency with the City of San Diego ESL Regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. A significance determination, pursuant to the City of San Diego's Significance Determination Thresholds, proceeds in two steps: (1) determine if significant biological resources are present; and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

Step 1. Determine the extent of biological resources and values present on the site. Sensitive biological resources are defined by the City of San Diego Municipal Code section 113.0103 as upland and/or wetland areas that meet any one of the following criteria:

(a) Lands that have been included in the City of San Diego Multiple Species Conservation Program Preserve;

(b) Wetlands;

(c) Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats;

(d) Lands supporting species or subspecies listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the Federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

(e) Lands containing habitats with Narrow Endemic Species as listed in the Biology Guidelines in the Land Development manual; or

(f) Lands containing habitats of covered species as listed in the Biology Guidelines in the Land Development Manual

In addition, the City of San Diego Significance Thresholds state that a significant impact may occur if the site contains or comes within 100 feet of a natural or manufactured drainage or if the site occurs within the 100-year flood plain established by the Federal Emergency Management Agency or the Flood Plain Fringe/ Flood Way zones. The evaluation must determine whether the drainage is vegetated with wetland vegetation.

Step 2. Any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.

A. Direct Impacts

- Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.

- Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered significant.

- Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to State or Federally listed species and all narrow endemics should be considered significant.

- Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B. Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

- Introduction of urban meso-predators into a biological system;
- Introduction of urban runoff into a biological system;
- Introduction of invasive exotic plant species into a biological system;
- Noise and lighting impacts;
- Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles; and
- Loss of a wetland buffer that includes no environmentally sensitive lands.

The following analysis discusses potential impacts in terms of direct and indirect impacts as defined by CEQA and in the City of San Diego's Significance Determination Thresholds.

b. Impact Analysis

Sensitive Vegetation Communities and Land Cover Types

Project implementation would result in impacts to vegetation communities and land cover types totaling 23.37 acres. Of that total, 22.92 acres of impacts would occur in the City of San Diego after annexation associated with off-site road improvements and project site impacts, assuming annexation of the site to San Diego. An additional 0.45 acre of impacts would occur in the City of Chula Vista resulting from the remedial grading and trails.

As detailed in Table 4.3-4 impacts to upland vegetation communities in the City of San Diego include 3.43 acre (Tier II) of Diegan coastal sage scrub, 0.16 acre of Diegan coastal sage scrub: Baccharis dominated (Tier II), and 13.60 acres of non-native grassland (Tier IIIB). These vegetation communities are considered sensitive uplands by the City of San Diego's Biology Guidelines (City of San Diego 2018). An additional 0.01 acre of Diegan coastal sage scrub: Baccharis-dominated (Tier II) and 0.05 acre of impact to non-native grassland (Tier III) would occur in the City of Chula Vista. Additionally, indirect impacts on these vegetation communities, including dust, erosion, and runoff generated by construction activities, would occur.

Table 4.3-4 summarizes the impacts to each vegetation community/land cover type within totality of the project area.

Table 4.3-4
Direct Impacts to Vegetation Communities and Land Cover Types (Annexation Scenario 2a)

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	City of Chula Vista MSCP Subarea Plan Tier	City of San Diego MSCP Subarea Plan Tier	Existing Project Area Acreage	City of San Diego Impacts			City of Chula Vista Impacts	Total Project Area Impacts (Acres)
					Project Site (acres)	Off-site Area (acres)	*Subtotal (acres)*	Off-site Area (acres)	
Upland Vegetation Communities									
Diegan coastal sage scrub	Coastal sage scrub	II	II	6.55	3.39	0.04	*3.43*	—	3.43
Diegan coastal sage scrub: *Baccharis*-dominated	Coastal sage scrub	II	II	0.92	0.16	—	*0.16*	0.01	0.17
Non-native grassland	Non-native grassland	III	IIIB	14.78	13.60	—	*13.60*	0.05	13.65
Wetland Vegetation Communities									
Arundo-dominated riparian	Riparian scrub	Wetlands	Wetlands	0.12	—	—	—	—	—
Mule fat scrub	Riparian scrub	Wetlands	Wetlands	0.11	0.03	—	*0.03*	—	0.03
Southern willow scrub	Riparian scrub	Wetlands	Wetlands	0.82	0.15	—	*0.15*	—	0.15
Emergent wetland	Natural flood channel	Wetlands	Wetlands	0.18	0.18	—	*0.18*	—	0.18
Disturbed wetland	Disturbed Wetland	Wetlands	Wetlands	0.05	0.04	—	*0.04*	—	0.04
Land Cover Types									
Disturbed habitat	Disturbed land	IV	IV	8.13	4.09	0.37	*4.48*	0.39	4.87
Eucalyptus woodland	Eucalyptus woodland	IV	IV	1.80	—	—	—	—	—
Ornamental	Disturbed land	N/A	IV	1.86	—	0.64	*0.64*	—	0.64
Urban/developed	Disturbed land	N/A	IV	1.53	—	0.23	*0.23*	—	0.23
Total				36.85	21.64	1.28	*22.92*	0.45	23.37

Special Status Plants

Direct Impacts

The project would result in impacts to six special-status plant species: Otay tarplant, San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera (see Figure 4.3-3). All impacts to special-status plants would occur within the City of San Diego following annexation and would be outside of the MHPA.

Impacts to Otay tarplant would be limited to the off-site impact area associated with road improvements within the City of San Diego. Otay tarplant populations vary year to year; however, based on 2022 surveys, impacts would occur to 14 individuals within 0.001 acre of occupied habitat. Direct and indirect impacts to this species, which is a narrow endemic under the City of San Diego MSCP Subarea Plan, would occur.

Direct impacts would occur to San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera within the project site and off-site area associated with road improvements. Project impacts would be limited to only a portion of the populations on and off-site within the development footprint. Thus, these species would persist both on-site within the Covenant of Easement area, as well as within off-site areas of habitat. In addition, suitable habitat within the project impact area is limited to 8.6 acres of Diegan coastal sage scrub (including *Baccharis*-dominated variant), disturbed habitat, and southern willow scrub which comprises a small portion of the habitat available to this species identified in the MSCP MHPA both at a local level (2,515 acres in southern MSCP area) and on a regional scale (24,147 acres total) (see Appendix D). Therefore, project impacts are not anticipated to reduce species' populations below self-sustaining levels.

Indirect Impacts

The following sensitive plants are mapped adjacent to the project impact area within the City of San Diego: California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss. Indirect impacts to these sensitive plants could occur as a result of dust, erosion, and runoff generated by construction activities.

Special Status Wildlife Species

The project has potential to result in direct impacts to thirteen special-status wildlife species: least Bell's vireo, coastal California gnatcatcher, Cooper's hawk, burrowing owl, yellow-breasted chat, yellow warbler, western bluebird, orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, western mastiff bat and Crotch's bumble bee (see Figure 4.3-5). Potential impacts would occur within the City of San Diego to all thirteen species outside of the MHPA. Within the City of Chula Vista, potential impacts would occur to burrowing owl, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, western mastiff bat and Crotch's bumble bee; all outside of any 75% or 100% Conservation Areas.

Least Bell's Vireo

Direct Impacts

Least Bell's vireo was observed within the project site and off-site areas and has a high potential to nest in suitable southern willow scrub, mule fat scrub, and *Arundo*-dominated riparian within the project impact area. Although the project would adhere to the MSCP conditions of coverage, direct impacts to any individuals occurring within this suitable habitat, as well as the removal of approximately 0.28 acre of available foraging and nesting habitat outside of the MHPA could adversely impact the species.

Indirect Impacts

Indirect impacts to least Bell's vireo may occur if construction activities are conducted during this species' breeding season of March 15 to September 15. Occupied suitable habitat (southern willow scrub, mule fat scrub) for this species occurs adjacent to the project impact area and construction is likely to cause noise levels within these adjacent habitat areas to exceed 60 dB(A) L_{eq}. This level of noise could adversely affect breeding pairs within the adjacent occupied habitat.

Coastal California Gnatcatcher

Direct Impacts

Coastal California gnatcatcher was observed within the project site and surrounding area and has a high potential to nest within the Diegan coastal sage scrub and Diegan coastal sage scrub: Baccharis dominated within the project impact area. Although the project would adhere to the MSCP conditions of coverage, direct impacts could result from the removal of approximately 3.82 acres of available foraging and nesting habitat within the City of San Diego, outside of the MHPA.

Indirect Impacts

Indirect impacts to coastal California gnatcatcher could occur if construction activities are conducted during this species' breeding season of March 1 to August 15. Occupied suitable habitat (coastal sage scrub) for this species occurs adjacent to the project impact area (see Figure 4.3-5), which may be subject to construction-related noise. However, suitable habitat for this species in the project vicinity (e.g., surrounding 300 feet) occurs entirely outside of any Conservation Areas and the MHPA.

Cooper's Hawk

Cooper's hawk has a moderate potential to nest within the southern willow scrub within the project impact area outside the MHPA. Considering the abundance of foraging habitat in the area and large foraging range for Cooper's hawk, adequate habitat would remain for Cooper's hawk foraging after project development. Establishment of the 300-foot impact avoidance area would provide adequate spacing between nesting and foraging habitat and project construction and operation to ensure the species is not disturbed. Required consistency with MSCP regulations, including implementation of area specific management directives would ensure avoidance of direct and indirect impacts to Cooper's hawk.

Burrowing Owl

Burrowing owl has a moderate potential to occur within the non-native grassland and disturbed habitat within the project impact area and within the disturbed habitat and non-native grassland adjacent to the project impact area, all outside the MHPA. This species is known to occur within one mile of the site and portions of the non-native grassland and disturbed habitat on-site contain suitable low-lying vegetation that have a moderate potential to support foraging Although the project would adhere to the MSCP conditions of coverage, potential direct and/or indirect impacts to the species could occur if burrowing owl were to be present during construction activities.

Yellow-Breasted Chat and Yellow Warbler

Yellow warbler and yellow-breasted chat were observed within the project impact area. These species have moderate potential to nest within the southern willow scrub and mule fat scrub habitats. Direct impacts to yellow-breasted chat and yellow warbler habitat and nesting could occur due to habitat loss and during construction activities if active nests are present.

Western Bluebird

Western bluebird was observed within the project area; however, the project impact area lacks suitable large trees with cavities for nesting and thus no direct impacts would occur to nesting western bluebird. While the project site may provide habitat for western bluebird foraging, this species is adequately conserved by the MSCP and associated MHPA and impacts to foraging habitat would occur entirely outside of the 75% and 100% Conservation Areas and MHPA.

Orange-throated Whiptail and San Diego Tiger Whiptail

Orange-throated whiptail and San Diego tiger whiptail have a moderate potential to occur within the project impact areas. Development of the project could result in direct impacts to these species during construction activities and through the removal of suitable habitat. However, these species were not observed during biological surveys conducted between 2020 and 2022 and likely only occur on-site in low numbers, and thus the project would be expected to result in the loss of very few individuals, if any. Additionally, suitable habitat within the project impact area is limited to 3.6 acres of Diegan coastal sage scrub which comprises a small fraction of the coastal sage scrub habitat available to these species identified in the MSCP MHPA both at a local level (1,257 acres in the southern MSCP area) and on a regional scale (18,951 acres total) (Appendix D). Therefore, the potential loss of these individuals would not reduce the population to less than self-sustaining.

Pallid Bat, Mexican Long-tongued Bat, and Western Mastiff Bat

Pallid bat, Mexican long-tongued bat, and western mastiff bat have a moderate potential to forage within the project impact area; however, none are expected to use any portion of the project impact area for roosting or for a maternity colony due to lack of rock crevices, cliffs, mines, or man-made structures suitable for roosting. Additionally, because no nighttime construction or maintenance activities would occur (during foraging), direct impacts to individuals during construction activities are unlikely. Suitable foraging habitat within the project impact area is limited to 17.65 acres of Diegan coastal sage scrub (including *Baccharis*-dominated variant), non-native grassland, and southern willow scrub which comprises a small fraction of the habitat available to this species

identified in the MSCP MHPA both at a local level (2,630 acres in the southern MSCP area) and on a regional scale (26,642 acres total) (see Appendix D). Therefore, this loss of foraging habitat on the project site would not reduce the population to less than self-sustaining.

Crotch's Bumble Bee

No Crotch's bumble bee has been observed on the site. Crotch's bumble bee has a moderate potential to forage and low potential to nest within the project impact area. Considering the project has a low potential to support nesting, the project would not result in impacts to Crotch's bumble bee nesting habitat. However, the would result in impacts to 4.65 acres of potential foraging habitat in the project impact area. Crotch's bumble bee is a state candidate for listing with a moderate potential to forage and nest within the project impact area. Considering the project has a low potential to support nesting, the project would not result in impacts to Crotch's bumble bee nesting habitat. However, the project has the potential for direct impacts to any individuals occurring within suitable foraging habitat and would result in impacts to 4.65 acres of potential foraging habitat in the project impact area. If CDFW finds that the candidacy is not warranted and the species is removed from the list of candidate species and not otherwise considered a sensitive species at the time of the preconstruction meeting, then no avoidance measure would be required.

c. Significance of Impacts

Sensitive Vegetation Communities and Land Cover Types

Annexation Scenario 2a would result in direct impacts to 17.25 acres of sensitive upland vegetation communities within the project site and off-site improvement areas. The 0.01-acre impact to Diegan coastal sage scrub: *Baccharis*-dominated and 0.05-acre impact to non-native grassland within the off-site area in City of Chula Vista is less than significant in the context of the city of Chula Vista's MSCP Subarea Plan, because impacts to less than 0.10 acre are not significant; however, impacts to these vegetation communities associated with the entire project (0.17 acre and 13.65 acres, respectively) would be collectively significant. Therefore, under Annexation Scenario 2a, direct impacts to 17.25 acres of sensitive upland habitats would be significant.

Impacts include 3.60 acres of Tier II vegetation communities (Diegan coastal sage scrub) and 13.65 acres of Tier IIIB vegetation communities (non-native grasslands). Impacts would be significant.

Special Status Plants

Direct Impacts

Direct impacts to San Diego marsh-elder, South Coast saltscale, San Diego bur-sage, ashy spike-moss, and San Diego County viguiera would occur outside of conservation areas and/or the MHPA and project impacts would not reduce the species' populations to below self-sustaining levels; therefore, impacts would be less than significant.

Direct impacts to Otay tarplant, a narrow endemic under the City of San Diego MSCP Subarea Plan, would occur outside of conservation areas and/or the MHPA. Direct impacts to 14 individuals or

0.001 acre of Otay tarplant habitat within the City of San Diego off-site improvement area would be significant.

Indirect Impacts

Indirect impacts to special-status plant species mapped adjacent to the project impact area including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss due to dust, erosion, and runoff generated by construction activities would be significant for grading within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista.

Special Status Wildlife Species

Impacts to Coopers hawk and western bluebird would be considered less than significant as project impacts would be consistent with the conditions of the MSCP. Impacts to orange-throated whiptail, San Diego tiger whiptail, pallid bat, Mexican long-tongued bat, and western mastiff bat would be less than significant as the project site is not anticipated to support significant populations of these species due to lack of prior observations and thus are not anticipated to reduce species' populations to less than self-sustaining levels. Impacts to least Bell's vireo, coastal California gnatcatcher, burrowing owl, yellow-breasted chat and yellow warbler would be significant, as detailed below.

Least Bell's Vireo

Direct impacts to least Bell's vireo would potentially result from the removal of 0.28 acre of foraging and nesting habitat for the species. Direct impacts would be considered significant for grading within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista.

Indirect impacts to least Bell's vireo may occur due to noise generation if construction activities are conducted during this species' breeding season of March 15 to September 15. Indirect impacts during construction for grading within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista would be considered significant.

Coastal California Gnatcatcher

Direct impacts resulting from the removal of approximately 3.60 acres of available foraging and nesting habitat for coastal California gnatcatcher outside of the MHPA would be significant for grading within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista.

Indirect impacts to coastal California gnatcatcher would be less than significant since the indirectly impacted habitat is outside of the MHPA and any 75% or 100% Conservation Areas.

Burrowing Owl

Due to project impacts to habitat with moderate potential for burrowing owl foraging, direct and indirect impacts to burrowing owl would be significant within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista.

Yellow-Breasted Chat and Yellow Warbler

Direct impacts to yellow warbler and yellow-breasted chat nesting habitats would be significant within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista due to their potential to nest within the southern willow scrub and mule fat scrub habitats.

Crotch's Bumble Bee

Direct impacts to foraging Crotch's bumble bee during construction would be significant within both the City of San Diego grading areas and off-site grading areas within the City of Chula Vista due to their moderate potential to forage within the project impact area. Impacts to Crotch's bumble bee nesting habitat would be less than significant, as habitat on the site has no to low potential for nesting Crotch's bumble bee.

d. Mitigation Measures

The following mitigation measures would be required to address the project's significant impacts in accordance with the regulations of both the City of Chula Vista and the City of San Diego. Under the Annexation Scenario 2a all mitigation measures would be implemented by the City of San Diego to offset project impacts to sensitive upland vegetation communities, and special-status plants and wildlife occurring in both the City of Chula Vista and City of San Diego.

Sensitive Vegetation Communities and Land Cover Types

Direct Impacts

Impacts to a total of 17.25 acres of sensitive upland vegetation communities under Annexation Scenario 2a would be mitigated by implementation of **BIO-SD-1**, consistent with City of San Diego Biology Guidelines, detailed in Table 4.3-5.

Table 4.3-5
Mitigation for Significant Impacts to Sensitive Upland Vegetation Communities (Annexation Scenario 2a)

Vegetation Community	Impact Acreage		City of San Diego Mitigation Ratio[b]		Proposed Mitigation (Inside MHPA)
	On-site	Off-site	Inside MHPA	Outside MHPA	
Diegan coastal sage scrub (Tier II)	3.39	0.04	1:1	1.5:1	3.43
Diegan coastal sage scrub: *Baccharis*-dominated (Tier II)	0.16	0.01 [a]	1:1	1.5:1	0.17
Non-native grassland (Tier IIIB)	13.60	0.05 [a]	0.5:1	1:1	6.83
Total	17.15	0.10	—	—	10.43

[a] Includes 0.01 acre of impacts to Diegan coastal sage scrub: *Baccharis*-dominated and 0.05 acre of impacts to non-native grassland within the off-site area in the City of Chula Vista. These impacts to Diegan coastal sage scrub: *Baccharis*-dominated and non-native grassland are less than significant in the context of the City of Chula Vista's MSCP Subarea Plan as they total than 0.10 acre. However, mitigation would be required to offset the project's total impact to 0.17 acre of Diegan coastal sage scrub: *Baccharis*-dominated and 13.65 acre of non-native grassland. Therefore, mitigation for impacts within the City of Chula Vista are proposed to be accomplished with the project's overall upland mitigation, which would occur in the City of San Diego.

[b] Mitigation ratios are based on the City of San Diego's Biology Guidelines (City of San Diego 2018a) Tier I–IV ranking system for impacts outside of the MHPA. This report proposes mitigation would occur inside the City of San Diego's MHPA. Ultimately the mitigation ratio would be dependent on the location of the mitigation as detailed in the City of San Diego's Biology Guidelines (City of San Diego 2018a).

BIO-SD-1 **Sensitive Upland Vegetation**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, by the City of San Diego for Annexation Scenario 2a, the owner/permittee shall mitigate for impacts to sensitive upland vegetation in accordance with the City of San Diego's 2018 Biology Guidelines. The project owner/permittee shall mitigate direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1:1 mitigation ratio and non-native grassland at a 0.5:1 ratio inside the MHPA. Mitigation for 3.43 acres of Diegan coastal sage scrub (Tier II), 0.17 acre of Diegan coastal sage scrub: *Baccharis*-dominated (Tier II), and 13.65 acres of non-native grassland (Tier IIIB) will be achieved through the preservation of 10.43 acres of Diegan coastal sage scrub habitat (Tier II) at the Pacific Highlands Ranch Restoration and Mitigation Credit Area. The applicant shall provide proof of mitigation credit purchase to the City of San Diego via a mitigation ledger prior to issuance of any land development permits.

Indirect Impacts

To mitigate for indirect impacts to sensitive habitat, mitigation measure **BIO-SD-2** would be implemented by the City of San Diego.

BIO-SD-2 Biological Resource Protection During Construction

I. Prior to Construction

A. **Biologist Verification -** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2018), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

B. **Preconstruction Meeting -** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

C. **Biological Documents -** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, ESL, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state or federal requirements.

D. **BCME -** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

E. **Resource Delineation -** Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on

the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

F. **Education -** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

A. **Monitoring -** All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the preconstruction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

B. **Subsequent Resource Identification -** The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

Special Status Plants

Direct Impacts

Impacts to approximately 14 individuals of Otay tarplant located in the City of San Diego off-site improvement areas would be mitigated at a 4:1 mitigation ratio as detailed in **BIO-SD-3**.

BIO-SD-3 **Otay Tarplant Mitigation Plan**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, shall incorporate the following mitigation measures into the project design and include them verbatim on all appropriate construction documents.

Prior to Permit Issuance

A. Land Development Review (LDR) Plan Check

1. Prior to the NTP or issuance for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, whichever is applicable, the ADD environmental designee shall verify that the requirements for the revegetation/restoration plans and specifications, including mitigation of direct impacts to Otay tarplant individual plants at a 4:1 ratio. While the number of individual plants present may vary year-to-year, it is estimated 14 individuals would be impacted and mitigation would include 56 Otay tarplant individuals. The landscape construction documents and specifications must be found to be in conformance with the Otay Tarplant Mitigation Plan for the Nakano Project prepared by RECON 2022, the requirements of which are summarized below:

B. Revegetation/Restoration Plan(s) and Specifications

1. Landscape Construction Documents (LCD) shall be prepared on D-sheets and submitted to the City of San Diego Development Services Department, Landscape Architecture Section (LAS) for review and approval. LAS shall consult with Mitigation Monitoring Coordination (MMC) and obtain concurrence prior to approval of LCD. The LCD shall consist of revegetation/restoration, planting, irrigation and erosion control plans; including all required graphics, notes, details, specifications, letters, and reports as outlined below.

2. Landscape Revegetation/Restoration Planting and Irrigation Plans shall be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Revegetation/Restoration Plans) of the City of San Diego's LDC Biology Guidelines. The Principal Qualified Biologist (PQB) shall identify and adequately document all pertinent information concerning the revegetation/restoration goals and requirements, such as but not limited to,

plant/seed palettes, timing of installation, plant installation specifications, method of watering, protection of adjacent habitat, erosion and sediment control, performance/success criteria, inspection schedule by City staff, document submittals, reporting schedule, etc. The LCD shall also include comprehensive graphics and notes addressing the ongoing maintenance requirements (after final acceptance by the City).

3. The Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Construction Manager (CM) and Grading Contractor (GC), where applicable shall be responsible to insure that for all grading and contouring, clearing and grubbing, installation of plant materials, and any necessary maintenance activities or remedial actions required during installation and the 120-day plant establishment period are done per approved LCD. The following procedures at a minimum, but not limited to, shall be performed:

    a. The RMC shall be responsible for the maintenance of the *upland* mitigation area for a minimum period of 120 days. Maintenance visits shall be conducted on a *weekly* basis throughout the plant establishment period.

    b. At the end of the 120-day period the PQB shall review the mitigation area to assess the completion of the short-term plant establishment period and submit a report for approval by MMC.

    c. MMC will provide approval in writing to begin the *five-year* long-term establishment/maintenance and monitoring program.

    d. Existing indigenous/native species shall not be pruned, thinned or cleared in the revegetation/mitigation area.

    e. The revegetation site shall not be fertilized.

    f. The RIC is responsible for reseeding (if applicable) if weeds are not removed, within one week of written recommendation by the PQB.

    g. Weed control measures shall include the following: (1) hand removal, (2) cutting, with power equipment, and (3) chemical control. Hand removal of weeds is the most desirable method of control and will be used wherever possible.

    h. Damaged areas shall be repaired immediately by the RIC/RMC. Insect infestations, plant diseases, herbivory, and other pest problems will be closely monitored throughout the *five-year* maintenance period. Protective mechanisms such as metal wire netting shall be used as necessary. Diseased and infected plants shall be immediately disposed of off-site in a legally-acceptable manner at the discretion of the PQB or

Qualified Biological Monitor (QBM) (City approved). Where possible, biological controls will be used instead of pesticides and herbicides.

4. If a Brush Management Program is required the revegetation/restoration plan shall show the dimensions of each brush management zone and notes shall be provided describing the restrictions on planting and maintenance and identify that the area is impact neutral and shall not be used for habitat mitigation/credit purposes.

C. Letters of Qualification Have Been Submitted to ADD

1. The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the PQB, Principal Restoration Specialist (PRS), and QBM, where applicable, and the names of all other persons involved in the implementation of the revegetation/restoration plan and biological monitoring program, as they are defined in the City of San Diego Biological Review References. Resumes and the biology worksheet should be updated annually.

2. MMC will provide a letter to the applicant confirming the qualifications of the PQB/PRS/QBM and all City Approved persons involved in the revegetation/restoration plan and biological monitoring of the project.

3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the revegetation/restoration plan and biological monitoring of the project.

4. PBQ must also submit evidence to MMC that the PQB/QBM has completed Storm Water Pollution Prevention Program (SWPPP) training.

Prior to Start of Construction

A. PQB/PRS Shall Attend Preconstruction (Precon) Meetings

1. Prior to beginning any work that requires monitoring:

   a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB or PRS, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC.

   b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the revegetation/restoration plan(s) and specifications with the RIC, CM and/or GC.

c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB/PRS, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the revegetation/ restoration phase of the project, including site grading preparation.

2. Where Revegetation/Restoration Work Will Occur

a. Prior to the start of any work, the PQB/PRS shall also submit a revegetation/restoration monitoring exhibit (RRME) based on the appropriate reduced LCD (reduced to 11"x 17" format) to MMC, and the RE, identifying the areas to be revegetated/restored including the delineation of the limits of any disturbance/grading and any excavation.

b. PQB shall coordinate with the construction superintendent to identify appropriate Best Management Practices (BMPs) on the RRME.

3. When Biological Monitoring Will Occur

a. Prior to the start of any work, the PQB/PRS shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur.

4. PQB Shall Contact MMC to Request Modification

a. The PQB may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the revegetation/restoration plans and specifications. This request shall be based on relevant information (such as other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present.

During Construction

A. PQB or QBM Present During Construction/Grading/Planting

1. The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, excavation, landscape establishment in association with the project's grading permit which could result in impacts to sensitive biological resources as identified in the LCD and on the RRME. **The RIC and/or QBM are responsible for notifying the PQB/PRS of changes to any approved construction plans, procedures, and/or activities. The PQB/PRS is responsible to notify the CM, LA, RE, BI and MMC of the changes.**

2. The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVRs shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC.

3. The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other than that of associated with biology).

4. All construction activities (including staging areas) shall be restricted to the development areas as shown on the LCD. The PQB/PRS or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance as shown on the approved LCD.

5. The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance adjacent to (or at the edge of) all sensitive habitats, including Diegan coastal sage scrub (including *Baccharis*-variant), non-native grassland, southern willow scrub, emergent wetland, and disturbed wetland, as shown on the approved LCD.

6. The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly.

7. The PQB or QBM shall oversee implementation of BMPs, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMPs upon completion of construction activities. Removal of temporary construction BMPs shall be verified in writing on the final construction phase CSVR.

8. PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area.

9. The long-term establishment inspection and reporting schedule per LCD must all be approved by MMC prior to the issuance of the Notice of Completion (NOC) or any bond release.

B. Disturbance/Discovery Notification Process

1. If unauthorized disturbances occurs or sensitive biological resources are discovered that where not previously identified on the LCD and/or RRME, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate.

2. The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMPs). After obtaining concurrence with MMC and the RE, PQB and CM shall install the approved protection and agreement on BMPs.

3. The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation).

C. Determination of Significance

1. The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs.

2. MMC shall review this letter report and provide the RE with MMC's recommendations and procedures.

Post Construction

A. Mitigation Monitoring and Reporting Period

1. Five-Year Mitigation Establishment/Maintenance Period

a. The RMC shall be retained to complete maintenance monitoring activities throughout the five-year mitigation monitoring period.

b. Maintenance visits will be conducted twice per month for the first six months, once per month for the remainder of the first year, and quarterly thereafter.

c. Maintenance activities will include all items described in the LCD.

d. Plant replacement will be conducted as recommended by the PQB (note: plants shall be increased in container size relative to the time of

initial installation or establishment or maintenance period may be extended to the satisfaction of MMC.

2. Five-Year Biological Monitoring

   a. All biological monitoring and reporting shall be conducted by a PQB or QBM, as appropriate, consistent with the LCD.

   b. Monitoring shall involve both qualitative horticultural monitoring and quantitative monitoring (i.e., performance/success criteria). Horticultural monitoring shall focus on soil conditions (e.g., moisture and fertility), container plant health, seed germination rates, presence of native and non-native (e.g., invasive exotic) species, any significant disease or pest problems, irrigation repair and scheduling, trash removal, illegal trespass, and any erosion problems.

   c. After plant installation is complete, qualitative monitoring surveys will occur monthly during year one and quarterly during years two through five.

   d. Upon the completion of the 120-days short-term plant establishment period, quantitative monitoring surveys shall be conducted at 0, 6, 12, 24, 36, 48 and 60 months by the PQB or QBM. The revegetation/restoration effort shall be quantitatively evaluated once per year (in spring) during years three through five, to determine compliance with the performance standards identified on the LCD. All plant material must have survived without supplemental irrigation for the last two years.

   e. Quantitative monitoring shall include the use of fixed transects and photo points to determine the vegetative cover within the revegetated habitat. Collection of fixed transect data within the revegetation/restoration site shall result in the calculation of percent cover for each plant species present, percent cover of target vegetation, tree height and diameter at breast height (if applicable) and percent cover of non-native/non-invasive vegetation. Container plants will also be counted to determine percent survivorship. The data will be used to determine attainment of performance/success criteria identified within the LCD.

   f. Biological monitoring requirements may be reduced if, before the end of the fifth year, the revegetation meets the fifth-year criteria and the irrigation has been terminated for a period of the last two years.

   g. The PQB or QBM shall oversee implementation of post-construction BMPs, such as gravel bags, straw logs, silt fences or equivalent erosion control measure, as needed to ensure prevention of any significant sediment transport. In addition, the PBQ/QBM shall be responsible to

verify the removal of all temporary post-construction BMPs upon completion of construction activities. Removal of temporary post-construction BMPs shall be verified in writing on the final post-construction phase CSVR.

B. Submittal of Draft Monitoring Report

1. A draft monitoring letter report shall be prepared to document the completion of the 120-day plant establishment period. The report shall include discussion on weed control, horticultural treatments (pruning, mulching, and disease control), erosion control, trash/debris removal, replacement planting/reseeding, site protection/signage, pest management, vandalism, and irrigation maintenance. The revegetation/restoration effort shall be visually assessed at the end of 120-day period to determine mortality of individuals.

2. The PQB shall submit two copies of the Draft Monitoring Report which describes the results, analysis, and conclusions of all phases of the Biological Monitoring and Reporting Program (with appropriate graphics) to MMC for review and approval within 30 days following the completion of monitoring. Monitoring reports shall be prepared on an annual basis for a period of five years. Site progress reports shall be prepared by the PQB following each site visit and provided to the owner, RMC, and RIC. Site progress reports shall review maintenance activities, qualitative and quantitative (when appropriate) monitoring results including progress of the revegetation relative to the performance/success criteria, and the need for any remedial measures.

3. Draft annual reports (three copies) summarizing the results of each progress report including quantitative monitoring results and photographs taken from permanent viewpoints shall be submitted to MMC for review and approval within 30 days following the completion of monitoring.

4. MMC shall return the Draft Monitoring Report to the PQB for revision or for preparation of each report.

5. The PQB shall submit revised Monitoring Report to MMC (with a copy to RE) for approval within 30 days.

6. MMC will provide written acceptance of the PQB and RE of the approved report.

D. Final Monitoring Reports(s)

1. PQB shall prepare a Final Monitoring upon achievement of the fifth-year performance/success criteria and completion of the five-year maintenance period.

a. This report may occur before the end of the fifth year if the revegetation meets the fifth-year performance /success criteria and the irrigation has been terminated for a period of the last two years.

b. The Final Monitoring report shall be submitted to MMC for evaluation of the success of the mitigation effort and final acceptance. A request for a pre-final inspection shall be submitted at this time, MMC will schedule after review of report.

c. If at the end of the five years any of the revegetated area fails to meet the project's final success standards, the applicant must consult with MMC. This consultation shall take place to determine whether the revegetation effort is acceptable. The applicant understands that failure of any significant portion of the revegetation/restoration area may result in a requirement to replace or renegotiate that portion of the site and/or extend the monitoring and establishment/maintenance period until all success standards are met.

E. Management and Maintenance in Perpetuity

The Otay tarplant mitigation area shall be protected and managed/maintained in perpetuity. The Otay tarplant mitigation site shall be addressed through a long-term management plan. The Otay tarplant mitigation area shall be covered by a Covenant of Easement to the benefit of the City of San Diego or dedicated in-fee title to the City of San Diego. The project proponent shall provide funding in an amount approved by the City based on a Property Analysis Record (PAR; Center for Natural Lands Management 1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the off-site mitigation area pursuant to the long-term management plan by an agency, nonprofit organization, or other entity approved by the City of San Diego.

Indirect Impacts

Indirect impacts to special-status plant species including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego County viguiera, small-flowered microseris, and ashy spike-moss would be mitigated through implementation of mitigation measures **BIO-SD-2**, Biological Resource Protection During Construction.

Special Status Wildlife

Least Bell's Vireo

Direct impacts to least Bell's vireo habitat would be mitigated through wetland habitat mitigation measures described in **BIO-SD-8**.

To mitigate for indirect impacts to least Bell's vireo under the Annexation Scenario, mitigation measures **BIO-SD-4**, Avian Protection Requirements and **BIO-SD-5**, Direct Impact Avoidance and Noise restrictions for Least Bell's Vireo, would be implemented by the City of San Diego.

Coastal California Gnatcatcher

Direct impacts to coastal California gnatcatcher would be mitigated through upland habitat mitigation measures described in **BIO-SD-1** and implementation of Avian Protection Requirements detailed in **BIO-SD-4**.

Burrowing Owl

Impacts to burrowing owl foraging habitat would be reduced to less than significant through implementation of habitat-based mitigation identified in **BIO-SD-1**. Potential direct and indirect impacts to burrowing owl during construction would be mitigated through implementation of mitigation measures **BIO-SD-4**, Avian Protection Requirements and **BIO-SD-6**, Burrowing Owl Preconstruction Survey and Avoidance in the City of San Diego.

Yellow-Breasted Chat and Yellow Warbler

Impacts to yellow warbler and yellow-breasted chat nesting habitat would be mitigated through implementation of habitat-based mitigation detailed in **BIO-SD-1**. Potential impacts associated with construction activities occurring during the breeding and nesting season for this species would be mitigated through implementation of **BIO-SD-4**, Avian Protection Requirements.

Crotch's Bumble Bee

Potential direct impacts to Crotch's bumble bee foraging habitat would be mitigated via habitat-based mitigation by **BIO-SD-1**. Potential direct impacts to foraging individuals from construction activities would be mitigated through implementation of **BIO-SD-7**, Crotch's Bumble Bee Preconstruction Survey and Consultation.

BIO-SD-4 **Avian Protection Requirements.** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for least Bell's vireo, burrowing owl, coastal California gnatcatcher, yellow-breasted chat, and yellow warbler (February 1 to September 15) or a preconstruction survey shall be completed by a Qualified Biologist preconstruction to determine the presence or absence of nesting least Bell's vireo, burrowing owl, coastal California gnatcatcher, yellow-breasted chat, and yellow warbler on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to City of San Diego DSD for review and written approval prior to initiating any construction activities. If nesting birds are detected, a letter report in conformance with the City of San Diego's Biology Guidelines and applicable

state and federal law (i.e., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City of San Diego for review and written approval and implemented to the satisfaction of the City of San Diego. The City of San Diego's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

BIO-SD-5 **Direct Impact Avoidance and Noise Restrictions for Least Bell's Vireo**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the City of San Diego Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur between March 15 and September 15, the breeding season of the least Bell's vireo, until the following requirements have been met to the satisfaction of the City of San Diego Manager:

A. A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall survey those wetland areas that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of construction. If the least Bell's vireo is present, then the following conditions must be met:

1. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and

2a. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied least Bell's vireo or habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego Manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of any construction activities during the breeding

season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or

2b. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16).

*Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the Qualified Biologist and the City of San Diego Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. If least Bell's vireo are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the City of San Diego Manager and applicable resource agencies for review and written approval which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows:

1. If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then condition A.III shall be adhered to as specified above.

2. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

BIO-SD-6 Burrowing Owl Preconstruction Survey and Avoidance in the City of San Diego.

Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the City of San Diego Manager (or appointed designee) shall verify that

the following project requirements regarding burrowing owl are shown on the construction plans:

PRECONSTRUCTION SURVEY ELEMENT

Prior to Permit or Notice to Proceed Issuance:

1. As this project area has been determined to be burrowing owl occupied or to have burrowing owl occupation potential, the Applicant Department or Permit Holder shall submit evidence to the ADD of Entitlements and MSCP staff, to the satisfaction of the City, verifying that a biologist possessing qualifications pursuant to the “Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency Department of Fish and Game, March 7, 2012 (hereafter referred as CDFG 2012, Staff Report), has been retained to implement a burrowing owl construction impact avoidance program.

2. The qualified burrowing owl biologist (or their designated biological representative) shall attend the preconstruction meeting to inform construction personnel about the City of San Diego’s burrowing owl requirements and subsequent survey schedule.

Prior to Start of Construction:

1. The Applicant Department or Permit Holder and Qualified Biologist must ensure that initial preconstruction/take avoidance surveys of the project "site" are completed between 14 and 30 days before initial construction activities begin, including brushing, clearing, grubbing, or grading of the project site regardless of the time of the year. "Site” means the project site and the area within a radius of 450 feet of the project site. The report shall be submitted and approved by the Wildlife Agencies and/or City of San Diego MSCP staff in writing prior to construction or burrowing owl eviction(s) and shall include maps of the project site and burrowing owl locations on aerial photos.

2. The preconstruction survey shall follow the methods described in CDFG 2012, Staff Report - Appendix D.

3. 24 hours prior to commencement of ground disturbing activities, the Qualified Biologist shall verify results of preconstruction/take avoidance surveys via review of the Survey Report (see report requirements in CDFG 2012, Staff Report - Appendix D 3) that is to be provided to the City and Wildlife Agencies. Written verification via the Survey Report shall be provided to the City of San Diego’s MMC and MSCP Sections, and to the satisfaction of these sections. If results of the preconstruction surveys have changed and burrowing owl are present in areas not previously identified, immediate notification to the City of San Diego and Wildlife Agencies shall be provided prior to ground disturbing activities.

During Construction:

1. Best Management Practices shall be employed as burrowing owls are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are

burrowing owl occupied and have followed all protocol in this mitigation section, or sites within 450 feet of occupied burrowing owl areas, should undertake measures to discourage burrowing owls from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms.

2. Ongoing Burrowing Owl Detection - If burrowing owls or active burrows are not detected during the preconstruction surveys, Section "A" below shall be followed. If burrowing owls or burrows are detected during the preconstruction surveys, Section "B" shall be followed. NEITHER THE MSCP SUBAREA PLAN NOR THIS MITIGATION SECTION ALLOWS FOR ANY BURROWING OWLS TO BE INJURED OR KILLED OUTSIDE **OR** WITHIN THE MHPA; in addition, IMPACTS TO BURROWING OWLS WITHIN THE MHPA MUST BE AVOIDED.

   A. **Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are Not Detected During the Initial Preconstruction Survey** - Monitoring the site for new burrows is required using CDFG Staff Report 2012 Appendix D methods for the period following the initial preconstruction survey, until construction is scheduled to be complete and is complete (NOTE - Using a projected completion date [that is amended if needed] will allow development of a monitoring schedule).

      1) If no active burrows are found but burrowing owls are observed to occasionally (1–3 sightings) use the site for roosting or foraging, they should be allowed to do so with no changes in the construction or construction schedule.

      2) If no active burrows are found but burrowing owls are observed during follow up monitoring to repeatedly (4 or more sightings) use the site for roosting or foraging, the City of San Diego's MMC and MSCP Sections shall be notified and any portion of the site where owls have been sited and that has not been graded or otherwise disturbed shall be avoided until further notice.

      3) If a burrowing owl begins using a burrow on the site at any time after the initial preconstruction survey, procedures described in Section B must be followed.

      4) Any actions other than these require the approval of the City of San Diego and the Wildlife Agencies.

   B. **Post Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are Detected During the Initial Preconstruction Survey** - Monitoring the site for new burrows is required using Appendix D CDFG 2012, Staff Report for the period following the initial preconstruction survey, until construction is scheduled to be complete and is complete

(NOTE - Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol).

1) This section (B) applies only to sites (including biologically defined territory) wholly outside of the MHPA – all direct and indirect impacts to burrowing owls within the MHPA SHALL be avoided.

2) If one or more burrowing owls are using any burrows (including pipes, culverts, debris piles, etc.) on or within 300 feet of the proposed construction area, the City of San Diego's MMC and MSCP Sections shall be immediately contacted. The City of San Diego's MSCP and MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist appropriate City of San Diego biologist for on-going coordination with the Wildlife Agencies and the qualified consulting burrowing owl biologist. No construction shall occur within 300 feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography, and other physical and biological characteristics.

   a) **Outside the Breeding Season** - If the burrowing owl is using a burrow on-site outside the breeding season (i.e., September 1–January 31), the burrowing owl may be evicted after the qualified burrowing owl biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFG 2012 Staff Report, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies and City of San Diego (MMC and MSCP). Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.

   b) **During Breeding Season** - If a burrowing owl is using a burrow on-site during the breeding season (February 1–August 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the burrowing owls can be evicted. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFG 2012 Staff Report, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies and City of San Diego (MMC and MSCP). Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation.

3. **Survey Reporting During Construction** - Details of construction surveys and evictions (if applicable) carried out shall be immediately (within 5 working days or sooner) reported to the City of San Diego's MMC, and MSCP Sections and the

Wildlife Agencies and must be provided in writing (as by e-mail) and acknowledged to have been received by the required Agencies and DSD Staff member(s).

Post Construction:

1. Details of all surveys and actions undertaken on-site with respect to burrowing owls (i.e., occupation, eviction, locations etc.) shall be reported to the City of San Diego's MMC Section and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries of all previous reports for the site; and maps of the project site and burrowing owl locations on aerial photos.

BIO-SD-7 **Direct Impact Avoidance for Crotch's Bumble Bee**. Should this species no longer be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no avoidance measures shall be required.

1. Prior to the Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the Development Services Department (DSD) Director's Environmental Designee shall verify the following project requirements regarding the Crotch's bumble bee are shown on the construction permit:

   A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

   B. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.

   C. The preconstruction survey shall be conducted during the colony active period between April 1 through August 31 by the Qualified Biologist within 30 calendar days prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and within one year prior to the initiation of project activities (including removal of vegetation). The pre-construction survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained, as described

below. The surveys shall consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period.

D. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.

E. The Qualified Biologist/owner permittee shall submit the results (including positive or negative survey results) of the pre-construction survey to City DSD (Mitigation Monitoring and Coordination) City Planning Department (MSCP) staff and CDFW for review and written approval prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits.

F. If pre-construction surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to determine whether project activities would result in impacts to Crotch's bumble bee, in which case an Incidental Take Permit ITP) may be required. If an ITP is required, it shall be obtained prior to issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and all necessary permit conditions shall be fulfilled prior to initiation of project activities. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA.

G. Survey data shall be submitted by the Qualified Biologist to the CNDDB in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

e. Significance of Impacts after Mitigation

Implementation of mitigation measures discussed in Section 4.3.2.2.d would ensure that all significant impacts related to sensitive species and habitats under Annexation Scenario 2a would be reduced to less than significant levels.

4.3.4 Issue 3: Wetlands

4.3.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to sensitive species in Chula Vista:

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

b. Impact Analysis

Direct Impacts

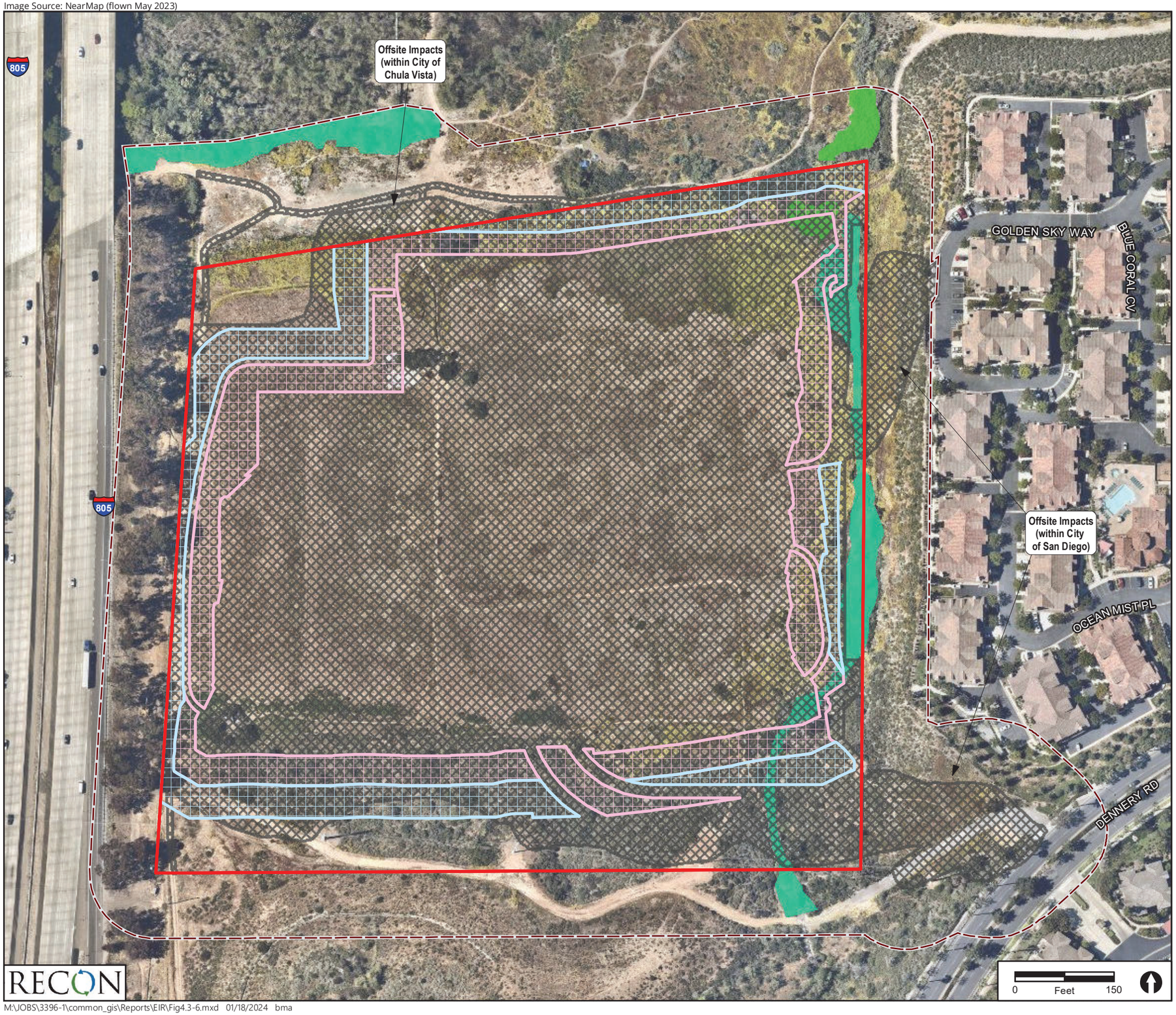
The project would result in the removal or otherwise directly impact wetland vegetation communities in the City of Chula Vista including 0.03 acre of mule fat scrub, 0.15 acre of southern willow scrub, 0.18 acre of emergent wetland, and 0.04 acre of disturbed wetland as detailed in Figure 4.3-6. These vegetation communities are considered sensitive wetlands by the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 2003).

Direct impacts to jurisdictional resources within the project area would be avoided and minimized to the extent feasible; however, some wetland impacts are unavoidable due to constraints around the project's main access and secondary access road. Due to the available location of primary and secondary access and the need to design these roadways to meet safety requirements for primary and emergency access, some wetland impacts would occur and are considered unavoidable. The project would impact a total of 0.40 acre of potential RWQCB wetland waters, CDFW riparian, and City of Chula Vista wetlands. Table 4.3-6 summarizes the acreage of each jurisdictional wetland resource type.

Table 4.3-6
Impacts to Jurisdictional Resources

Jurisdictional Resource / Wetland Type	Acres
Arundo-dominated riparian	—
Mule fat scrub	0.03
Southern willow scrub	0.15
Emergent wetland	0.18
Disturbed wetland	0.04
Total	**0.40**
Jurisdictional resource impacts are the same for each of the following applicable agencies: CDFW, RWQCB, City of Chula Vista, and City of San Diego.	

Image Source: NearMap (flown May 2023)



Project Site
Survey Area
Project Impacts
BMZ Zone 1
BMZ Zone 2
RWQCB Wetland Waters of the State/ CDFW Riparian/ City of San Diego Wetland/ City of Chula Vista Wetland
CDFW Riparian/ City of San Diego Wetland/ City of Chula Vista Wetland

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FIGURE 4.3-6
Impacts to Jurisdictional Resources

Indirect Impacts

Development adjacent to wetlands can result in indirect impacts due to changes in drainage patterns and the potential for erosion and pollutants to degrade the quality of the wetland. Wetland buffers offer water quality benefits by filtering pollution and improving the function of wetland resources. The project design incorporates a wetland buffer that ranges between 18 feet and 99 feet from the drainage course to protect and maintain the functions and values of the on-site wetland. The buffer would be located between the proposed development and the wetland to avoid and minimize any indirect edge effects. The buffer would consist of manufactured slopes and a water quality basin planted with a mix of native trees and shrubs such as oaks, walnuts, western sycamore, spineshrub, and sages. The proposed buffer width is considered adequate due to the current marginal functions and values of the wetlands, with the existing wetland and buffer area dominated by invasive species and heavy disturbance by encampments and trash. Furthermore, the proposed landscaping would improve the quality of the buffer compared to existing conditions by removing invasive species and establishing native upland species and a 6-foot block wall running along the eastern boundary of the project site to further protect functions and values of the wetlands on-site. The biofiltration basin would also protect the wetlands from runoff from the adjacent development Water quality improvements implemented by the project would improve run-off in a manner that would also reduce erosion and siltation issues into the Otay River off-site.

In order to ensure that the wetland buffer provides protection of the functions and values of the remaining southern willow scrub, mule fat scrub, and disturbed wetlands on-site, the following design measures would be implemented to reduce and minimize edge effects:

- A 6-foot block wall would be installed along the outer edge of the buffer to restrict access to the adjacent wetlands and streambed.

- Signage shall be posted that informs people of the sensitive nature of the adjacent wetland habitat and prohibits any brush management activities. As shown on the landscape plans, three signs would be located west of the drainage, and state “Environmentally sensitive area: no brush management shall be performed beyond this point.

- Only native plants would be used in the wetland buffer as shown on the project landscape plans.

- Long-term management would include on-going removal of invasives from the drainage and wetland buffer, as detailed in the Wetland Mitigation Plan and Long-term Management Plan (RECON 2023) and brush management plan.

The proposed wetland buffer in addition to these wetland buffer design features are identified as a project design feature in Chapter 3.0, Project Description, Section 3.6.2 and would be implemented through project conditions. Although the proposed wetland buffer would protect the wetland after the project is operational, there is the potential for indirect wetland impacts during construction. Specifically, indirect impacts to wetland resources could occur as a result of grading and construction activities that result in erosion, trash and pollutant discharge, and dust generation.

c. Significance of Impacts

Direct Impacts

Direct impacts to jurisdictional resources include direct impacts to a total of 0.40 acre of potential RWQCB wetland waters, CDFW riparian, and City of Chula Vista wetlands as detailed in Table 4.3-6. Direct impacts to wetlands would be significant.

Indirect Impacts

Indirect impacts to jurisdictional resources during project operation would be avoided through incorporation of a wetland buffer to protect the function and values of the wetland as detailed in Chapter 3.0, Project Description, Section 3.6.2. However, during construction there is a potential for indirect impacts to wetland resources to occur which would be a significant impact.

d. Mitigation Measures

Direct Impacts

Mitigation requirements for direct impacts to jurisdictional resources are detailed in Table 4.3-7. Implementation of **BIO-CV-8**, Wetland Restoration, Credits and Permits and **BIO-CV-9**, HLIT Permit would be required.

Table 4.3-7
Mitigation for Significant Impacts to Jurisdictional Resources

Vegetation Community	Impact Acreage	City of San Diego and City of Chula Vista Mitigation Ratio[1]	Total Mitigation Required (Acres)
Mule fat scrub	0.03	2:1	0.06
Southern willow scrub	0.15	2:1	0.30
Emergent wetland	0.18	2:1	0.36
Disturbed wetland	0.04	2:1	0.08
Total	0.40	—	0.80

Source: Nakano Wetland Mitigation Plan (RECON 2024)

BIO-CV-8 **Wetland Restoration/Creation and Permits**. Prior to issuance of land development permits by the City of Chula Vista, including clearing, grubbing, grading, and/or construction permits that impact jurisdictional waters, the project applicant shall provide compensatory wetland mitigation resulting in no overall net loss of wetlands. A total of 0.40 acre of impacts to RWQCB wetland waters, CDFW riparian, and City of Chula Vista wetlands. A total of 0.80 acre of mitigation for permanent impacts shall be provided, at minimum. To ensure no net loss, the mitigation shall include a 1:1 creation component.

Prior to issuance of land development permits, including clearing, grubbing, grading, and/ or construction permits by the City of Chula Vista that impact jurisdictional

waters, the project applicant shall obtain all necessary permits from RWQCB and CDFW, and shall mitigate direct impacts pursuant to the City of Chula Vista MSCP Subarea Plan and in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of RWQCB and CDFW shall be delineated on all grading plans.

The applicant shall submit a Final Wetlands Mitigation and Monitoring Plan to the satisfaction of the City of Chula Vista, RWQCB and CDFW. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; a five-year maintenance, monitoring, and reporting program; an estimated completion time; contingency measures; and shall identify a long-term funding source. A Conceptual Wetland Mitigation Plan has been prepared and is included in Attachment 13 of the Biological Resources Report, which identifies planned wetlands restoration located within the City of San Diego. If restoration occurs in San Diego, the project applicant shall also be required to implement the Wetlands Mitigation and Monitoring Plan subject to the oversight and approval of the City of San Diego Development Services Department director (or their designee), City of San Diego Parks and Recreation Open Space Division, RWQCB, and CDFW and any additional requirements of **BIO-SD-8** shall apply. If the restoration is completed in Chula Vista, the applicant shall be required to enter into a Secured Agreement with the City of Chula Vista consisting of a letter of credit, bond, or cash for 100 percent of the estimated costs associated with the implementation of the Wetland Mitigation Plan. The applicant shall provide the endowment for the long-term funding source.

Should the purchase of additional mitigation credits be necessary to satisfy permit conditions from RWQCB and CDFW, applicant shall secure mitigation credits within a City of Chula Vista-approved conservation bank in accordance with the terms and conditions of all required permits. The applicant is required to present proof of mitigation credit purchase to the City of Chula Vista and the Wetland Agencies prior to issuance of any land development permits.

BIO-CV-9 **HLIT Permit**. Prior to issuance of any land development permits (including clearing, grubbing, and/or grading permits), the project will be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to MSCP Tier II and III habitats and wetland resources.

Indirect Impacts

Indirect impacts to wetlands would be mitigated through compliance with mitigation measures **BIO-CV-2** and **BIO-CV-3** which requires a biological monitor to be on-site during construction and implementation of best management practices during construction to ensure wetlands are protected from trash, pollutants, and disturbance.

e. Significance of Impacts after Mitigation

Direct Impacts

With implementation of **BIO-CV-8** and **BIO-CV-9**, direct impacts to wetlands would be reduced to less than significant.

Indirect Impacts

With implementation of **BIO-CV-2** and **BIO-CV-3**, indirect impacts to wetlands during construction would be reduced to less than significant.

4.3.4.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue question related to wetlands:

- Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

In accordance with the City if San Diego's Significance Determination Thresholds (2022), the project would have a significant impact if it would:

- Result in substantial adverse impacts on wetlands through direct removal, filling, hydrological interruption, or other means.

b. Impact Analysis

Direct Impacts

Consistent with City of San Diego Biology Guidelines (2018) and the ESL Regulations, impacts to potential jurisdictional resources within the project area would be avoided and minimized to the extent feasible. However, despite effort to avoid and minimize impacts, a total of 0.40 acre of impacts to potential RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands would occur with project implementation (see Figure 4.3-6). The wetland impacts under Annexation Scenario 2a are the same as those reported under Section 4.3.4.1.b.

Under Annexation Scenario 2a, impacts to wetlands would require a deviation from the ESL wetland regulations in accordance with SDMC Section 143.0150. Deviations from the wetland regulations require processing as one or more of the following three options: Essential Public Projects Option, Economic Viability Option, and Biologically Superior Option. The project qualifies for a wetland deviation under the Biologically Superior Option because the wetlands are considered low quality and the project has demonstrated wetlands avoidance to the extent feasible. In addition, the project would result in a biologically superior design through restoration and enhancement/ re-establishment within Spring Canyon, as well as improvements to the on-site wetlands. Wetland

enhancement/re-establishment would include the conversion of non-native riparian habitat into native riparian habitat, while wetland restoration would include the conversion of disturbed habitat and non-native grassland habitat to native riparian habitat. These improvements would include establishment of native vegetation in the wetland buffer, drainage improvements to reduce erosion and sedimentation into the on-site wetlands, and invasive species removal within the on-site wetlands and wetland buffer, as detailed in the Wetland Mitigation Plan and Long-term Management Plan (see Appendix D, Attachment 13). A wetland buffer and fencing has been incorporated into the project design (see Section 3.6.3.c for details of the wetland buffer project design feature) to protect and enhance the function of the wetlands. Additional details supporting the wetland deviation are included in Section 5.3.1.5.a of the Biological Resources Technical Report prepared for the project (see Appendix D).

Indirect Impacts

As detailed under Section 4.3.4.1.b, the project design includes a wetland buffer that ranges between 18 feet and 99 feet to protect and maintain the functions and values of the on-site wetland. The proposed wetland buffer in addition to wetland buffer design features are identified as PDF-BIO-1 in Chapter 3.0, Project Description, Section 3.6.2 and would be implemented through project conditions. These project design features would ensure long-term protection of the function and values of the wetland after the project is fully operational. Although the proposed wetland buffer would protect the wetland after the project is operational, there is the potential for indirect wetland impacts during construction. Specifically, indirect impacts to wetland resources could occur as a result of grading and construction activities that result in erosion, trash and pollutant discharge, and dust generation.

c. Significance of Impacts

Direct Impacts

Annexation Scenario 2a would result in direct impacts to jurisdictional resources including direct impacts to a total of 0.40 acre of potential RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands as detailed in Table 4.3-6. Direct impacts to wetlands would be significant.

Indirect Impacts

Indirect impacts to jurisdictional resources during project operation would be avoided through incorporation of a wetland buffer to protect the function and values of the wetland as detailed in Chapter 3.0, Project Description, Section 3.6.2. However, during construction there is a potential for indirect impacts to wetland resources to occur which would be a significant impact.

d. Mitigation Measures

Direct Impacts

The project would result in direct impacts to jurisdictional resources including a total of 0.40 acre of potential RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands. Mitigation ratios would total 2:1 for all wetland types and the total mitigation requirement is 0.80 acre of wetland as

detailed in Table 4.3-7. In addition, the on-site wetlands would require placement in a restrictive Covenant of Easement with long-term management. To mitigate for direct impacts to jurisdictional resources, the following measures shall be implemented:

BIO-SD-8 Wetland Restoration/Creation and Permits

Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the owner/permittee shall provide compensatory wetland mitigation in accordance with the City of San Diego Land Development Code Biology Guidelines, resulting in no overall net loss of wetlands. To offset the loss of 0.40 acre of impacts to RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands a minimum of 0.80 acre of mitigation for jurisdictional impacts shall be provided. To ensure no net loss, this shall include a 1:1 creation or restoration component (0.40 acre of creation or restoration).

Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits by the City of San Diego that impact jurisdictional waters, the project applicant shall obtain all necessary permits from RWQCB, and CDFW, and shall mitigate direct impacts in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of RWQCB, and CDFW shall be delineated on all grading plans.

The applicant shall submit a Final Wetlands Mitigation and Monitoring Plan and submit it for review and approval to the satisfaction of the City of San Diego, RWQCB, and CDFW. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; contingency measures; and identify long-term funding. The project applicant shall implement the Wetlands Mitigation and Monitoring Plan subject to the oversight and approval of the City of San Diego DSD director (or their designee), RWQCB, and CDFW.

The project proponent shall provide funding in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (PAR) (Center for Natural Lands Management 1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the off-site wetland mitigation area by an agency, nonprofit organization, or other entity approved by the City and the Wildlife Agencies.

A Conceptual Wetland Mitigation and Long-term Management Plan has been prepared and is included in Attachment 13 of the Biological Resources Report (see Appendix D).

BIO-SD-9 **Protection and Management Element.** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the remaining environmentally sensitive lands (ESL) shall be placed in a covenant of easement (Figure 6-1) per Section 143.0140(a) of the City of San Diego Municipal Code ESL regulation (City of San Diego 2022). These lands will not be used towards mitigation and will be protected from future development. Long-term management of the wetlands within the covenant of easement would be managed by the Homeowners Association in accordance with the Long-term Management Plan (see **BIO-SD-10**).

BIO-SD-10 Prior to the issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, a long-term management plan shall be prepared to the satisfaction of the City of San Diego DSD director (or their designee), USFWS, and CDFW to address the ongoing maintenance of the on-site wetland mitigation lands to remain. This plan shall require (1) yearly inspection and enforcement of lighting within the site to be directed and shielded away from the wetland area; (2) yearly maintenance of the 6-foot block wall that separates the development from the wetland area to reduce intrusion into the wetlands; (3) control invasive species appearing within the wetland three times a year; (4) brush management once a year with techniques that protect habitat quality; and (5) trash removal once a year. The project proponent shall provide funding in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (Center for Natural Lands Management 1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the on-site wetland mitigation area by the Owner/Permittee.

A Conceptual Long-term Management Plan for the On-site Wetlands at the Nakano Project has been prepared and is included in Attachment 15 of the Biological Resources Report (see Appendix D).

Indirect Impacts

Indirect impacts to jurisdictional resources in the City of San Diego would be avoided through compliance with mitigation measure **BIO-SD-2**, Biological Resource Protection During Construction.

e. Significance of Impacts after Mitigation

Direct Impacts

With implementation of **BIO-SD-8** to **BIO-SD-10**, direct impacts to wetlands would be reduced to less than significant.

Indirect Impacts

With implementation of **BIO-SD-2**, indirect impacts to wetlands during construction would be reduced to less than significant.

4.3.5 Issue 4: Wildlife Corridors and Nursery Sites

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

4.3.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to wildlife corridors and nursery sites in the City of Chula Vista:

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

b. Impact Analysis

The project site is near the Otay River but the site lacks regional value as a wildlife corridor due to its history of disturbance, the limited native habitat present, and its proximity to existing residential and commercial development, roads, and highways. The site does not act as a pass-through corridor linkage to off-site habitat areas given the adjacency to development on three sides. The project is located 197 feet south of a 75% Conservation Area associated with the Otay River, which may provide opportunities for regional wildlife movement. However, the project would not cause impacts to native vegetation communities within the riparian corridor and is separated from the 75% Conservation Area by dense, non-native vegetation such as giant reed, black mustard, and crown daisy. Based on the development surrounding the site and its separation from the river corridor, development of the site would not substantially interfere with ongoing wildlife movement patterns within the Otay Valley along the river corridor. Implementation of best management practices during construction would ensure soil erosion and polluted runoff does not enter surrounding open space areas. Furthermore, the project's landscape plan includes revegetation of slopes with native species that would be compatible with the open space to the north. During construction, disturbances to habitat such as construction-related runoff, ground disturbance, and the introduction of invasive non-native species in off-site habitat would be minimized through the implementation of erosion control devices, silt fencing, and the containment and proper disposal of invasive non-natives. As a result, the project would not cause any loss of functionality of the Otay River wildlife corridor.

c. Significance of Impacts

The project would not cause any loss of functionality of the Otay River wildlife corridor and impacts to wildlife corridors would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.3.5.2 Annexation Scenario 2a

a. Thresholds of Significance

In accordance with the City's Significance Determination Thresholds (2022), the project would have a significant impact if it would:

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites.

b. Impact Analysis

Refer to the analysis in Section 4.3.5.1.b, which applies to all scenarios. As discussed in that section, the project would not cause any loss of functionality of the Otay River wildlife corridor and the project site is not a wildlife corridor.

c. Significance of Impacts

The project would not cause any loss of functionality of the Otay River wildlife corridor; therefore, impacts to wildlife corridors would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.3.6 Issues 5 and 6: Conflicts with Local Plans, Policies, or HCPs /NCCPs

4.3.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to conflicts with local plans, policies, or HCPs/NCCPs in the City of Chula Vista:

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

b. Impact Analysis

Conflict with MSCP Plans

Under the No Annexation Scenario, the project site and off-site area associated with remedial grading would remain in the City of Chula Vista and continue to be subject to the City of Chula Vista MSCP Subarea Plan. Within the City of Chula Vista MSCP Subarea Plan, the project area is designated as "Development Area Outside Covered Projects" (i.e., not designated a preserve or conservation area) and is not located immediately adjacent to any 75% or 100% Conservation Areas. The off-site area associated with roadway improvements would remain in the City of San Diego and continue to be subject to the City of San Diego MSCP Subarea Plan. The project area as a whole would be subject to the MSCP Conditions for Coverage for covered species, which is consistent between both Subarea Plans.

Under Annexation Scenario 2b, Chula Vista would process grading and development permits for the site prior to LAFCO annexation into the City of San Diego. Since Chula Vista would issue grading and development permits prior to annexation, the Chula Vista MSCP Subarea Plan provisions would apply as discussed in the preceding paragraph. After annexation, the project would become part of the City of San Diego Subarea Plan. Consistency with the City of San Diego Subarea Plan is discussed in Section 4.3.6.2.b.

Conflict with Local Policies or Ordinances

Under the No Annexation Scenario and Annexation Scenario 2b, the project would be subject to conformance with the City of Chula Vista's HLIT Ordinance which are intended to implement the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 2003) and ensure that development occurs in a manner that protects the overall quality of the habitat resources, encourages a sensitive form of development, and retains biodiversity and interconnected habitats. The project demonstrates consistency with the findings necessary for issuance of an HLIT permit as the project occurs in a Development Area outside of Covered Projects, provides habitat-based mitigation in conformance with the ratios set forth in the MSCP, and avoids impacts to narrow endemics and wetlands to the maximum extent practicable. Unavoidable impacts to wetlands for site access would be mitigated at a minimum 2:1 ratio, consistent with the MSCP. Off-site impacts to Otay tarplant, a narrow endemic, would occur within the City of San Diego (not be regulated by the City of Chula Vista's HLIT Ordinance), and impacts to these 14 individuals would be mitigated through off-site restoration pursuant to the Otay Tarplant Mitigation Plan and in accordance with the City of San Diego's MSCP Subarea Plan. Considering the presence of sensitive biological resources, the off-site City of San Diego area is subject to the Environmentally Sensitive Lands Regulations. A more detailed analysis regarding project consistency with the City of Chula Vista MSCP Subarea Plan and City of San Diego's MSCP Subarea Plan can be found in the Biological Resources Technical Report (see Appendix D).

Adjacency with City of Chula Vista 75% or 100% Conservation Area

The project site is not located within or adjacent to any 75% or 100% Conservation Areas (see Figure 4.3-4). As shown in Figure 4.3-4, the closest conservation area (75%) is located approximately 197 feet north of the project area within the Otay River.

c. Significance of Impacts

The project would be consistent with the provisions of the City of Chula Vista MSCP Subarea Plan and HLIT Ordinance, as well as City of San Diego's MSCP Subarea Plan, Environmentally Sensitive Lands Regulations, and Biology Guidelines for the off-site improvement area. Thus, impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.3.6.2 Annexation Scenario 2a

a. Thresholds of Significance

In accordance with the City of San Diego's Significance Determination Thresholds (2022), the project would have a significant impact if it would:

- Result in a conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- Introduce land use within an area adjacent to the MHPA that would result in adverse edge effects;
- Result in a conflict with any local policies or ordinances protecting biological resources; or
- Introduce invasive species of plants into natural open space area.

b. Impact Analysis

Conflict with MSCP Plans

Under Annexation Scenario 2a, the project site would be annexed into and developed in the City of San Diego. As one of the required actions under Annexation Scenario 2a, an amendment to the City of San Diego Subarea Plan would be required to amend the Subarea Plan boundary to include the project site. After the site is included in the City of San Diego's Subarea Plan boundary, it would be subject to the City of San Diego MSCP Subarea Plan. Upon approval of the Subarea Plan amendment, the Take Authorizations of the City of San Diego's MSCP Subarea Plan would be applicable to the project site. In addition, the off-site area associated with road improvements in the City of San Diego would continue to be subject to the City of San Diego MSCP Subarea Plan. The off-site area associated with remedial grading would remain in the City of Chula Vista and would continue to be subject to the City of Chula Vista MSCP Subarea Plan.

Provisions for the annexation of properties between MSCP Subarea Plans is provided in Section 5.4.3 of the MSCP Subregional Plan (County of San Diego 1998). Under this section, an amendment

to a Subarea Plan is allowed provided the conservation policies of the two Subarea Plans involved in the transfer are consistent with one another. The annexation would involve the transfer of a "Development Area Outside of Covered Projects" within Chula Vista to a "Development Area" in the City of San Diego. Mitigation ratios provided by the City of Chula Vista MSCP Subarea Plan and City of San Diego Biology Guidelines are consistent between jurisdictions; thus, no loss in habitat mitigation would result from the proposed transfer. In addition, no 75% or 100% Conservation Areas are proposed for development or would be transferred into the City of San Diego, so the transfer would not affect the City of Chula Vista's ability to meet their conservation obligations under the MSCP. In addition, the project area as a whole would continue to be subject to the MSCP Conditions for Coverage for covered species, which is based on Table 3-5 of the MSCP Subregional Plan and is consistent between both Subarea Plans. Narrow endemic impacts are limited to the off-site improvement area in the City of San Diego, which would remain in the City of San Diego and would not be subject to annexation. Thus, there would further be no changes in the protection of narrow endemics as a result of the proposed annexation. Therefore, the project site would be equally protected under both Subarea Plans and the transfer of the project site from the City of Chula Vista MSCP Subarea Plan to the City of San Diego MSCP Subarea Plan would be consistent with the conservation goals of the MSCP Subregional Plan. Additional discussion of consistency between Subarea Plans is provided in Attachments 11 and 12 of the Biological Resources Technical Report (see Appendix D).

Conflict with Local Policies or Ordinances

Under the Annexation Scenario 2a, the project would be subject to conformance with the City of San Diego Environmentally Sensitive Lands Regulations and Biology Guidelines, which are intended to implement the City of San Diego MSCP Subarea Plan (City of San Diego 1997) and ensure that development occurs in a manner that protects the overall quality of the habitat resources, encourages a sensitive form of development, and retains biodiversity and interconnected habitats. The project demonstrates consistency with these regulations as the project occurs outside of the MHPA, provides habitat-based mitigation in conformance with the ratios set forth in the MSCP, and avoids impacts to narrow endemics and wetlands to the maximum extent practicable. Unavoidable impacts to wetlands for site access would be mitigated at a minimum 2:1 ratio, consistent with the MSCP. As discussed in Section 4.3.4.2, the project is consistent with the findings for the City of San Diego wetland deviation process by providing a Biologically Superior Option, through avoiding wetland impacts to the extent feasible while providing improved on-site conditions and off-site wetland mitigation within Spring Canyon, a regional MSCP corridor. Off-site impacts to Otay tarplant, a narrow endemic, would occur within the City of San Diego and impacts to these 14 individuals would be mitigated through off-site restoration pursuant to the Otay Tarplant Mitigation Plan and in accordance with the City of San Diego's MSCP Subarea Plan. A more detailed analysis regarding project consistency with the City of San Diego's MSCP Subarea Plan can be found in the Biological Resources Technical Report (see Appendix D).

Under all scenarios, the off-site area to the north would remain within the City of Chula Vista. Off-site impacts within Chula Vista would include 0.01 acre of Diegan coastal sage scrub: *Baccharis* dominated (Tier II) and 0.05 acre of impact to non-native grassland (Tier III). These impacts are exempt from the requirement for an HLIT permit as the impact area is less than 0.10 acre in size and located entirely within a mapped "Development Area Outside of Covered Projects." Thus, the off-site

area in Chula Vista under Scenario 2a would be consistent with the City of Chula Vista HLIT regulations.

Adjacency with City of San Diego MHPA

The project site is not located within or adjacent to MHPA lands or 75% or 100% Conservation Area. As shown in Figure 4.3-4, the closest boundary of the City of San Diego MHPA is across the I-805 and the closest boundary of the City of Chula Vista 75% Conservation Area is 197 feet to the south. No MHPA adjacency issues would occur.

c. Significance of Impacts

The project would be consistent with the provisions of the City of San Diego MSCP Subarea Plan, Environmentally Sensitive Lands Regulations, and Biology Guidelines, as well as the City of Chula Vista's MSCP Subarea Plan and HLIT Ordinance for the off-site improvement area. Thus, impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4 Geologic and Paleontological Resources

This section analyzes potential impacts that could occur related to geology, soils, and paleontology. The impact analysis related to geology and soils is based on information from a site-specific Geotechnical Investigation prepared by Geocon, Inc. (Geocon) (Appendix E-1); and three Geotechnical Addendums prepared by Geocon (Appendices E-2, E-3, and E-4). Geocon additionally prepared an Infiltration Feasibility Condition Letter included as Appendix E-5 as well as a letter in response to City of San Diego review comments dated May 10, 2023 (Appendix E-6). The analysis related to paleontological resources is based on a Paleontological Resources Inventory Report prepared by Dudek (Appendix F-1) and an addendum to the Paleontological Resources Inventory Report for the Nakano Project prepared by RECON Environmental, Inc. (Appendix F-2). This section also refers to the Nakano Project (project) Storm Water Quality Management Plan (SWQMP) prepared by Project Design Consultants (Appendix N).

As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for approving project implementation with the exception of the off-site grading and City of San Diego sewer line that are under the purview of the City of San Diego. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds, as the City of San Diego would be responsible for approving project implementation of all on-site and off-site components in this scenario.

4.4.1 Existing Conditions

The project site is located just south of the Otay River. Site topography is vacant and relatively flat, sloping from south to north towards the Otay River channel. A north-facing natural slope, approximately 70 feet high is present along the south property boundary. Elevations across the project site range between approximately 95 and 180 feet above mean sea level.

4.4.1.1 Soils

Boring logs and test pit analyses indicate the project site is underlain by compressible surficial deposits consisting of undocumented fill, topsoil, colluvium, and alluvium that general range from 2 to 12 feet thick but reaches 25 feet thick in the northwest portion of the site. Terrace deposits underlie the surficial deposits in the flatter areas of the site and the Tertiary-aged Mission Valley Formation and the conglomerate member of the San Diego Formation are exposed in the north-facing slope adjacent to the south property boundary (see Appendix E-1).

a. Undocumented Fill

Undocumented fill thickness ranges from approximately 2 to 5 feet across the majority of the site increasing to 25 feet in the northeast portion of the site. The undocumented fill consists of very loose to moderately dense, sand with cobbles. Abundant debris including pieces of plastic, asphalt concrete, concrete curb, brick, and wood were also encountered in the undocumented fill. The

undocumented fill is compressible and will require remedial grading to support new fill and structural improvements.

b. Artificial Fill

Artificial fill borders the east, west, and portions of the south property margins within the existing slopes. The fill is expected to consist of silty to clayey sand and sandy to silty clay. The fill was placed during previous grading activities as structural fill.

c. Topsoil (Unmapped)

Topsoil covers the majority of the project site and varies in thickness from 0.5 feet to 3 feet. The topsoil typically consists of loose to moderately dense, dry to moist, sand, cobble, and clay. The topsoil is compressible and will require removal and recompacting to support compacted fill and/or proposed site improvements.

d. Alluvium (Qal)

As detailed in the Geotechnical Investigation (see Appendix E-1), alluvium is present in a drainage located at the southeast corner of the property. Alluvium was also encountered beneath undocumented fill across a limited area at the north end of the site. The alluvium consists of stiff, damp, dark brown, sandy clay with gravel. The alluvium is compressible and will require removal and recompacting to support compacted fill and/or proposed project site improvements.

e. Colluvium (Qcol)

Colluvium is derived from weathering of the underlying bedrock materials at higher elevations and is deposited by gravity and sheet-flow on the side slopes and canyon sidewalls. The observed thickness of colluvium at the site was approximately 3 to 5 feet. The colluvium as encountered consists of moderately dense, olive brown, clayey sand with cobbles. The colluvium is compressible in its current state and requires removal and recompacting to support compacted fill.

f. Terrace Deposits (Qt)

Quaternary-age Terrace Deposits were observed in underlying artificial fill, topsoil, and alluvium in the flatter portions of the project site. The Terrace Deposits consist of moderately dense to very dense and firm to very stiff, clayey gravel, clayey to cobbly sand, and silty to cobbly clay. Terrace Deposits are suitable for support of compacted fill and/or structural loads.

4.4.1.2 Paleontological Sensitivity and Geologic Formations

Paleontological resources, also referred to as fossils, are the remains and/or traces of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in the geologic deposits, or formations, in which they were originally buried. Paleontological resources represent limited, non-renewable, and sensitive scientific and educational resources. San Diego County is underlain by numerous distinct geologic units (i.e.,

formations) that record portions of the past 450 million years of Earth's history. Geologic formations have varying levels of paleontological resource sensitivity. In other words, there is a higher likelihood of encountering paleontological resources within specific geologic formations, which have a history of producing fossil remains. Geologic units within one mile of the project site include the Mission Valley Formation, the San Diego Formation, old Alluvial Floodplain Deposits, and Young Colluvial Deposits, and Young Alluvial Floodplain Deposits as detailed on Figure 4.4-1.

The paleontological resource potential of the underlying geologic formations on the project site are as follows: Mission Valley Formation–High Sensitivity; San Diego Formation–High Sensitivity; Old Alluvial Floodplain Deposits–Moderate Sensitivity; Young Colluvial Deposits- Low Sensitivity; and Young Alluvial Floodplain Deposits–Low Sensitivity.

a. Mission Valley Formation (Tmv)

The middle Eocene Mission Valley Formation is a marine sedimentary unit found along coastal San Diego, characterized by light gray, fine- to very fine-grained marine sandstones. Upper Eocene-age Mission Valley Formation was encountered in slopes along the southern portion of the site. The Mission Valley Formation is predominantly a marine sandstone unit consisting of reddish brown to tan, weak to friable, silty, fine- to medium-grained sandstone. The formation is typically moderately to well cemented but is usually rippable with heavy duty excavation equipment; however, localized cemented zones and concretions should be expected. The Mission Valley Formation is suitable for the support of the compacted fill and structural loads.

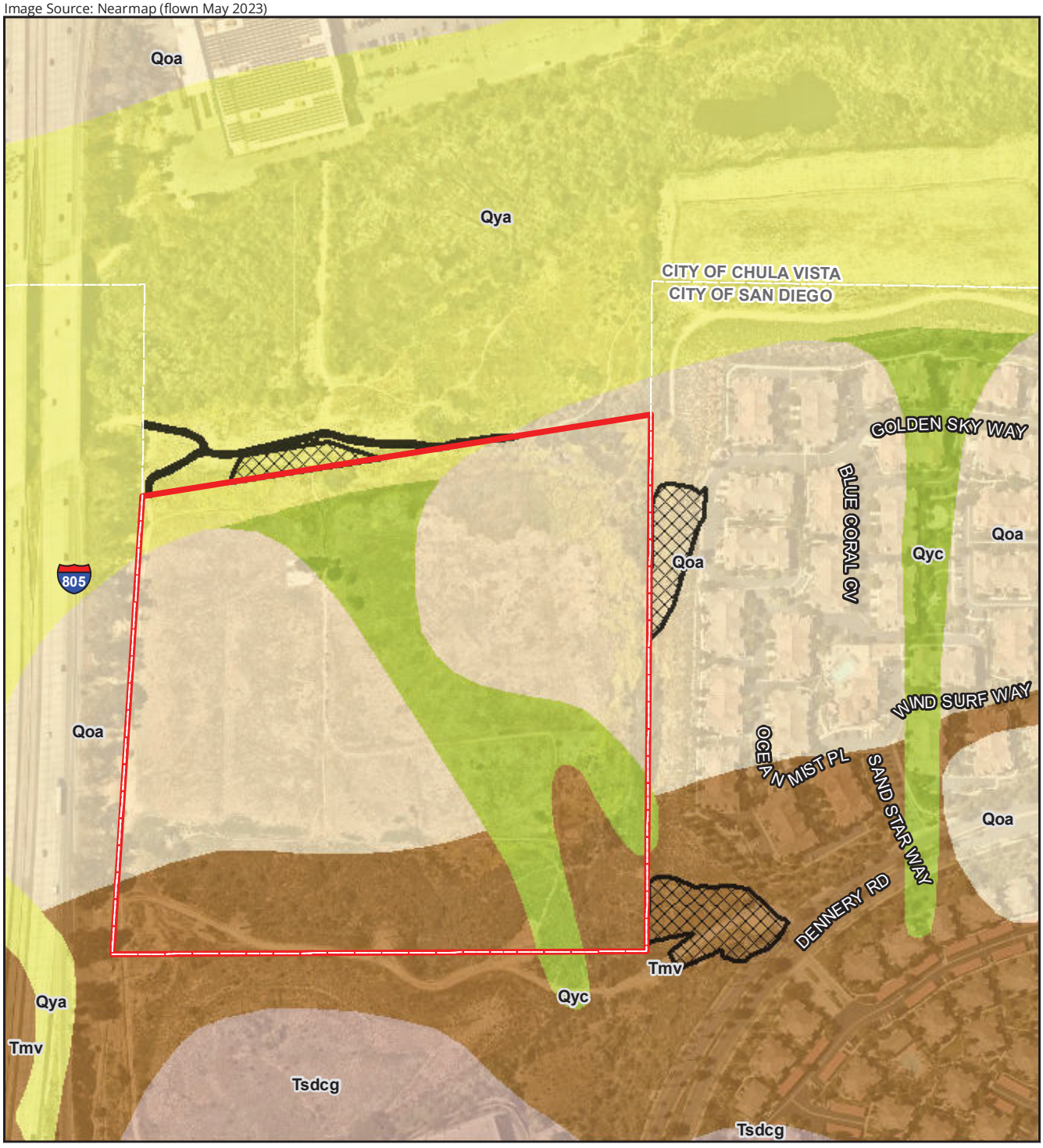
b. San Diego Formation (Tsdcg)

The project site contains late Pliocene to early Pleistocene, marine San Diego Formation in the southern portion of the project site consisting of fossiliferous yellowish-gray to yellowish-brown, weakly consolidated, fine-grained sandstones, poorly sorted gravels, pebble conglomerates, and bedded claystones. The San Diego Formation is known to produce fossils and has produced significant marine and terrestrial fossils throughout its extent in San Diego County. Nine fossils have been found within the San Diego Formation at sites within a 1-mile radius buffer zone for the project site. These localities yielded fossil burrows, leaf and seed pod impressions and remains, brachiopods, gastropods, bivalves, tusk shells, sea birds, and baleen whales.

c. Old Alluvial Floodplain Deposits (Qoa)/Terrace Deposits (Qt)

Pleistocene old alluvial floodplain deposits consist of variable amounts of clays, sands, silts, and gravels that are usually moderately indurated and oxidized. Old alluvial floodplain deposits have produced significant paleontological resources in San Diego County. Alluvial floodplain deposits are mapped at the surface within the southern portion of the project site according to the Paleontological Resources report (see Appendix F-1). This area is mapped as Terrace Deposits in the geologic report.

Image Source: Nearmap (flown May 2023)



Project Site

Off-site Improvements

0 Feet 300

Stratigraphic Unit

Qya - Young alluvial flood plain deposits

Qyc - Young colluvial deposits

Qoa - Old alluvial flood plain deposits undivided

Tsdcg - San Diego Formation, pebble and cobble conglomerate

Tmv - Mission Valley Formation

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FIGURE 4.4-1
Geologic Map

d. Young Alluvial Floodplain Deposits (Qya)

Late Pleistocene to Holocene young alluvial floodplain deposits contain varying amounts of clays, silts, sands, and gravels that are usually unconsolidated to moderately indurated. Young alluvial floodplain deposits are generally Holocene in age on the surface, and therefore, have low paleontological sensitivity on the surface. Young alluvial floodplain deposits are limited to the northwestern portion of the project site.

4.4.1.3 Geologic Hazards

a. Faulting and Seismicity

The project site is not underlain by active, potentially active, or inactive faults. An active fault is defined by the California Geological Survey as a fault showing evidence for activity within the last 11,700 years. The project site is not within a State of California Earthquake Fault Zone.

However, like the majority of southern California, the project site is in a seismically active area and the potential for strong ground motion is considered significant during the design life of the proposed structures. Damage to structures and improvements caused by a major earthquake will depend on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction.

b. Ground Shaking

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. The Geotechnical Investigation (see Appendix E-1) prepared for the site noted possible strong seismic shaking.

c. Surface Fault Rupture

Surface fault rupture is the result of movement on an active fault reaching the surface. Southern California is considered one of the most seismically active regions in the U.S., with numerous active faults and a history of destructive earthquakes. Several earthquake fault zones, as well as numerous smaller faults, exist in the County of San Diego and in southern California. Damage to structures and improvements caused by a major earthquake depends on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction. The severity of an earthquake can be expressed in terms of both intensity and magnitude. The risk associated with ground rupture hazard within the project site is very low due to the absence of active faults at the project site.

d. Liquefaction, Seismically Induced Settlement, and Lateral Spread

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 a 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.

Liquefaction-induced ground failure can involve a complex interaction among seismic, geologic, soil, topographic, and groundwater factors. Failures can include ground fissures, sand boils, ground settlement, and loss of bearing strength; buoyancy effects; ground oscillation; flow failure; and complex lateral spread landslides. The three key factors that indicate whether an area is potentially susceptible to liquefaction are the capacity for severe ground shaking, shallow groundwater, and low-density granular deposits (mainly finer grained sands). In these areas, where alluvium is sufficiently loose and groundwater is sufficiently shallow that strong earthquake shaking could cause sediments to lose bearing capacity, severe settlement of surface facilities and in some cases uplift of buried structures (e.g., large pipelines) could occur.

Among the potential hazards related to liquefaction are seismically induced settlement and lateral spread. 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. Lateral spreading is liquefaction-induced ground failure that occurs on gentle sloping ground surfaces in the direction of a free face (i.e., retaining wall, slope, channel, etc.). 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 or lateral ground displacement.

Due to the dense nature of the soils underlying the site, proposed grading, and the lack of permanent, shallow groundwater, there is a low risk of liquefaction occurring at the site (see Appendix E-1).

e. Soil Instability

Slope failure is dependent on topography and underlying geologic materials, as well as factors such as rainfall, excavation, or seismic activities that can precipitate slope instability. Earthquake motions can induce significant horizontal and vertical dynamic stresses along potential failure surfaces within a slope.

The proposed development includes cut and fill up to 15 feet in sheet graded areas and cut and fill slopes at inclinations of 2:1 (horizontal:vertical). As detailed in the Geotechnical Investigation, Section 5.7, the project site is mapped as Geologic Hazard Categories 22 and 52. Category 22 is described as Landslides – possible or conjectured. Category 52 is described as Other Terrain – other level areas, gently sloping to steep terrain, favorable geologic structure, low risk (see Appendix E-1).

f. Soil Erosion, Expansive Soils, and Settlement or Subsidence

Erosion could occur during high wind, rainfall, and flooding over disturbed, unprotected soil. It is most prevalent in steeper areas where gravity moves soil downhill. Erosion also occurs within river streams when high-velocity flow wears away at the banks, sending sediment downstream. The project site topography is relatively flat; however, a north-facing natural slope, approximately 70 feet high, is present along the south property boundary. Project site drainage currently flows from south to north via sheet flows towards Otay River and via an existing natural channel along the eastern edge of the property.

Expansive soils are characterized by significant volume changes (shrink or swell) due to variations in moisture content. 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. A majority of on-site soils are expected to possess a very low to medium expansion potential.

g. Landslides

Landslides are deep-seated ground failures that result in a large section of a slope sliding downhill. They can result in damage to structures both above and below the slide area. As stated under Section 4.4.1.3.e, the project site is mapped as Geologic Hazard Categories 22 described as Landslides – possible or conjectured. Based on the Geotechnical Investigation (see Appendix E-1) landslide-related features are not discernable in the north-facing slope located near the south property boundary; however, landslides have been mapped east of the project site.

4.4.1.4 Groundwater

Site elevation ranges between approximately 95 and 180 above mean sea level (MSL). Groundwater or seepage was not encountered during recent geotechnical investigations; however, it is not uncommon for shallow seepage conditions to develop where none previously existed when sites are irrigated, or infiltration is implemented. Seepage is dependent on seasonal precipitation, irrigation, land use, among other factors, and varies as a result. As discussed in the Geotechnical Investigation, based on investigated conditions, groundwater elevation at the project site is expected to be between 80 and 90 feet above MSL (see Appendix E-1).

4.4.2 Regulatory Setting

4.4.2.1 Federal

a. Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act requires the secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land using scientific

principles and expertise. The Omnibus Public Lands Act–Paleontological Resources Preservation (OPLA–PRP) includes specific provisions addressing management of these resources by the Bureau of Land Management, the National Park Service, the Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the U.S. Department of Agriculture.

The OPLA–PRP affirms the authority for many of the policies that the federal land-managing agencies already have in place for the management of paleontological resources, such as issuing permits for collecting paleontological resources, curation of paleontological resources, and confidentiality of locality data. The OPLA–PRP only applies to federal lands and does not affect private lands. It provides authority for the protection of paleontological resources on federal lands, including criminal and civil penalties for fossil theft and vandalism. As directed by the OPLA–PRP, the federal agencies are in the process of developing regulations, establishing public awareness and education programs, and inventorying and monitoring federal lands.

4.4.2.2 State

a. Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Alquist–Priolo Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the state geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults, and published maps showing these zones. Earthquake fault zones are delineated along traces of faults where mapping demonstrates that surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic exploration has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. The project site is not within an earthquake fault zone.

b. California Building Code

Slope instability or erosion problems are primarily regulated through the California Building Code (CBC). The CBC requires special foundation engineering and investigation of soils on proposed development sites in geologic hazard areas. These reports must demonstrate either that the hazard presented by the project will be eliminated or that there is no danger for the intended use. The CBC also contains design and construction regulations pertaining to seismic safety for buildings. These regulations cover issues such as ground motions, soil classifications, redundancy, drift, and deformation compatibility.

c. Public Resources Code

The Public Resources Code Section 5097.5 regulates removal of paleontological resources from public lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

4.4.2.3 Local Regulations - City of Chula Vista

a. City of Chula Vista General Plan

The Environmental Element of the City of Chula Vista General Plan specifically addresses potential impacts to non-renewable paleontological resources and outlines policies to mitigate negative impacts (City of Chula Vista 2005). The objective and policies relevant to protecting paleontological resources are outlined below:

Objective E 10: Protect important paleontological resources and support and encourage public education and awareness of such resources.

> **Policy E 10.1:** Continue to assess and mitigate the potential impacts of private development and public facilities and infrastructure to paleontological resources in accordance with the California Environmental Quality Act (CEQA).
>
> **Policy E 10.2:** Support and encourage public education and awareness of local paleontological resources, including the establishment of museums and educational opportunities accessible to the public.

Objective E 14: Minimize the risk of injury, loss of life, and property damage associated with geologic hazards.

> **Policy E 14.1:** To the maximum extent practicable, protect against injury, loss of life, and major property damage through engineering analyses of potential seismic hazards, appropriate engineering design, and the stringent enforcement of all applicable regulations and standards.
>
> **Policy E 14.2:** Prohibit the subdivision, grading, or development of lands subject to potential geologic hazards in the absence of adequate evidence demonstrating that such development would not be adversely affected by such hazards and would not adversely affect surrounding properties.
>
> **Policy E 14.3:** Require site-specific geotechnical investigations for proposals within areas subject to potential geologic hazards; and ensure implementation of all measures deemed necessary by the City of Chula Vista Engineer and/or Building Official to avoid or adequately mitigate such hazards.

b. City of Chula Vista Municipal Code

The following provisions of the Chula Vista Municipal Code (CVMC) would be applicable to the project under the No Annexation Scenario and Annexation Scenario 2b:

- CVMC Section 15.04.040: This section specifies that projects constructing slopes shall be designed for proper stability considering both geological and soil properties.
- CVMC Section 15.04.040: Reports shall be prepared by a soil engineer and a certified engineering geologist and contain the results of surface and subsurface exploration and

analysis and contain assurance that the underlying bedrock and soil supporting the slope have strength characteristics sufficient to provide a stable slope and will not pose a danger to persons or property.

4.4.2.4 Local Regulations - City of San Diego

a. City of San Diego General Plan

The **Public Facilities, Services and Safety Element** of the City of San Diego's General Plan (City of San Diego 2022) identifies the following policy related to seismic, geologic, and structural considerations:

Policy F-Q.1: Protect public health and safety through the application of effective seismic, geologic, and structural considerations.

a. Ensure that current and future community planning and other specific land use planning studies continue to include consideration of seismic and other geologic hazards. This information should be disclosed, when applicable, in the CEQA document accompanying a discretionary action.

b. Maintain updated citywide maps showing faults, geologic hazards, and land use capabilities, and related studies used to determine suitable land uses.

c. Require the submission of geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever seismic or geologic problems are suspected.

b. City of San Diego Municipal Code

The City of San Diego's Grading Ordinance (San Diego Municipal Code [SDMC] Section 142.0101, et seq.) provides the City's grading regulations which address slope stability, protection of property, erosion control, water quality, and landform preservation and to protect the public health, safety, and welfare of persons, property, and the environment. To reduce slide danger and erosion hazards, a grading permit must be obtained for all projects involving the process of moving soil and rock from one location to another. The Grading Ordinance is designed in part to assure that development in earthquake- or landslide-prone areas does not threaten human life or property. Specific grading regulations relevant to the project include the following:

- SDMC Section 142.0411 requires implementation measures that ensure excessive erosion is avoided, such as implementing immediate post-grading slope revegetation or hydroseeding with erosion-resistant species to ensure coverage of the slopes prior to the next rainy season in accordance with Table 142-04F, Landscape Regulations. All required revegetation and erosion control is required to be completed within 90 calendar days of the completion of grading or disturbance (SDMC 142.0411 [c])

- SDMC Section 142.0151 includes requirements to ensure protection of paleontological resources, as follows:

  (a) Paleontological resources monitoring shall be required in accordance with the General Grading Guidelines for Paleontological Resources in the Land Development Manual for any of the following:

  (1) Grading that involves 1,000 cubic yards or greater, and 10 feet or greater in depth, in a High Resource Potential Geologic Deposit/Formation/Rock Unit; or

  (2) Grading that involves 2,000 cubic yards or greater, and 10 feet or greater in depth, in Moderate Resource Potential Geologic Deposit/Formation/Rock Unit; or

  (3) Grading on a fossil recovery site or within 100 feet of the mapped location of a fossil recovery site.

  (b) If paleontological resources, as defined in the General Grading Guidelines for Paleontological Resources, are discovered during grading, notwithstanding Section 142.0151(a), all grading in the area of discovery shall cease until a qualified paleontological monitor has observed the discovery, and the discovery has been recovered in accordance with the General Grading Guidelines for Paleontological Resources.

c. City of San Diego Land Development Manual

The City of San Diego Land Development Manual Appendix P identifies general grading guidelines for paleontological resources, including standard monitoring requirements. The City of San Diego requires the placement of standard monitoring requirements on grading plans when needed consistent with SDMC Section 142.0151.

4.4.3 Issue 1: Geologic Hazards

4.4.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to geologic hazards in the City of Chula Vista:

- Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

  i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

- Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

b. Impact Analysis

Ground Rupture and Ground Shaking

Ground rupture and surface faulting can occur in the location of an active fault, where the ground surface can tear the surface pushing the ground apart and upward. As previously described, the project site is not underlain by known active or potentially active faults. Additionally, the project site is not within a State of California Earthquake Fault Zone, and therefore the risk associated with ground rupture hazard is very low at the project site due to the absence of active faults at the project site; however, like the majority of southern California, the site is in a seismically active area and the project site could be subjected to moderate to severe ground shaking in the event of an earthquake. Consistent with CVMC Section 15.04.040, a site-specific Geotechnical Investigation was prepared to evaluate subsurface soil and geologic conditions at the site and provide conclusions and recommendations pertaining to the geotechnical aspects of developing the property as proposed (see Appendices E-1 through E-4).

The project would comply with all applicable state and local regulations and building standards, including CBC seismic design considerations set forth in Table 6.5.1 of the Geotechnical Investigation (see Appendix E-1). Specific geotechnical criteria required in the design and construction of the project are detailed in Section 6 of the Geotechnical Investigation (see Appendix E-1). All design considerations listed in Section 6 of the Geotechnical Investigation would be applied to project development including: shoring and excavation requirements (as needed based on final plans); grading recommendations; slope stability measures and landscaping requirements (see Appendix E-1).

Overall, consistent with City of Chula Vista General Plan Objective E 14, the project would minimize the risk of injury, loss of life, and property damage associated with ground shaking. The project would be designed and constructed to include geotechnical design measures based on the recommendations of the site-specific Geotechnical Investigation pursuant to City of Chula Vista General Plan Policy E 14-3, and in accordance with applicable regulatory requirements, the inclusion of which would avoid the potential for risks related to seismic events.

Liquefaction and Seismically Induced Settlement

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: (1) shallow groundwater; (2) low density non-cohesive (granular) soils; and

(3) high-intensity ground motion. Liquefaction is typified by a buildup of pore-water pressure in the affected soil layer to a point where a total loss of shear strength occurs, causing the soil to behave as a liquid. Studies indicate that saturated, loose to medium dense, near surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. Due to the dense nature of the soils underlying the site, proposed grading, and the lack of permanent, shallow groundwater, there is a low risk of liquefaction occurring at the project site.

Landslides and Mudslides

Based on published geologic maps for the project site vicinity, landslides are not mapped on the property or at a location that could impact the project site; however, the site is identified as being within Category 22 for possible landslides (see Appendix E-1). The site-specific Geotechnical Investigation (see Appendix E-1) evaluated the potential for geologic hazards including risk of landslide or mudslides. No landslide-related features were identified in the north-facing slope located near the south property boundary which could present a landslide risk. The slope to the east of the project site is a manufactured slope that was installed consistent with City of San Diego grading and compaction requirements that would ensure no risk of landslide. The remainder of the project site is flat, and no slope areas would pose a risk of landslide. However, as detailed in the Infiltration Feasibility Condition Letter (see Appendix E-5), the site is underlain by undocumented fill associated with previous site grading, alluvium, colluvium, Terrace Deposits, and Mission Valley Formation. Infiltration testing was performed on the property, which showed very slow infiltration rates; therefore, stormwater infiltration is not recommended because infiltration could cause slope instability to the existing natural and manufactured fill slopes that ascend to the east, west and south. All stormwater infiltration areas would be lined with an impermeable barrier to reduce the potential for water infiltration into the underlying soils, consistent with geotechnical recommendations.

Additionally, there are no susceptible slope conditions on-site or in the surrounding area that could become saturated resulting in mudslide conditions.

Geologic Stability

The Geotechnical Investigation (see Appendices E-1 through E-4) determined that there are no potential landslide areas on the project site or in the surrounding areas that could impact the project site. Similarly, based on the project site's soils and underlying geology, the site would not be subject to potential impacts related to lateral spreading or collapse. Additionally, the potential for the project to be impacted by liquefaction is considered low. With implementation of the recommendations of the Infiltration Feasibility Condition Letter (see Appendix E-5), impacts from the risk of slope instability to the existing and manufactured fill slopes on the site as well as the risk of settlement would be avoided. The potential for dry sand settlement would be negligible, and seismic settlement below groundwater from liquefaction could be minimized through adherence to design recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4).

c. Significance of Impacts

The project site is not underlain by an active fault and has an underlying geology that is not prone to liquefaction. Additionally, no landslide risk areas have been identified on or adjacent to the project site. Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and Infiltration Feasibility Condition Letter (see Appendix E-5) prepared for the project and compliance with applicable CBC regulations would ensure that impacts related to geologic hazards would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to geologic hazards:

- Would the project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

- Would the project result in a substantial increase in wind or water erosion of soils, either on or off the site?

- Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

According to the City of San Diego's Significance Determination Thresholds (2022), geologic conditions exist within certain areas of the City of San Diego which have the potential to pose serious problems when land is developed. The City of San Diego staff determine the potential for significant impacts on a case-by-case basis. Typically, standard construction practices recommended in a geologic report would not be mitigation.

b. Impact Analysis

The analysis of impacts related to geologic hazards under Annexation Scenario 2a would be the same as the No Annexation Scenario/Annexation Scenario 2b discussion. The Geotechnical Investigation prepared for the project would apply under all scenarios. Except for possible strong seismic shaking, no significant geologic hazards including landslide, mudslide or ground failure were observed or are known to exist on the site that would adversely affect the site (see Appendices E-1 through E-5). Refer to Section 4.4.3.1.b for further details.

SDMC Section 145.1803(a)(2) states that no building permit shall be issued for construction where the Geotechnical Investigation establishes that the construction of buildings or structures would be unsafe because of geologic hazards. Site development would be required to comply with the SDMC and the CBC to demonstrate that the recommendations of the project's Geotechnical Investigation (see Appendices E-1 through E-5) are implemented.

As detailed in Section 4.4.3.1.b, Annexation Scenario 2a would avoid significant impacts associated with seismic ground shaking through compliance with CBC seismic design parameters and recommendations of the Geotechnical Investigation (see Appendix E-1) as required by SDMC Section 145.1803.

The project site was identified to have a very low to medium expansive soil potential. The Geotechnical Investigation (see Appendix E-1) included a recommendation related to foundation design to reduce the potential for slab cracking. Implementation of the Geotechnical Investigation recommendations during construction and compliance with CBC recommendations would ensure adverse impacts to property would be minimized.

c. Significance of Impacts

Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and the Infiltration Feasibility Condition Letter (see Appendix E-5) prepared for the project and compliance with applicable SDMC and CBC regulations would ensure that impacts related to geologic hazards would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4.4 Issue 2: Erosion

4.4.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to erosion in the City of Chula Vista:

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

b. Impact Analysis

Ground-disturbing activities during construction of the project could potentially leave loose soil temporarily exposed to the erosive forces of rainfall and high winds, which would increase the potential for soil erosion and loss of topsoil. Prolonged erosion can result in effects such as damaging or destabilizing slopes, soil loss, and deposition of eroded material in roadways or

drainage structures. In addition, off-site sediment transport can adversely affect downstream receiving water quality. The potential for erosion and sedimentation impacts would be temporarily increased as a result of proposed construction, through activities such as excavation, grading, and removal of surface stabilizing features (e.g., vegetation and pavement). However, the project would reduce such impacts via implementation of a required project-specific Storm Water Pollution Prevention Plan (SWPPP), which would describe temporary best management practices (BMPs) to be implemented during construction to prevent soil erosion that could result in discharge of sediment and other pollutants into the City of Chula Vista's storm water system. BMPs would provide erosion and sedimentation control during construction through measures such as silt fences, fiber rolls, or gravel bags. The SWPPP is a requirement of the National Pollutant Discharge Elimination System (NPDES) permit and would regulate construction BMPs. Specifically, project construction BMPs must comply with the requirements outlined in the CVMC and City of Chula Vista Jurisdictional Runoff Management Program, which requires the submittal of construction BMP plans prior to project approval. Consistent with these requirements, the project prepared a project-level Priority Development Project Storm Water Quality Management Plan (SWQMP) (see Appendix N) identifying a preliminary list of BMPs, which would be implemented as project design features, to minimize disturbance, protect slopes, reduce erosion, and limit or prevent various pollutants from entering surface water runoff.

Post-construction, all exposed slopes would be landscaped to ensure soil stabilization. Structural BMPs proposed by the project include biofiltration basins and modular wetlands that would provide hydromodification control and reduce potential for soil erosion by controlling run-off volume and velocity. The SWQMP provides the post-construction implementation of source control, site design, and/or structural BMPs to reduce the potential for soil erosion by controlling run-off volume and velocities (see Appendix N).

Overall, the project 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. Ultimately, all disturbed areas would be stabilized through either construction of structures/hardscape, through landscape installation, or long-term structural BMPs. Potentially significant erosion impacts would be addressed through conformance with NPDES standards and local stormwater regulations (described in greater detail in Sections 4.12.3.1 and 4.12.3.2 of this EIR), as well as site-specific measures included in the project's SWQMP.

c. Significance of Impacts

Adherence to the recommendations presented in the SWQMP prepared for the project (see Appendix N) along with the future SWPPP and compliance with national and local regulations would ensure that impacts related to soil erosion in No Annexation Scenario and Annexation Scenario 2b would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4.4.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to erosion:

- Result in a substantial increase in wind or water erosion of soils, either on or off the site

b. Impact Analysis

The potential impacts related to soil erosion under Annexation Scenario 2a would be the same as the impacts described in Section 4.4.4.1.b. Consistent with that analysis, the project under Annexation Scenario 2a would avoid significant impacts associated with soil erosion through implementation of BMPs required to achieve conformance with NPDES standards and local stormwater regulations during grading/construction and operations. Under Annexation Scenario 2a, the project would be developed in the City of San Diego and would be subject to SDMC requirements including Section 142.0220, which requires development to comply with the Stormwater Management and Discharge Control Ordinance. SDMC 142.0220(b) requires all development to be conducted in a way that prevents erosion and stops sediment and pollutants from leaving the property to the maximum extent practicable. The property owner is responsible to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures to the satisfaction of the City Manager, whether or not such measures are a part of approved plans. The property Owner/Permittee shall install, monitor, maintain, and revise these measures, as appropriate, to ensure their effectiveness. Erosion prevention, sediment control, and phased grading shall be implemented to control and avoid erosion. Additionally, City of San Diego implementation of SDMC Section 142.0411 would require implementation of revegetation and erosion control on all graded, disturbed, or eroded areas. Permanent revegetation is required in accordance with the standards in the City of San Diego's Land Development Manual.

c. Significance of Impacts

Adherence to BMPs required for NPDES requirements in addition to SDMC requirements for erosion control and slope stabilization under Annexation Scenario 2a would ensure impacts related to soil erosion would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4.5 Issue 3: Unstable Geologic Units or Soils

4.4.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to unstable geologic units or soils in the City of Chula Vista:

- Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- Does the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

b. Impact Analysis

Expansive Soils

The project site was identified to have a very low to medium expansive soil potential. The Geotechnical Investigation (see Appendix E-1) included a recommendation related to foundation design to reduce the potential for slab cracking. Implementation of the Geotechnical Investigation recommendations during construction and compliance with CBC recommendations would ensure adverse impacts to property would be minimized.

Soils Capable of Supporting Septic

The project is not proposing to use septic tanks or alternative waste disposal systems. Connection to public sewer is proposed.

c. Significance of Impacts

Adherence to the recommendations presented in the Geotechnical Investigation (see Appendices E-1 through E-4) and the Infiltration Feasibility Condition Letter (see Appendix E-5) would ensure that impacts related to expansive soils would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.4.5.2 Annexation Scenario 2a

The City of San Diego's initial study questions do not address expansive soils specifically; instead, it is addressed as "unstable" soils in Issue 1 above. The City of San Diego's initial study questions do not

address soils capable of supporting septic tanks; however, the analysis provided in Section 4.4.5.1 would be the same for Annexation Scenario 2a.

4.4.6 Issue 4: Paleontological or Unique Geologic Feature

4.4.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to paleontological or unique geologic features in the City of Chula Vista:

- Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

b. Impact Analysis

No unique geologic features have been identified on the project site. The project site is underlain by middle Eocene (approximately 42 million years ago) Mission Valley Formation, middle to late Pleistocene (approximately 781,000 to 11,700 years ago) Old Alluvial Floodplain Deposits, and Holocene (less than 11,700 years ago) to late Pleistocene (129,000 to 11,700 years ago) Young Alluvial Floodplain Deposits (see Appendix F-1). As detailed in Appendix F-1, the San Diego National History Museum indicated the project site is likely underlain by the late Pliocene to early Pleistocene (approximately 3.6 to 1.8 million years ago) San Diego Formation in areas mapped as the Mission Valley Formation. Both Mission Valley Formation and San Diego Formation have high paleontological resource sensitivity.

The San Diego National History Museum records showed no records of fossil localities found within the boundaries of the project site; however, 16 fossil localities are within a 1-mile radius of the project site. Of these, seven localities are from geological units not present within the project site, and nine fossil localities are from the San Diego Formation. A paleontological survey performed for the project site revealed limited exposure of eroded San Diego Formation and Young and Old Alluvial Deposits. These deposits were inspected for potential fossils weathering on the surface. Based on the records search results, survey results, and map and literature review, no paleontological resources were identified on the site; however, the project site has moderate to high potential to produce paleontological resources during planned construction activities. The project would adhere to the City of Chula Vista General Plan policies relating to protection of paleontological resources; however, due to the proposed 110,400 cubic yards of grading to a depth of 22 feet, impacts to resources within the Pleistocene Alluvial Floodplain Deposits and the San Diego and/or Mission Valley Formation could occur during grading.

c. Significance of Impacts

Impacts related to unique geology would be less than significant as no unique geology is present.

Construction activity could uncover and potentially damage paleontological resources within the Pleistocene Alluvial Floodplain Deposits and the San Diego and/or Mission Valley Formation. Impacts would be significant.

d. Mitigation Measures

To mitigate for impacts to paleontological resources, the project would be required to implement mitigation measure **GEO-CV-1**. In the No Annexation Scenario and Annexation Scenario 2b, the City of Chula Vista would implement paleontological resources mitigation for both the project site and off-site improvement areas in the City of San Diego.

GEO-CV-1: **Paleontological Resources.** Prior to the issuance of grading permits, the applicant shall provide written confirmation to the City of Chula Vista that a qualified paleontologist has prepared a Paleontological Resources Impact Mitigation Program (PRIMP) and has been retained to carry out the PRIMP. A qualified paleontologist is defined as an individual with an MS or PhD in paleontology or geology who is familiar with paleontological procedures and techniques and has expertise in local geology, stratigraphy, and biostratigraphy. The PRIMP shall be consistent with the Society of Vertebrate Paleontology (2010) guidelines and contain the following components:

- Introduction to the project, including project location, description grading activities with the potential to impact paleontological resources, and underlying geologic units.
- Description of the relevant laws, ordinances, regulations, and standards pertinent to the project and potential paleontological resources.
- Requirements for the qualified paleontologist to attend the preconstruction meeting and provide worker environmental awareness training at the preconstruction meeting as well as at the jobsite the day grading is to be initiated. In addition, the qualified paleontologist shall inform the grading contractor and City Resident Engineer of the paleontological monitoring program methodologies.
- Identification of where paleontological monitoring of excavations impacting the San Diego Formation, Old Alluvial Floodplain Deposits, and deep excavations (greater than five feet below the ground surface) in areas underlain by Young Alluvial Floodplain Deposits is required within the project site based on construction plans and/or geotechnical reports.

- Procedures for adequate paleontological monitoring (including necessary monitoring equipment), methods for treating fossil discoveries, fossil recovery procedures, and sediment sampling for microvertebrate fossils, including the following requirements:

    - A paleontological monitor shall be on-site at all times during the original cutting of previously undisturbed sediments of moderately to highly sensitive geologic units (e.g., San Diego Formation, Old Alluvial Floodplain Deposits, and excavations below a depth of five feet below the ground surface in areas underlain by Young Alluvial Floodplain Deposits) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. Monitoring is not required during shallow excavations within Young Alluvial Floodplain Deposits.

    - Paleontological monitoring is not required in areas underlain by Artificial Fill unless grading activities are anticipated to extend beneath the veneer of fill and impact underlying geological units with moderate to high paleontological sensitivity (e.g., San Diego Formation, Old Alluvial Floodplain Deposits, or deeper excavations into Young Alluvial Floodplain Deposits).

    - If fossils are discovered, the qualified paleontologist and/or paleontological monitor shall recover them. The paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading within 50 feet of the resource to allow recovery of fossil remains. Because of the potential for the recovery of small fossil remains, it may be necessary in certain instances, and at the discretion of the qualified paleontologist, to set up a screen-washing operation on the project site. Alternatively, sediment samples can be collected and processed off-site.

- Paleontological reporting, and collections management:

    - Prepared fossils along with copies of all pertinent field notes, photos, maps, and the final paleontological monitoring report discussed below shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum within 90 days of completion of monitoring unless the City of Chula Vista and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time. Any curation costs shall be paid for by the applicant.

    - A final paleontological monitoring report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils, and shall be submitted to the designated scientific institution within 90 days of the completion of monitoring unless the City of Chula Vista and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time.

e. Significance of Impacts after Mitigation

Implementation of mitigation measure **GEO-CV-1** would ensure that a qualified paleontologist is on-site during grading and excavation to monitor construction activity and inspect cuts for fossils and paleontological resources that may be uncovered. The mitigation measure requires steps to be taken should resources be discovered to collect, curate and/or preserve found resources. Through implementation of mitigation measure **GEO-CV-1**, significant impacts to paleontological resources would be reduced to less than significant levels.

4.4.6.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to paleontological or unique geologic features:

- Would the project: 1) Require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit? 2) Require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

The City of San Diego's CEQA Significance Determination Thresholds (2022) provide guidance for determining the potential significance of paleontological resources. Based on the City's thresholds, a significant impact to paleontological resources could occur if the proposed project would result in development that requires:

- Over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit; or

- Over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit.

Additionally, the thresholds provide the following additional guidance for determining significance:

- If there are sedimentary rocks such as those found in the coastal areas, they usually contain fossils.

- If there are granitic or volcanic rocks such as those found in the inland areas, they usually will not contain fossils.

The City of San Diego's CEQA Significance Determination Thresholds (2022) establish a Paleontological Monitoring Determination Matrix provided in Table 4.4-1, which identifies geological deposits, formations, and rock units in the City and describes the potential fossil localities and sensitivity ratings associated with each formation. The sensitivity of the paleontological resource determines the significance of a paleontological impact, described as follows:

- **High Sensitivity.** High sensitivity is assigned to geologic formations known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleobiology and evolutionary history (phylogeny) of animal and plant groups. Generally speaking, highly sensitive formations produce vertebrate fossil remains or are considered to have the potential to produce such remains.

- **Moderate Sensitivity.** Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved, common elsewhere, or stratigraphically unimportant fossil material. The moderate sensitivity category is also applied to geologic formations judged to have a strong, but unproven potential for producing important fossil remains.

- **Low Sensitivity.** Low sensitivity is assigned to geologic formations that, based on their relative youthful age and/or high-energy depositional history, are judged unlikely to produce important fossil remains. Typically, low sensitivity formations produce invertebrate fossil remains in low abundance.

- **Zero Sensitivity.** Zero sensitivity is assigned to geologic formations that are entirely igneous in origin and therefore have no potential for producing fossil remains, or to artificial fill materials that lose the stratigraphic/geologic context of any contained organic remains (e.g., fossils).

The City of San Diego CEQA Significance Determination Thresholds (2022) indicate that significant impacts to paleontological resources are most often mitigated by the implementation of a monitoring program carried out under the supervision of a qualified paleontologist including preconstruction meetings as well as on-site inspections of active excavations. However, since adoption of amendments to the SDMC described in Section 4.4.2.4.b, the paleontological resources thresholds and monitoring requirements are required by ordinance; therefore, compliance with the grading ordinance reduces impacts to paleontological resources to less than significant.

Table 4.4-1
Paleontological Monitoring Determination Matrix

Geological Deposit/Formation/ Rock Unit	Potential Fossil Localities	Sensitivity Rating[1]
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)[2]	All communities where this unit occurs	High
Cabrillo Formation (Kcs)	All communities where this unit occurs	Moderate
Delmar Formation (Td)	All communities where this unit occurs	High
Friars Formation (Tf)	All communities where this unit occurs	High
Granite/Plutonic (Kg)	All communities where this unit occurs	Zero
Lindavista Formation (Qln, Qlb)[2]	A. Mira Mesa/Tierrasanta B. All other areas	A. High B. Moderate
Lusardi Formation (Kl)	A. Black Mountain Ranch/Lusardi Canyon Poway/Rancho Santa Fe B. All other areas	A. High B. Moderate
Mission Valley Formation (Tmv)	All communities where this unit occurs	High
Mt. Soledad Formation (Tm, Tmss, Tmsc)	A. Rose Canyon B. All other areas	A. High B. Moderate
Otay Formation (To)	All communities where this unit occurs	High
Point Loma Formation (Kp)	All communities where this unit occurs	High
Pomerado Conglomerate (Tp)	A. Scripps Ranch/Tierrasanta B. All other areas	High
River/Stream Terrace Deposits (Qt)	A. Southeastern/Chollas Valley/ Fairbanks Ranch/ Skyline/Paradise Hills/Otay Mesa, Nestor/San Ysidro B. All other areas	A. Moderate B. Low
San Diego Formation (Qsd)	All communities where this unit occurs	High
Santiago Peak Volcanics (Jsp) A. Metasedimentary B. Metavolcanic	A. Black Mountain Ranch/La Jolla Valley, Fairbanks Ranch/Mira Mesa/ Peñasquitos B. All other areas	A. Moderate B. 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)	A. Black Mountain Ranch/Carmel Valley B. All other areas	A. High B. Low

[1]**Sensitivity Rating** **Grading Thresholds for Required Monitoring**
High = > 1,000 cubic yards and 10 feet+ deep
Moderate = > 2,000 cubic yards and 10 feet+ deep
Zero – Low = Monitoring not required

[2]Baypoint – Broadly correlative with Qop 1-8 of Kennedy and Tan (2008) new mapping nomenclature.
[3]Lindavista – Broadly correlative with Qvop 1-13 of Kennedy and Tan (2008) new mapping nomenclature.

NOTES:
- Monitoring is always required when grading on a fossil recovery site or near a fossil recovery site in the same geologic deposit/formation/rock unit as the project site as indicated on the Kennedy Maps.
- Monitoring may be required for shallow grading (i.e., <10 feet) when a site has previously been graded and/or unweathered geologic deposits/formations/rock units are present at the surface.
- Monitoring is not required when grading documented or undocumented artificial fill.

SOURCE: City of San Diego CEQA Significance Determination Thresholds 2022.

b. Impact Analysis

No unique geologic features have been identified on the project site.

The geologic formations identified on the project site and results of the paleontological investigation are discussed in Section 4.4.6.1.b. As discussed, the project would excavate into Mission Valley and San Diego Formations. These formations have a high paleontological resource potential according to the City's Paleontological Monitoring Determination Matrix.

If paleontological resources are discovered during grading, the SDMC requires that grading in the area of discovery cease until a qualified paleontological monitor has observed the discovery, and the discovery has been recovered in accordance with the General Grading Guidelines for Paleontological Resources. The General Grading Guidelines for Paleontological Resources are contained within Appendix P of the Land Development Manual. These guidelines require the placement of a standard monitoring requirement on all grading plans to ensure paleontological monitoring is implemented and defines the steps to be taken to ensure significant paleontological resources are recovered, recorded, and curated, in the event resources are encountered. Implementation of the General Grading Guidelines for Paleontological Resources, as required by the SDMC, would ensure that potential significant impacts to paleontological resources associated with construction activities would be avoided.

c. Significance of Impacts

Impacts related to unique geology would be less than significant as no unique geology is present.

Compliance with the SDMC and the City of San Diego General Grading Guidelines for Paleontological Resources contained within Appendix P of the Land Development Manual would ensure adverse impacts to paleontological resources during construction are avoided and any fossils discovered are recovered. Therefore, impacts would be less than significant.

d. Mitigation Measures

Impacts related to unique geology and paleontological resources would be less than significant. No mitigation is required.

4.5 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) emissions for the Nakano Project (project), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if applicable related to implementation of the project. The following discussion is based on the Greenhouse Gas Emissions Analysis Technical Report, prepared by RECON Environmental Inc., included as Appendix G. As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego under both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.5.1 Existing Conditions

4.5.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the Sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (U.S. Environmental Protection Agency [U.S. EPA] 2017a).

The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus contributing substantially to the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and that they are the most significant driver of observed climate change (Intergovernmental

Panel on Climate Change [IPCC] 2013; U.S. EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013).

4.5.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). 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. The following are the GHGs of primary concern in this analysis:

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 involve the combustion of fuels, such as coal, oil, natural gas, and wood, and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, race cars, and aerosol sprays).

4.5.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (U.S. EPA 2017b). The IPCC developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance

relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO_2e). Emissions are converted into CO_2e based on 100-year Global Warming Potential, taken from the IPCC Assessment Reports. The current version is the IPCC Sixth Assessment Report. CO_2e emissions include the basket of Kyoto gases (carbon dioxide, methane, nitrous oxide, as well as fluorinated gases). CO_2, CH_4, and N_2O are the relevant GHGs in this analysis because they are the main GHGs emitted from project-related sources (i.e., mobile, energy, area, water and wastewater, and solid waste sources).

The current version of California Emissions Estimator Model (CalEEMod) (version 2022.1) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2, and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the project.

4.5.1.4 GHG Inventories

a. State Inventory

According to California's 2000–2020 GHG emissions inventory, California emitted 369.2 MMT CO_2e in 2020, including emissions resulting from out-of-state electrical generation (California Air Resources Board [CARB] 2022a). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high-GWP substances, and recycling and waste. The California GHG emission source categories (as defined in CARB's 2008 Scoping Plan) and their relative contributions in 2020 are presented in Table 4.5-1.

Table 4.5-1
Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total
Transportation	135.8	36.8
Industrial uses	73.3	19.9
Electricity Generation[a]	59.5	16.1
Commercial and Residential	38.7	10.5
Agriculture	31.6	8.6
High GWP substances	21.3	5.8
Recycling and waste	8.9	2.4
TOTAL	**369.2**	**100.0**

SOURCE: CARB 2022a.
NOTES: GHG = greenhouse gas; GWP = global warming potential; MMT CO_2e = million metric tons of carbon dioxide equivalent.
Emissions reflect 2020 California GHG inventory.
Totals may not sum due to rounding.
[a]Includes emissions associated with imported electricity, which account for 18.6 MMT CO_2e.

b. City of Chula Vista Inventory

The City of Chula Vista regularly conducts GHG emission inventories to support Climate Action Plan (CAP) implementation. Estimated GHG emissions by sector for the years 2018 and 2020 are shown in Table 4.5-2.

Table 4.5-2
Chula Vista Greenhouse Gas Emissions by Sectors

Source Category	2018 Annual GHG Emissions (MT CO_2e)	2020 Annual GHG Emissions (MT CO_2e)	Percent Change
Community Analysis			
Transportation	668,000	581,000	-13%
Energy Use	411,000	451,000	10%
Solid Waste	52,000	50,000	-4%
Potable Water	12,000	13,000	8%
Wastewater	3,000	3,000	0%
Subtotal	*1,146,000*	*1,098,000*	*-4%*
Municipal Analysis			
Transportation	1,761	2,583	46.7%
Energy Use	4,855	5,015	3.3%
Solid Waste	2,797	2,934	4.9%
Potable Water	795	659	-17/1%
Subtotal	*10,207*	*11,191*	*9.6%*

SOURCE: City of Chula Vista 2022a and 2022b.
NOTES: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide equivalent.
Totals may not sum precisely due to rounding.

c. City of San Diego Inventory

The City of San Diego provided an update to their GHG emission inventory in their 2020 CAP Annual Report Appendix (City of San Diego 2020). The City's GHG emissions for 2019 are presented in Table 4.5-3.

Table 4.5-3
GHG Emissions Sources in the City of San Diego

Source Category	Annual GHG Emissions (MT CO_2e)	Percent of Total*
Transportation	5,296,000	54.9
Electricity	2,069,000	21.5
Natural Gas	1,911,000	19.8
Wastewater and Solid Waste	303,000	3.1
Water	67,000	0.7
TOTAL	**9,646,000**	**100**

SOURCE: City of San Diego 2020.
MMT CO_2e = million metric tons of carbon dioxide equivalent per year.
*Percentage of total has been rounded, and total may not sum due to rounding

d. Project Site

The project site is currently undeveloped and is not a source of GHG emissions.

4.5.2 Regulatory Framework

In response to rising concern associated with increasing GHG emissions and global climate change impacts, several plans and regulations have been adopted at the federal, state, and local levels with the aim of reducing GHG emissions. The following is a discussion of the federal, state, and local plans and regulations most applicable to the project.

4.5.2.1 Federal

The federal Corporate Average Fuel Economy standards determine the fuel efficiency of certain vehicle classes in the U.S. The National Highway Traffic Safety Administration sets Corporate Average Fuel Economy standards for passenger cars and for light trucks (collectively, light-duty vehicles), and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines. With improved gas mileage, fewer gallons of transportation fuel would be combusted to travel the same distance, thereby reducing nationwide GHG emissions associated with vehicle travel. The most recent standards require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024 and 2025, and 10 percent annually for model year 2026.

4.5.2.2 State Regulations

a. Executive Orders and Statewide GHG Emission Targets

Executive Order S-3-05

This Executive Order (EO) established the following GHG emission reduction targets for the State of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels; and
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California Environmental Protection Agency to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and report on mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years.

Executive Order B-30-15

This EO establishes a GHG emission reduction goal for the State of California by 2030 of 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal.

b. California Global Warming Solutions Act

In response to EO S-3-05, the California Legislature passed Assembly Bill 32 (AB) 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of AB 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009 indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

In 2008, CARB estimated that annual statewide GHG emissions were 427 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 1990 and would reach 596 MMT CO_2e by 2020 under a business as usual (BAU) condition (CARB 2008a). To achieve the mandate of AB 32, CARB determined that a 169 MMT CO_2e (or approximate 28.5 percent) reduction in BAU emissions was needed by 2020. In 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. CARB determined that the economic downturn reduced the 2020 BAU by 55 MMT CO_2e; as a result, achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 (not 28.5) percent from the 2020 BAU. California has achieved its 2020 goal.

Approved in September 2016, Senate Bill (SB) 32 updates the California Global Warming Solutions Act of 2006 and enacts EO B-30-15. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. This is equivalent to an emissions level of approximately 260 MMT CO_2e for 2030. In implementing the 40 percent reduction goal, CARB is required to prioritize emissions reductions to consider the social costs of the emissions of GHGs; where "social costs" is defined as "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year."

c. California Climate Crisis Act

AB 1279 (also known as the California Climate Crisis Act), approved in September 2022, requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below 1990 levels. The bill would require the state board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies.

d. Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*), which identifies the main strategies California will implement to achieve the GHG reductions necessary to reduce forecasted BAU emissions in 2020 to the state's historic 1990 emissions level (CARB 2008a). In November 2017, CARB released the 2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target (2017 Scoping Plan; CARB 2017). The 2017 Scoping Plan identifies state strategies for achieving the state's 2030 GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan Scenario build on existing programs such as the Low Carbon Fuel Standard, Advanced Clean Cars Program, Renewables Portfolio Standard (RPS), Sustainable Communities Strategy (SCS), Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. Additionally, the 2017 Scoping Plan proposes new policies to address GHG emissions from natural and working lands. The 2022 Scoping Plan Update for Achieving Carbon Neutrality (2022 Scoping Plan; CARB 2022b) was adopted in December 2022. The 2022 Scoping Plan assesses the progress towards the 2030 GHG emissions reduction target identified in the 2017 Scoping Plan, and lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The 2022 Scoping Plan identifies strategies related to clean technology, energy development, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

e. Regional Emissions Targets – Senate Bill 375

SB 375, the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP). The San Diego region's MPO is the San Diego Association of Governments (SANDAG), and the region's SCS/RTP is San Diego Forward: The 2021 Regional Plan (see Section 4.1.2.1.a). The current targets for the region are a 15 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020 and a 19 percent reduction by 2035. These targets are periodically reviewed and updated.

f. Renewables Portfolio Standard

The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by EOs S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, SB 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's

renewable energy mix goal to 50 percent by year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030.

g. California Code of Regulations, Title 24 – California Building Code

The California Code of Regulations (CCR), Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards as outlined below.

Title 24, Part 6 – Energy Efficiency Standards

The CCRs, Title 24, Part 6 is the California Energy Efficiency Standards for Residential and Nonresidential Buildings (also known as the California Energy Code). This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficient technologies and methodologies as they become available, and incentives in the form of rebates and tax breaks are provided on a sliding scale for buildings achieving energy efficiency above the minimum standards.

The current 2022 Title 24 Building Energy Efficiency Standards went into effect on January 1, 2023. The 2022 Energy Code increases on-site renewable energy generation from solar, increases electric load flexibility to support grid reliability, reduces emissions from newly constructed buildings, reduces air pollution for improved public health, and encourages adoption of environmentally beneficial efficient electric technologies.

New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The compliance reports must demonstrate a building's energy performance through use of CEC approved energy performance software that shows iterative increases in energy efficiency given the selection of various heating, ventilation, and air conditioning; sealing; glazing; insulation; and other components related to the building envelope. The CEC estimates that non-residential buildings will use 30 percent less energy through implementation of the 2019 Energy Code, mainly due to lighting upgrades.

Title 24, Part 11 – California Green Building Standards

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The most recent 2022 CALGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements. The mandatory measures are related to planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen mandatory requirements must be demonstrated through completion of compliance forms and worksheets.

2022 CALGreen also includes two tiers of residential and non-residential voluntary measures that encourage local jurisdictions to raise the sustainability goals Tier 1 adds additional requirements beyond the mandatory measures, and Tier 2 further increases the requirements.

4.5.2.3 Local Regulations – City of Chula Vista

a. Chula Vista Carbon Dioxide (CO_2) Reduction Plan

Each participant in the International Council of Environmental Initiatives program was to create local policy measures to ensure multiple benefits to the City and, at the same time, identify a carbon reduction goal through the implementation of those measures. The carbon reduction goal was to fit within the realm of international climate treaty reduction goals.

In its CO_2 Reduction Plan, developed in 1996 and officially adopted in 2000, Chula Vista committed to lowering its CO_2 emissions by diversifying its transportation system and using energy more efficiently in all sectors. To focus efforts in this direction, Chula Vista adopted the international CO_2 reduction goal of returning to pre-1990 levels by 2010. In order to achieve this goal, eight actions were identified, which when fully implemented, were anticipated to save 100,000 tons of CO_2 each year.

As a result of the 2005 GHG Emissions Inventory Report, in May 2007, staff reported to the City Council that citywide GHG emissions had increased by 35% (mainly due to residential growth) from 1990 to 2005, while emissions on a per capita basis and from municipal operations decreased by 17 percent and 18 percent, respectively. The City Council directed staff to convene a Climate Change Working Group to develop recommendations to reduce the community's GHGs in order to meet the City's 2010 GHG emissions reduction targets.

As a result of the 2012 GHG Emissions Inventory Report, staff reported to the City Council that citywide GHG levels are 1,011,481 MT CO_2e. Compared to 2005, Chula Vista's citywide GHG emissions have increased by 8 percent. However, 2012 per capita emissions are approximately 5 percent below 2005 levels and 33% below 1990 levels. Unlike the last two inventories, 2009 and 2010, there was a slight increase in citywide energy consumption over the last couple of years due most likely to local economic recovery. As with past inventories, community transportation activity has continued increasing with 2012 vehicle miles traveled about 29 percent higher than in 2005. In order to reach the current community emissions reduction goal of 20 percent below 1990 emission levels, the City will have to reduce its GHG emissions by more than 359,332 MT CO_2e (35 percent); however, statewide initiatives are expected to help achieve some of these reductions by 2020.

b. 2017 Climate Action Plan

The latest version of the CAP was adopted on September 26, 2017, by the City Council and provides updated goals, policies, actions, and the latest citywide inventory and projections. The CAP is not

considered a California Environmental Quality Act (CEQA) "qualified" plan under CEQA Guidelines Section 15183.5, as it has not been adopted in a public process following environmental review. The Climate Change Working Group has been evaluating new opportunities to help reach the Chula Vista CAP's GHG gas reduction goals, which are based on the Second Update goals of 6 MT CO_2e per person by 2030 and 2 MT CO_2e per person by 2050. As such, they have identified the following 11 action areas that could generate up to 208,220 MT in reductions by 2020, while improving local air quality, generating utility savings, reducing traffic congestion, and promoting a healthier community (City of Chula Vista 2017). The actions are related to water conservation and reuse, waste reduction, renewable and efficient energy, and smart growth and transportation.

c. Green Building Standards/Energy Code

Title 24, Part 11 (CALGreen), was adopted as the Green Building Code of the City for enhancing the design and construction of buildings, building additions, and alterations through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices, excepting such portions as are hereinafter deleted, modified, or amended (Chula Vista Municipal Code Section 15.12.001). As discussed 2022 CALGreen is the current version and was adopted by reference in Chapter 15.12 of the Municipal Code. 2022 Title 24, Part 6 was adopted by reference in Chapter 15.26 of the Municipal Code. It was adopted for the purpose of regulating building design and construction standards to increase efficiency in the use of energy for new residential and nonresidential buildings.

d. Climate Emergency Resolution

The City of Chula Vista has adopted numerous climate related policies, plans, and programs to reduce GHG emissions. The creation of the climate emergency declaration resolution is intended to update the City's GHG reduction goals, to strengthen existing efforts such as the update to the City Operations Sustainability Plan and encourage new City actions and voluntary actions by residents and businesses.

e. City of Chula Vista General Plan

The City of Chula Vista General Plan (City of Chula Vista 2005) includes various policies related to reducing GHG emissions (both directly and indirectly). Applicable policies include the following:

Land Use and Transportation Element

Objective: Promote the use of a balanced transportation system that maximizes safe and non-polluting alternatives for mobility.

Policy LUT-23.1: Encourage the use of bicycles and walking as alternatives to driving.

Policy LUT-23.2: Foster the development of a system of inter-connecting bicycle routes throughout the City and region.

Policy LUT-23.5: Provide linkages between bicycle facilities that utilize circulation element alignments and open space corridors.

Policy LUT-23.8: Provide and maintain a safe and efficient system of sidewalks, trails, and pedestrian crossings.

Policy LUT-23.14: Require new development projects to provide internal bikeway systems with connections to the citywide bicycle networks.

Environmental Element

Objective: Improve local air quality and reduce greenhouse gas emissions by minimizing the release of air pollutants and toxic air contaminants and limiting the exposure of people to such pollutants.

Policy E 6.1: Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit.

Policy E 6.5: Ensure that plans developed to meet the City's energy demand use the least polluting strategies, wherever practical. Conservation, clean renewables, and clean distributed generation should be considered as part of the City's energy plan, along with larger natural gas-fired plants.

Policy E 6.7: Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City's Air Quality Improvement Plan Guidelines or its equivalent, pursuant to the City's Growth Management Program.

Policy E 6.8: Support the use of alternative fuel transit, City fleet and private vehicles in Chula Vista.

Policy E 7.1: Promote development of regulations and building design standards that maximize energy efficiency through appropriate site and building design and through the use of energy-efficient materials, equipment, and appliances.

Policy E 7.6: Encourage the construction and operation of green buildings, considering such programs as the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

Policy E 7.8: Ensure that residential and non-residential construction complies with all applicable City energy efficiency measures and other green building measures that are in effect at the time of discretionary permit review and approval or building permit issuance, whichever is applicable.

Policy E 8.1: Promote efforts to reduce waste, minimize the need for additional landfills, and provide economically and environmentally sound resource recovery, management, and disposal facilities.

Policy E 8.3: Implement source reduction strategies, including curbside recycling, use of small collection facilities for recycling, and composting.

4.5.2.4 Local Regulations - City of San Diego

a. San Diego General Plan

The City of San Diego General Plan sets forth a comprehensive, long-term plan for development within the City of San Diego. The General Plan implements a City of Villages strategy as part of its Strategic Framework, which aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

The **Conservation Element** of the City of San Diego General Plan (City of San Diego 2008) contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, that help define the City of San Diego's identity, and that are relied upon for continued economic prosperity. The purpose of this element is to help the City of San Diego become an international model of sustainable development and conservation and to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City of San Diego's identity, contribute to its economy, and improve its quality of life.

The City of San Diego has adopted the following General Plan **Conservation Element** policies (City of San Diego 2008) related to climate change:

Goal: To reduce the City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally sound waste management.

Goal: To be prepared for, and able to adapt to adverse climate change impacts.

Goal: To become a city that is an internal model of sustainable development and conservation.

Policy CE-A.8: Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-1.2, or by renovating or adding on to existing buildings, rather than constructing new buildings.

Policy CE-A.9: Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:

Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;

Using life cycle costing in decision-making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system.

Policy CE-I.4: Maintain and promote water conservation and waste diversion projects to conserve energy.

Policy CE-I.5: Support the installation of photovoltaic panels, and other forms of renewable energy production.

Promote the use and installation of renewable energy alternatives in new and existing development.

Policy CE-I.10: Use renewable energy sources to generate energy to the extent feasible.

b. City of San Diego Climate Action Plan

In December 2015, the City of San Diego adopted a CAP (City of San Diego 2015) which aimed to reduce emissions 15 percent below the baseline to approximately 11.1 MMT CO_2e by 2020, 40 percent below the baseline to approximately 7.8 MMT CO_2e by 2030, and 50 percent below the baseline of 2010 to approximately 6.5 MMT CO_2e by 2035. In 2022, the City adopted a CAP Update which sets a goal of achieving net zero GHG emissions by 2035 with updated strategies, measures, and actions (City of San Diego 2022). The CAP Update centers climate equity through robust community engagement and pushes for bold action to mitigate the effects of climate change beyond the previously adopted 2015 CAP. Concurrent with the CAP Update, the City adopted new GHG emissions regulations which replace the CAP Consistency Checklist. The 2022 CAP update expands the goals of the 2015 CAP and identifies six strategies for achieving the goal of net zero emissions:

Strategy 1: Decarbonization of the Built Environment;
Strategy 2: Access to Clean & Renewable Energy;
Strategy 3: Mobility & Land Use;
Strategy 4: Circular Economy & Clean Communities;
Strategy 5: Resilient Infrastructure and Healthy Ecosystems; and
Strategy 6: Emerging Climate Actions.

Implementation of these six strategies support the City of San Diego's goal of net zero emissions by 2035. The first strategy, Decarbonization of the Built Environment, addresses natural gas consumption in all buildings, both new development, and in the timespan of the CAP, existing buildings. The second strategy, Access to Clean & Renewable Energy, maintains the 100 percent renewable energy measure and includes for the vehicular sector of its mobility mode share goal of 50 percent, electric vehicle (EV) infrastructure and adoption citywide. The third strategy, Mobility & Land Use, focuses on emissions from transportation and establishes actions that support mode shift through mobility and land use actions and policies. The fourth strategy, Circular Economy & Clean Communities, expands on current zero waste goals, maintains gas capture measures, and supports efforts to increase composting and prevent food waste in response to California State Senate Bill 1383. The fifth strategy, Resilient Infrastructure and Healthy Ecosystems, will help the City of San Diego thrive in the face of the impacts of climate change through a greater focus on the greening of the City of San Diego, starting with Communities of Concern.

The newest strategy, Strategy 6: Emerging Climate Actions, addresses those GHG emissions that will remain after all current identified measures have been achieved, which account for roughly

20 percent of total GHG emissions by 2035. This new strategy focuses on identification of additional actions to reduce GHG emissions via technological innovation, expanding partnerships and supporting research that reduces GHG emissions in all sectors.

c. CAP Consistency Regulations

As part of the implementation measures for the CAP, the City adopted amendments to the San Diego Municipal Code (SDMC) to add CAP Consistency Regulations as Chapter 14, Article 3, Division 14. The CAP Consistency Regulations apply to specified ministerial and discretionary projects to ensure projects comply with the goals and objectives of the updated CAP. The CAP Consistency Regulations apply to the following projects:

- Development that results in three or more total dwelling units on all premises in the development;
- 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
- Parking facilities as a primary use.

To implement the various strategies of the CAP Update, the regulations require:

Section 143.1410 Mobility and Land Use Regulations requires pedestrian enhancements that reduce heat island effects including:

- Providing shading of at least 50 percent of the Throughway Zone through either trees and/or a combination of trees and structures for premises that contains a street yard or abuts a public right of way with a Furnishings Zone.
- If the required trees cannot be provided on-site because the premises does not contain a street yard and does not abut a public right of way within a Furnishings Zone, the applicant shall either plant the required number of trees at an off-site location and enter into an agreement with the owner of the off-site location to provide indefinite maintenance of the trees, or pay the Urban Tree Canopy Fee.
- Where development contains 250 linear feet or more of street frontage, at least one publicly accessible pedestrian amenity shall be provided for every 250 linear feet of street frontage (e.g., trash and recycling receptacles, seating, lighting, public artwork, wayfinding signs, transit stop enhancement).
- At least 50 percent of all residential and non-residential bicycle parking spaces required in accordance with Chapter 14, Article 2, Division 5 shall be supplied with individual outlets for electric charging at each bicycle parking space.

Section 143.1415 Resilient Infrastructure and Healthy Ecosystems Regulations requires two trees to be provided on the premises for every 5,000 square feet of lot area, with a minimum of one tree per

premises. If the required trees cannot be provided on-site, they can either be provided off-site or the Urban Tree Canopy Fee can be paid as detailed above.

If a project is unable to comply with one or more of the CAP Consistency Regulations, a Site Development Permit (Process 3) with deviation findings is required specifying how the project will reduce GHG emissions in a manner comparable to the regulation(s) the project is deviating from.

4.5.3 Issue 1: Greenhouse Gas Emissions

4.5.3.1 No Annexation Scenario and Annexation Scenario 2b

The City of Chula Vista does not have jurisdiction specific CEQA significance thresholds; therefore, the questions in CEQA Guidelines Appendix G are used as threshold guidance for Chula Vista. As detailed in the CEQA Guidelines Appendix G and evaluated in the following sections. Impacts related to GHG emissions would be significant if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

a. Threshold of Significance

No GHG emission thresholds have been adopted by the City of Chula Vista for land development projects. Additionally, the San Diego Air Pollution Control District has not issued guidance for assessing GHG impacts from land use development projects. Thus, in the absence of a threshold of significance for GHG emissions for the San Diego Air Pollution Control District, the City of Chula Vista evaluates the significance of GHG emissions based on the recommendation from the next closest air district, the South Coast Air Quality Management District (SCAQMD).

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – *Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans*, that could be applied by lead agencies. The working group met again in 2010 to review the guidance. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach (SCAQMD 2008, 2010):

- Tier 1 – The project is exempt from CEQA.
- Tier 2 – The project is consistent with an applicable regional GHG emissions reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 – Project GHG emissions represent an incremental increase below or mitigated to less than Significance Screening Levels, where

    - Residential/Commercial Screening Level
        - Option 1: 3,000 MT CO_2e screening level for all residential/commercial land uses
        - Option 2: Screening level thresholds for land use type acceptable if used consistently by a lead agency:
            - Residential: 3,500 MT CO_2e
            - Commercial: 1,400 MT CO_2e
            - Mixed-Use: 3,000 MT CO_2e
    - 10,000 MT CO_2e is the Permitted Industrial Screening Level

- Tier 4 – The project achieves performance standards, where performance standards may include:

    - Option 1: Percent emission reduction target. SCAQMD has no recommendation regarding this approach at this time.
    - Option 2: The project would implement substantial early implementation of measures identified in the CARB's Scoping Plan. This option has been folded into Option 3.
    - Option 3: SCAQMD Efficiency Targets.
        - 2020 Targets: 4.8 MT CO2e per service population (SP) for project-level analyses or 6.6 MT CO2e per SP for plan level analyses where service population includes residential and employment populations provided by a project.
        - 2035 Targets: 3.0 MT CO2e per SP for project-level analyses or 4.1 MT CO2e per SP for plan level analyses.

- Tier 5 – Offsets along or in combination with the above target Significance Screening Level. Offsets must be provided for a 30-year project life, unless the project life is limited by permit, lease, or other legally binding condition.

If a project complies with any one of these tiers, its impacts related to GHG emissions would be considered less than significant.

Tier 1 and Tier 2 thresholds are based on planning consistency. This approach, which is referred to in the CEQA Guidelines as "tiering", allows agencies to rely on programmatic analysis of GHG emissions to determine that subsequent development consistent with the regional plan would result in incremental GHG emissions contribution that represent a less than significant contribution to cumulative effects. The project is not exempt from CEQA. Additionally, although the City of Chula Vista has an adopted CAP, it is not considered a qualified GHG reduction plan. A qualified GHG reduction plan means that it meets the criteria specified in CEQA Guidelines Section 15183.5(b) for a plan for the reduction of GHG emissions, such that it may be used for the specific purpose of streamlining the analysis of GHG emissions in subsequent projects.

Tier 3 significance screening levels from SCAQMD guidance are based on the concept of establishing a 90 percent GHG emission market capture rate. A 90 percent emission capture rate means that 90 percent of total emissions from new development projects would be subject to CEQA analysis and mitigation. The market capture rate of 90 percent was developed to capture a substantial fraction of GHG emissions from new development projects while excluding small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This

market capture rate approach is based on guidance from the California Air Pollution Control Officers Association (CAPCOA) report CEQA & Climate Change, dated January 2008 (CAPCOA 2008). Following rationale presented in the CAPCOA Guidance, the aggregate emissions from all projects with individual annual emissions that are equal to or less than the identified screening levels for 90 percent market capture rate would not impede achievement of the statewide GHG emissions reduction targets. This analysis follows the Tier 3 recommendation of a 3,000 MT CO_2e screening threshold.

Tier 4 and Tier 5 interim thresholds are intended to demonstrate project consistency with the AB 32 goal of achieving 1990 emission levels by 2020 and the SB 32 goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

b. Impact Analysis

Construction

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. GHG emissions associated with temporary construction activity were quantified using CalEEMod (CAPCOA 2022). A discussion of the construction emission calculation methodology is provided in Section 4.2.4.1.b, Construction Emissions. Table 4.5-4 shows the estimated annual GHG construction emissions associated with the project, as well as the amortized construction emissions over a 30-year project life.

Table 4.5-4
Estimated Annual Construction Greenhouse Gas Emissions
(metric tons)

Year	CO_2	CH_4	N_2O	Refrigerants	CO_2e
2024	684.71	0.03	0.03	0.33	694.53
2025	413.31	0.02	0.01	0.25	418.15
				Total Emissions	1,112.68
				30-Year Amortized Emissions	**37.09**

SOURCE: Appendix G.
NOTES: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

Total construction-related GHG emissions for the project were approximately 1,113 MT CO_2e. Estimated 30-year amortized project-generated construction emissions would be approximately 37 MT CO_2e per year. However, because there is no separate GHG threshold for construction emissions alone, the evaluation of significance is discussed in the operational emissions analysis.

Operation

Operation of the project would generate GHG emissions as a result of area sources , energy sources (generation of electricity consumed by the project as well as miscellaneous sources of natural gas from other equipment ranging from portable fans to wine coolers to aquariums based on the CEC's Residential Appliance Saturation Study (CAPCOA 2021)), mobile sources, solid waste disposal,

generation of electricity associated with water supply, treatment, and distribution, and wastewater treatment, and refrigerants. Operational year 2026 was assumed based on the project schedule provided in Chapter 3, Project Description, following completion of construction. It is noted that this operational analysis is considered conservative as a higher 221-unit project was utilized herein. The project would include 61 detached condominiums, 84 duplexes, and 70 townhome dwelling units for a total of 215 units. All detached units were modeled as single-family units in CalEEMod, and all attached duplexes and townhomes were modeled as low-rise apartments. The low-rise apartments land use in CalEEMod was used instead of the condominium/townhome land use because the low-rise apartments land use is more accurate, as it allows for the proposed affordable housing (10 percent of the units) to be accounted for. The main difference between condominium/townhome and low-rise apartments land use in CalEEMod is the default trip rate, which was updated to be consistent with the project's transportation analysis, making the low-rise apartments land use an appropriate modeling assumption. The additional six units that were modeled for a conservative analysis were modeled as single-family units. Calculations take into account PDF-GHG-1 through PDF-GHG-9, and PDF-AQ-2.

Mobile Sources

The daily maximum weekday trip rates were taken from the Local Mobility Analysis (LMA) Report for the project (see Appendix M-2). The maximum weekday trip project trip generation per the LMA is 1,902 trips per day. It is noted that this traffic volume data is considered conservative, as the LMA utilized a 221-unit project scenario that has higher volumes than the proposed 215-unit project. The weekend trip generation rates were obtained by proportionally adjusting the CalEEMod default trips rates. CalEEMod default data, including temperature, trip distances, variable start information, and emissions factors, were conservatively used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the associated use of light-duty vehicles for the residents. Emission factors representing the vehicle mix and emissions for 2026 were used to estimate emissions associated with vehicular sources.

Energy Sources

Energy sources include GHG emissions associated with building electricity and natural gas usage. Annual natural gas and electricity emissions were estimated in CalEEMod using the emissions factors for San Diego Gas & Electric Company (SDG&E), which would be the energy source provider for the proposed project. CalEEMod default values for SDG&E GHG intensity factors were utilized.

Title 24 of the CCRs serves to enhance and regulate California's building standards. The proposed project would meet the 2022 California Building Energy Efficiency Standards (24 CCR, Part 6) at a minimum. CalEEMod Version 2022.1 default energy values are based on 2019 energy efficiency standards. It is anticipated that the new 2022 Title 24 energy standards will result in a 10.9 percent increase in energy efficiency for multi-family uses over the previous code (CEC 2021). To account for these standards, a 10.9 percent increase in energy efficiency was modeled. The 10.9 percent increase in energy efficiency is included in the "unmitigated emissions" shown in Table 4.5-5 since the increase in energy efficiency will be required by code at the time construction would commence. The "unmitigated emissions" also take into account the project design features. The project would include all electric appliances and heating system as detailed in PDF-GHG-3, and would not be served by natural gas. Note that CalEEMod default calculations include other miscellaneous sources

of natural gas from other equipment ranging from portable fans to wine coolers to aquariums based on the CEC's Residential Appliance Saturation Study (CAPCOA 2021), thus, the calculations still include some minimal emissions from natural gas even though the project would not be served by natural gas. It is therefore a conservative analysis for both the purposes of this GHG analysis and the air quality analysis. Emissions calculations after incorporation of project design features including PDF-GHG-3 Electric Appliances, and mitigation measures, are shown in Table 4.5-6.

Area Sources

Area sources include GHG emissions that would occur from the use of landscaping equipment. However, as noted in Section 1.3, the project would include electric landscaping equipment (PDF-GHG-6). Area sources also include consumer products and architectural coatings. However, only criteria pollutant emissions are associated with these sources and not GHG emissions. Area source emissions were calculated using default CalEEMod emission factors.

Solid Waste Sources

The project would generate solid waste and would therefore result in CO_2e emissions associated with landfill off-gassing. Solid waste generation was derived from the CalEEMod default rates for each land use type. Emission estimates associated with solid waste were estimated using CalEEMod.

Water and Wastewater Sources

Water supplied to the project requires the use of electricity. Accordingly, the supply, conveyance, treatment, and distribution of water would indirectly result in GHG emissions through use of electricity. Annual water use for the project and GHG emissions associated with the electricity used for water supply were calculated based on default water use estimates for the residential land use type, as estimated by CalEEMod and SDG&E factors.

Refrigerant Sources

Small amounts of GHG emissions result from refrigerants used in air conditioning and refrigeration equipment. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Emissions due to refrigerants were calculated using CalEEMod default values, which are based on industry data from the U.S. EPA.

Total GHG Emissions

The estimated operational (year 2026) project generated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water usage and wastewater generation, and refrigerants are shown in Table 4.5-5.

Table 4.5-5
Estimated Annual Unmitigated Operational Greenhouse Gas Emissions
(metric tons per year)

Emission Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
Area	0.00	0.00	0.00	0.00	0.00
Energy	319.85	0.02	<0.005	0.00	320.82
Mobile	1,949.48	0.10	0.08	2.93	1,979.29
Solid waste	14.12	1.41	0.00	0.00	49.42
Water Supply and Wastewater	16.65	0.25	0.01	0.00	24.80
Refrigerants	0.00	0.00	0.00	0.35	0.35
				Total	2,374.68
				Amortized Construction Emissions	37.09
				Operation + Amortized Construction Total	**2,411.77**

SOURCE: Appendix G.
NOTES: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Total MT CO_2e rounded to the nearest whole number.
These emissions reflect CalEEMod "unmitigated" output assuming 2022 Title 24 Building Energy Efficiency Standards and implementation of PDFs and operational year 2026.

c. Significance of Impacts

As shown in Table 4.5-5, the project's total annual unmitigated GHG emissions would be approximately 2,412 MT CO_2e per year. This emission level would not exceed the 3,000 MT CO_2e Residential/Commercial Screening Level. As project emissions would be less than the applicable screening level, the project would not generate GHG emissions that would have a significant impact on the environment and GHG emissions impacts under the No Annexation scenario and Annexation Scenario 2b would be less than significant.

d. Mitigation Measures

Impacts are less than significant. No mitigation is required.

4.5.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to greenhouse gas emissions:

- Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The City's CEQA significance thresholds identify a method to determine significance depending on whether the action requires plan- or policy-level or project-level environmental analysis, as follows:

1. For plan- and policy-level environmental documents, as well as environmental documents for public infrastructure projects, the Planning Department has prepared a Memorandum, Climate Action Plan Consistency for Plan- and Policy-Level Documents and Public Infrastructure Projects, to provide guidance on significance determination as it relates to consistency with the strategies in the Climate Action Plan.

2. For project-level environmental documents, significance is determined through (a) land use consistency and (b) project compliance with the regulations set forth in SDMC Chapter 14, Article 3, Division 14.

CAP consistency is determined in two steps. Step 1 involves evaluating whether the project is consistent with the growth projections used in the development of the CAP. A project is consistent with the growth projections used in the CAP if the project can answer yes to any of the three questions below:

A. Is proposed project is consistent with the existing General Plan and Community Plan land use and zoning designations? or;

B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA)? or;

C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?

Step 2 of determining CAP consistency is determining if the project is consistent with the regulations set forth in SDMC Chapter 14, Article 3, Division 14. Projects 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. Projects that do not comply with the CAP Consistency Regulations must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in the CAP Consistency Regulations to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

b. Impact Analysis

As discussed above, a project's consistency with the CAP is determined in two steps. Each of these steps is addressed below.

Step 1 – CAP Growth Projections Consistency

Step 1 involves evaluating whether the project is consistent with the growth projections used in the development of the CAP. As the project site is not currently within the jurisdictional boundaries of the City of San Diego, the City does not have any planning assumptions for the site in its General Plan or the Otay Mesa Community Plan. The project site was also not within the City of San Diego Sphere of Influence when the CAP was prepared. Therefore, the project is not included in the CAP growth projections and the associated site GHG emissions were not considered in the CAP. Under the Annexation Scenario 2a, the project site would be annexed into and developed in the City of San Diego. The project includes an amendment to the City of San Diego's land use plan and zoning. Specifically, the site would be designated as Residential – Low Medium and zoned as RM-1-1 (Residential-Multiple Unit). The project site is not located within a TPA; therefore, the increase in density would not be located within a TPA. Finally, the proposed development would result in densities that are more intensive than existing assumptions for the site since the City does not currently have any development assumptions for the site. Therefore, the project would not be consistent with the growth projections and associated GHG emission assumptions used in the development of the CAP.

Step 2 – CAP Consistency Regulations

Step 2 of determining CAP consistency is determining if the project is consistent with the regulations set forth in SDMC Chapter 14, Article 3, Division 14. The project design has been modified to demonstrate consistency with the CAP Consistency Regulations as detailed below.

Mobility and Land Use Regulations (SDMC Section 143.1410)

The Mobility and Land Use Regulations section of the CAP Consistency Regulations require the following improvements to be provided.

Street Shading. This provision of the CAP Consistency Regulations requires projects to provide shading of at least 50 percent of the Throughway Zone through either trees and/or a combination of trees and structures for premises that contains a street yard or abuts a public right of way with a Furnishings Zone. These regulations would apply to the project frontage along Dennery Road. To fulfill this requirement, the project would provide trees along the back of sidewalk, between the existing trees as shown on the landscape plans to achieve 50 percent shade coverage of the Throughway Zone along the Dennery Road project frontage.

Pedestrian Amenities. The regulations require at least one pedestrian amenity for every 250 feet of linear feet of street frontage (e.g., trash and recycling receptacles, seating, lighting, public artwork, wayfinding signs, transit stop enhancement). To comply with these provisions, the project would provide three pedestrian amenities along Dennery Road to account for the approximate 530 linear feet of frontage. Amenities include Otay Valley Regional Park trail signage at the project entrance driveway within private property to provide wayfinding to the regional trail system, a trash and recycling bin, and one backless bench to provide pedestrian seating. Refer to Appendix G Figure 4 for details on the proposed location of the pedestrian amenities and signage.

Bicycle Charging. The regulations require at least 50 percent of all residential and non-residential bicycle parking spaces required in accordance with Chapter 14, Article 2, Division 5 to be supplied with individual outlets for electric charging at each bicycle parking space. Per SDMC Section 142.0525, common area bicycle parking is not required for dwelling units with enclosed garages, as bicycle charging capacity will exist within individual garages. As the requirement for outlets near bike parking only applies to spaces required by the SDMC, the common bicycle racks proposed at the project's pocket parks do not require outlets to be installed. All residential bicycle parking would be accommodated within garages which would have accessibility to outlets for electric charging.

Resilient Infrastructure and Healthy Ecosystems Regulations (SDMC Section 143.1415)

The Resilient Infrastructure and Healthy Ecosystems Regulations requires two trees to be provided on the premises for every 5,000 square feet of lot area, with a minimum of one tree per premises. If the required trees cannot be provided on-site, they can either be provided off-site or the Urban Tree Canopy Fee can be paid. The project's landscape plan has been updated to provide the required trees based on the lot area. The total lot area for Nakano is 23.76 acres or 1,035,418 square feet which would require 414 total trees to meet the minimum requirements. As detailed in the projects' landscape plans, a total of 447 trees have been provided, exceeding the minimum requirements.

Project Design Features

In addition to the project features included as CAP consistency measures, the project also includes specific project design features as detailed in Section 3.6.3.d. Specifically, PDFs related to reduction of GHG emissions include the following:

PDF-GHG-1 **Increased Density**. The project shall allow up to 221 residential units in an area with access to transit.

PDF-GHG-2 **Affordable Housing**. The project shall provide 22 units (10 percent), including 11 low-income units and 11 moderate-income units, that are affordable to low- and moderate-income households.

PDF-GHG-3 **Electric Appliances.** Prior to issuance of building permits, the Owner/Permittee shall ensure the project plans include all electric appliances and heating systems. Woodburning and natural gas/propane shall be prohibited on-site.

PDF-GHG-4 **Pedestrian Network Improvements.** Prior to issuance of building permits, the Owner/Permittee shall ensure the following pedestrian and trail amenities are shown on the plans:

- A 7- to 8-foot-wide decomposed granite public trail connection along the western edge of the project site. To ensure public accessibility to the Otay Valley Regional Park (OVRP) trail system, a public trail easement would be granted along this alignment.

- An 8-foot-wide decomposed granite public trail improvement with split rail fencing from the proposed mini-park at the north central portion of the project site, connecting north to off-site portions of the OVRP trail system.

- Off-site within the City of Chula Vista parcel to the north, the project includes improvements to the OVRP trail system including formalizing existing trail alignments with placement of decomposed granite within an 8-foot-wide alignment and installation of split-rail fencing on one side of the trail.

- Wayfinding signage to the OVRP trail system along Dennery Road, within private property, as detailed on the project landscape plans.

- Sidewalks are proposed on both sides of Private Street A. All other internal streets would provide sidewalks on one side of the street. Sidewalks provide a connection to the OVRP trail connection on the north end of the site.

PDF- GHG-5 **Bicycle Network Improvements.** Prior to issuance of building permits, the Owner/Permittee shall provide plans with buffered Class II bike lanes shown on the plans. The bike lanes shall be provided along Private Street A, the main private street running through the site, connecting to the existing Class II bike lane along Dennery Road. The private streets leading east and west from the primary roadway would include bicycle sharrows (i.e., shared lane markings).

PDF-GHG-6 **Outdoor Electrical Outlets to Allow for Electric Landscape Equipment** Prior to issuance of building permits, the Owner/Permittee shall provide the landscape plans illustrating the locations of the exterior electrical outlets necessary for sufficient powering of electric lawnmowers and other landscaping equipment.

PDF- GHG-7 **Prohibit Turf.** Prior to issuance of building permits, the Owner/Permittee shall provide landscape plans that do not include turf lawns in any residential portion of the project.

PDF- GHG-8 **Community Gardens.** Prior to issuance of construction permits, the building plans shall identify 26,726 square feet of common open space that would allow for community gardens.

PDF-GHG-9 **Electric Vehicle Charging Capacity.** Prior to the issuance of building permits, the Owner/Permittee shall submit building plans illustrating all units comply with Title 24 Green Building Standards Code, Residential Mandatory Measures which requires each dwelling unit to install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall originate at the main service or subpanel and shall terminate in the garage to allow for electric vehicle charging.

c. Significance of Impacts

Under Annexation Scenario 2a, the project would implement the City of San Diego's CAP Consistency Regulations and proposed project design features. However, because the project would not be

consistent with the growth projections used in the development of the CAP, cumulative GHG impacts would be significant.

d. Mitigation Measures

GHG-SD-1 **Transit Passes.** Prior to the issuance of the first occupancy permit, the Owner/Permittee shall implement a transit subsidy program. The subsidy value will be limited to the equivalent value of 25 percent of the cost at the time of occupancy permit issuance of an MTS "Regional Adult Monthly/30-Day Pass" (currently $72, which equates to a subsidy value of $18 per month). Subsidies will be available on a per unit basis to residential tenants for a period of five years (five years after issuance of the first occupancy permit). Owner/Permittee shall provide an annual report to the City Engineer in each of the first five years demonstrating how the offer was publicized to residents and documenting the results of the program each year, including number of participants and driveway traffic counts.

GHG-SD-2 **Commute Trip Reduction Program.** Prior to the issuance of the first occupancy permit, the Owner/Permittee shall develop and implement a commute trip reduction program that requires each homeowner and tenant to be provided with a one-page flyer every year that provides information regarding available transit, designated bicycle routes, local bicycle groups and programs, local walking routes and programs, and rideshare programs.

GHG-SD-3 **Bicycle Micro-mobility Fleet.** Prior to the issuance of the first occupancy permit, the Owner/Permittee shall provide one bicycle (up to a $400 value) per unit to the first buyer of each unit.

GHG-SD-4 **Energy Star Appliances.** Prior to the issuance of building permits, the Owner/Permittee shall submit building plans illustrating that residential structures shall have Energy Star rated appliances (clothes washers, dishwashers, refrigerators, and ceiling fans).

GHG-SD-5 **Alternative Water Heating.** Prior to the issuance of building permits, the Owner/Permittee shall submit building plans illustrating that residential structures shall have non-gas water heaters (e.g., electric or solar water heating).

GHG-SD-6 **Water Efficient Landscaping.** Prior to the issuance of building permits, the Owner/Permittee shall submit landscaping plans illustrating that the project would provide low-water use/drought tolerant plant species with low water use irrigation (e.g., spray head or drip), where required.

Mitigated GHG emissions were calculated using CalEEMod Version 2022.1. As mentioned previously, savings associated with compliance with 2022 Title 24 Energy Code standards were included as part of the baseline unmitigated emissions. Mitigated emission calculations take into account the mitigation measures and project design features listed above to account for all project features and mitigation requirements that would be implemented to minimize GHG emissions. The model considers quantified reductions for mitigation measures **GHG-SD-1**, **GHG-SD-4**, **GHG-SD-5**, and

GHG-SD-6. The remaining two mitigation measures are not quantifiable in the model. Similarly, the model includes quantified emissions reductions for project design features PDF-GHG-1, PDF-GHG-2, PDF-GHG-3, PDF-GHG-6, and PDF-GHG-7. The remaining project design features do not result in quantifiable reductions. The results are summarized in Table 4.5-6.

Table 4.5-6
Estimated Annual Mitigated Operational Greenhouse Gas Emissions
(metric tons per year)

Emission Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
Area	0.00	0.00	0.00	0.00	0.00
Energy	312.22	0.02	<0.005	0.00	313.17
Mobile	1,949.43	0.10	0.08	2.93	1,979.24
Solid waste	14.12	1.41	0.00	0.00	49.42
Water supply and Wastewater	16.58	0.25	0.01	0.00	24.74
Refrigerants	0.00	0.00	0.00	0.35	0.35
				Total	2,366.97
				Amortized Construction Emissions	37.09
				Operation + Amortized Construction Total	**2,404.00**

SOURCE: Appendix G (Attachment 2).
NOTES: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. Total MT CO_2e rounded to the nearest whole number.
These emissions reflect CalEEMod "mitigated" output and implementation of PDFs and operational year 2026.

As shown, with incorporation of project design features in addition to mitigation measures **GHG-SD-1** through **GHG-SD-6**, project emissions would total 2,445MT CO_2E annually which is a reduction of approximately 8 MT CO_2e over unmitigated emissions without consideration of project design features and mitigation measures.

e. Significance After Mitigation

The project would implement **GHG-SD-1** through **GHG-SD-6** to reduce the project's GHG emission impact. The project would also implement the City of San Diego's CAP Consistency Regulations. However, per the City of San Diego's CAP threshold guidance, a project that would generate more emissions than planned for in the City of San Diego CAP would result in a significant impact with regards to GHG. The site is not currently within the City of San Diego and therefore the associated GHG emissions were not accounted for in the City of San Diego CAP. As such, the project would be required to achieve net zero emissions in order to not increase emissions beyond the level assumed in the CAP. All feasible mitigation has been implemented as further detailed in the Greenhouse Gas Emissions Technical Report (see Appendix G). While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the CAP, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation.

4.5.4 Issue 2: Conflicts with the CAP or other Plans or Policies

4.5.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to conflicts with the CAP or other plans or policies in Chula Vista:

- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

b. Impact Analysis

This section discusses the project's consistency with the City of Chula Vista's CAP, SANDAG's Regional Plan, and CARB's Scoping Plan.

Consistency with the City of Chula Vista's CAP

The project includes several design features that will help reduce its GHG emissions in line with the City of Chula Vista's CAP. Table 4.5-7 identifies the measures and goals within the City of Chula Vista's CAP and the project's consistency with them.

Table 4.5-7
City of Chula Vista Climate Action Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Water Conservation & Reuse		
Water Education & Enforcement	Expand education and enforcement [through fines] targeting landscape water waste.	**Not applicable.** The project would not impair the ability of the City to expand education and enforcement targeting landscape water waste.
Water Efficiency Upgrades	Update the City's Landscape Water Conservation Ordinance to promote more water-wise landscaping designs.	**Consistent.** The project would be consistent with the City's Landscape Water Conservation Ordinance.
	Require water-savings retrofits in existing buildings at a specific point in time (not point of sale).	**Not applicable.** The project would not impair the ability of the City to require water-savings retrofits for existing buildings.
Water Reuse Plan & System Installations	Develop a Water Reuse Master Plan to maximize the use of storm water, graywater [recycled water] and onsite water reclamation.	**Not applicable.** The project would not impair the ability of the City to develop a Water Reuse Master Plan.

Table 4.5-7
City of Chula Vista Climate Action Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
	Facilitate simple graywater systems for laundry-to-landscape applications.	**Not applicable.** The project would not impair the ability of the City to facilitate simple graywater systems for laundry-to-landscape applications. As these are primarily targeted for single-family homes, it is not anticipated that this would apply to the project.
	Streamline complex graywater systems' permit review.	**Not applicable.** The project would not impair the ability of the City to streamline complex graywater systems permit review.
Waste Reduction		
Zero Waste Plan	Develop a Zero Waste Plan to supplement statewide green waste, recycling and plastic bag ban efforts	**Not applicable.** The project would not impair the ability of the City to develop a Zero Waste Plan.
Renewable & Energy Efficiency		
Energy Education & Enforcement	Expand education targeting key community segments [e.g., do-it-yourselfers and Millennials] and facilitating energy performance disclosure (e.g., Green Leases, benchmarking and Home Energy Ratings).	**Not applicable.** The project would not impair the ability of the City to expand energy education.
	Leverage the building inspection process to distribute energy-related information and to deter unpermitted, low performing energy improvements.	**Not applicable.** The project would not impair the ability of the City to distribute energy-related information during the building inspection process.
Clean Energy Sources	Incorporate solar photovoltaic into all new residential and commercial buildings [on a project-level basis].	**Consistent.** The project would be in compliance with the current building standards and install solar photovoltaic systems.
	Provide more grid-delivered clean energy (up to 100%) through Community Choice Aggregation or other mechanism.	**Not applicable.** The project would not impair the ability of the City to provide a Community Choice Aggregation of clean energy.
Energy Efficiency Upgrades	Expand the City's "cool roof" standards to include re-roofs and western areas.	**Not applicable.** The project would not impair the ability of the City to expand the City's cool roof standards.
	Facilitate more energy upgrades in the community through incentives [e.g., tax breaks and rebates], permit streamlining (where possible) and education [e.g., more local energy efficiency programming].	**Not applicable.** The project would not impair the ability of the City to incentivize additional energy upgrades in the community.
	Require energy-savings retrofits in existing buildings at a specific point in time (not at point of sale).	**Not applicable.** The project would not impair the ability of the City to require energy-savings retrofits for existing buildings.

Table 4.5-7
City of Chula Vista Climate Action Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Robust Urban Forests	Plant more shade trees to save energy, address heat island issues and improve air quality.	**Consistent.** The project would include shade trees on site to save energy and reduce heat island issues, consistent with the City's Shade Tree Policy No. 576-19.
Smart Growth & Transportation		
Complete Streets & Neighborhoods	Incorporate "Complete Streets" principles into municipal capital projects and plans [e.g., the Bicycle and Pedestrian Master Plans and Capital Improvement Program].	**Not applicable.** The project would not impair the ability of the City to incorporate Complete Streets principles into the Bicycle and Pedestrian Master Plans and Capital Improvement Program.
	Encourage higher density and mixed-use development in Smart Growth areas, especially around trolley stations and other transit nodes.	**Consistent.** The project would be located close to major urban and employment centers. The project would be building on a site within the City and is located close to public transit and I-805.
Transportation Demand Management	Utilize bike facilities, transit access/passes and other Transportation Demand Management and congestion management offerings.	**Not applicable.** The project would not impair the ability of the City to use Transportation Demand Management and congestion management offerings.
	Expand bike-sharing, car-sharing and other "last mile" transportation options.	**Not applicable.** The project would not impair the ability of the City to expand bike-sharing, car-sharing, and other last mile transportation options.
Alternative Fuel Vehicle Readiness	Support the installation of more local alternative fueling stations.	**Consistent.** The project would be in compliance with the California Green Building Code 2022 (Section 4.106.4 Electric Vehicle [EV] charging for new construction).
	Designate preferred parking for alternative fuel vehicles.	**Not applicable.** The project would not impair the ability of the City to designate preferred parking for alternative fuel vehicles.
	Design all new residential and commercial buildings to be "Electric Vehicle Ready".	**Consistent.** The project would be in compliance with the California Green Building Code 2022 (Section 4.106.4 Electric Vehicle [EV] charging for new construction).

SOURCE: City of Chula Vista 2017.
City = City of Chula Vista; project = Nakano Project; I-805 = Interstate 805

As shown, the project would be consistent with the applicable measures within the City of Chula Vista's CAP.

Consistency with San Diego Forward: The Regional Plan

Regarding consistency with SANDAG's Regional Plan, the project incorporates a number of project design features (detailed in Chapter 3.0, Project Description, Section 3.6.3.d) to support the policy objectives of the RTP and SB 375.

Table 4.5-8 illustrates the project's consistency with all applicable goals and policies of the Regional Plan (SANDAG 2021).

Table 4.5-8
San Diego Forward: The 2021 Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Complete Corridors	Providing a regional transportation system using technology, infrastructure, improvements, pricing and connectivity to support all forms of movement.	**Consistent.** The project would enhance connectivity to the adjacent Otay Valley Regional Park, offering a trail connection and overlooks. Additionally, the site would provide connectivity to nearby bus routes.
Transit Leap	Offering people a network of high-capacity, high-speed, and high-frequency transit services that will incorporate new modes of transit while also improving existing services.	**Not applicable.** The project would not impair SANDAG's ability to provide high-capacity, speed and capacity transit services.
Mobility Hubs	Centers of activity where a high concentration of people, destinations, and travel choices converge. They will offer on-demand travel options and safe streets to enhance connections to high-quality transit while also making it easier for people to take short trips without needing a car.	**Consistent.** The project would provide pedestrian and bicycle connectivity to the neighborhood. Furthermore, the project would be located near MTS bus routes 933 and 934.
Flexible Fleets	Offer people a variety of on-demand, shared vehicles, including micro transit, bikeshare, scooters, and other modes of transportation that will connect them to transit and make travel easy within Mobility Hubs.	**Consistent.** The project would provide pedestrian and bicycle connectivity to the neighborhood and would not impair the ability to use flexible fleets to access transit and mobility hubs. Furthermore, the project would be located near MTS bus routes 933 and 934.
Next Operating System (Next OS)	This will be the "brain" of the transportation system—an integrated digital platform that ties the transportation system together. Next OS will be the digital network that analyzes data in real time from the region's physical networks, making them all work better—more integrated, more efficient, and most of all, more responsive to people's immediate needs.	**Not applicable.** The project would not impair SANDAG's ability to provide Next OS improvements to the transportation system.
Active Transportation	Providing critical connections along Complete Corridors and other streets, providing people with safe and convenient ways to connect to transit and other destinations within and between Mobility Hubs.	**Consistent.** The project would provide pedestrian and bicycle connectivity to the neighborhood. Furthermore, the project would be located near MTS bus routes 933 and 934.
Goods Movement	Supports the local, interregional, and international movement of goods.	**Not applicable.** The project would not impair SANDAG's ability to support goods movement.

Table 4.5-8
San Diego Forward: The 2021 Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Sustainable Growth and Development	A regional pattern of growth and development that reflects smart growth, transit-oriented development, preserving natural resources and agricultural lands, and building communities that are resilient to the consequences of climate change and other environmental changes.	**Not applicable.** The project would not impair SANDAG's ability to Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat.
Habitat Conservation	To Protect, Connect, and Respect species and their natural habitats to prevent their extinction in San Diego County.	**Not applicable.** The project would not impair SANDAG's ability to Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat.

SOURCE: SANDAG 2021.
NOTES: MTS = San Diego Metropolitan Transit System; Project = Nakano Project; SANDAG = San Diego Association of Governments

As shown, the project is consistent with all applicable 2021 Regional Plan policy objectives and strategies.

Consistency with CARB's Scoping Plan

The Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. In the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the California Natural Resources Agency observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (California Natural Resources Agency 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. The project would comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 4.5-9 highlights measures that have been developed under the Scoping Plan, including the recommended approaches for interim GHG thresholds under CEQA (CARB 2008b), and the project's consistency with Scoping Plan measures. The table also includes measures in the 2017 Scoping Plan Update. To the extent that these regulations are applicable to the project and its inhabitants or uses, the project would comply with all applicable regulations adopted in furtherance of the Scoping Plan.

Table 4.5-9
Project Consistency with 2008 and 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	The project's residents would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
1.5 Million Zero-Emission and Plug-In Hybrid Light-Duty Electric Vehicles by 2025 (4.2 Million Zero-Emissions Vehicles by 2030)	N/A	The project would provide EV charging stations consistent with California Green Building Standards.
Low Carbon Fuel Standard	T-2	Motor vehicles driven by the project's residents would use compliant fuels.
Low Carbon Fuel Standard (18% reduction in carbon intensity by 2030)	N/A	Motor vehicles driven by the project's residents would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	The project would provide pedestrian and bicycle connectivity to the neighborhood. Further, the project would be located near MTS bus routes 933 and 934.
Advanced Clean Transit	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Last Mile Delivery	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Reduction in Vehicle Miles Traveled	N/A	The project would provide pedestrian and bicycle connectivity to the neighborhood. Further, the project site is located near MTS bus routes 933 and 934.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Ship Electrification at Ports (Shore Power)	T-5	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.

Table 4.5-9
Project Consistency with 2008 and 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
California Sustainable Freight Action Plan	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Heavy-Duty Vehicle GHG Emission Reduction • Tractor-Trailer GHG Regulation • Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Project	T-8	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Medium and Heavy-Duty GHG Phase 2	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
High-Speed Rail	T-9	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	The project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	CR-1	The project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards for electrical appliances and other devices at the time of building construction.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	The project would not employ solar water heating. However, the project would comply with the energy-efficient requirements of the current building codes.
Combined Heat and Power	E-2	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Renewables Portfolio Standard (33% by 2020)	E-3	The project would use energy supplied by SDG&E, which is in compliance with the Renewables Portfolio Standard.
Renewables Portfolio Standard (50% by 2050)	N/A	The project would use energy supplied by SDG&E, which is in compliance with the Renewables Portfolio Standard.
Senate Bill 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	The project would be in compliance with the current building standards and install solar photovoltaic systems.

Table 4.5-9
Project Consistency with 2008 and 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Water Sector		
Water Use Efficiency	W-1	The project's buildings would meet water use efficiency standards that are in effect at the time of construction.
Water Recycling	W-2	Recycled water would be used on site for all common landscaped areas and landscaping within public right-of-way.
Water System Energy Efficiency	W-3	This is applicable for the transmission and treatment of water, but it is not applicable for the project.
Reuse Urban Runoff	W-4	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Increase Renewable Energy Production	W-5	This is applicable for wastewater treatment systems, but is not applicable for the project.
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	The project would be constructed in compliance with state or local green building standards in effect at the time of building construction.
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-2	The project's buildings would meet green building standards that are in effect at the time of construction.
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-3	The project would be constructed in compliance with local green building standards in effect at the time of building construction.
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-4	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Oil and Gas Extraction GHG Emission Reduction	I-2	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan Measure.
Refinery Flare Recovery Process Improvements	I-4	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan Measure.
Work with the Local Air Districts to Evaluate Amendments to Their Existing Leak Detection and Repair Rules for Industrial Facilities to Include Methane Leaks	I-5	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.

Table 4.5-9
Project Consistency with 2008 and 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Mandatory Commercial Recycling	RW-3	During both construction and operation of the project, the project would comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
Increase Production and Markets for Compost and Other Organics	RW-4	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Anaerobic/Aerobic Digestion	RW-5	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Extended Producer Responsibility	RW-6	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Environmentally Preferable Purchasing	RW-7	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Forests Sector		
Sustainable Forest Target	F-1	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
High Global Warming Potential Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Limit High Global Warming Potential Use in Consumer Products	H-4	The project's employees would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.

Table 4.5-9
Project Consistency with 2008 and 2017 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
40% Reduction in Methane and Hydrofluorocarbon Emissions	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
50% reduction in black carbon emissions	N/A	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	This measure does not apply to the project. The project would not inhibit CARB from implementing this Scoping Plan measure.

SOURCE: CARB 2008a, 2008b, 2017.
Notes: project = Nakano Project; CARB = California Air Resources Board; N/A = not applicable; GHG = greenhouse gas; MTS = San Diego Metropolitan Transit System; SDG&E = San Diego Gas & Electric Company; SF6 = sulfur hexafluoride.

AB 1279, the California Climate Crisis Act, codified the carbon neutrality target as 85 percent below 1990 levels by 2045. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. Appendix D of the 2022 Scoping Plan includes local actions that jurisdictions may take to reduce GHG emissions in line with AB 1279 goals. It includes project attributes for residential and mixed-use projects to qualitatively determine consistency with the 2022 Scoping Plan. The City of Chula Vista 2017 CAP is not considered a qualified CAP. In the absence of a qualified CAP, CARB recommends that the first approach in "determining whether a proposed residential or mixed-use development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing" (CARB 2022b). A summary of the 2022 Scoping Plan Priority Strategies is provided in Table 4.5-10. Empirical research shows that the following project attributes result in reduced GHG emissions from residential and mixed-use development, and that "residential and mixed-use projects that have all of the key project attributes in [Table 4.5-10] should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals" (CARB 2022b).

Table 4.5-10
Project Consistency with 2022 Scoping Plan Key Prioritization Strategies

Priority Area	Key Project Attribute	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	**Consistent.** Parking for individual units would be provided within each unit's garage. Consistent with 2022 Title 24 Green Building Standards, Residential Mandatory Measures requires each garage to accommodate a listed raceway to accommodate a dedicated 208/240-volt branch circuit which would allow for EV charging. This would be implemented per PDF-GHG-9.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	**Consistent.** The project is surrounded on three sides by urban uses including a heath care facility, multi-family residential, and Interstate 805. While the project is adjacent to open space to the north, services are available at the site including an existing sewer line and water facilities in the adjacent Dennery Road. Access is available from the existing Dennery Road and transit is located within 0.25 mile from the project site.
	Does not result in the loss or conversion of natural and working lands.	**Inconsistent.** The project site is not an active agricultural site; however, it is designated as Open Space which is intended for lands to be protected from urban development, including floodplains; canyon; mountain; and agricultural uses.
	• Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or • Is in proximity to existing transit stops (within a half mile), or • Satisfies more detailed and stringent criteria specified in the region's SCS.	**Consistent.** The project site is located 0.25 mile from bus routes 933 and 934. Bus stops are located at the corner of Palm Avenue and Dennery Road, which provides transit to the Palm Avenue trolley station located three miles to the west.
	Reduces parking requirements by: • Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or • Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or • For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	**Inconsistent.** Based on the unit mix and bedroom count, 619 total parking spaces are required. The project would exceed this requirement by providing 656 parking spaces, and would not include unbundled parking.

Table 4.5-10
Project Consistency with 2022 Scoping Plan Key Prioritization Strategies

Priority Area	Key Project Attribute	Project Consistency
	At least 20 percent of units included are affordable to lower-income residents.	**Inconsistent.** The project would include 22 (10 percent) affordable units. including 11 low-income units and 11 moderate-income units, per PDF-GHG-2.
	Results in no net loss of existing affordable units.	**Consistent.** The project site is undeveloped and the project would not result in a loss in existing affordable units.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking.	**Consistent.** Per PDF-GHG-3, the project would include all electric appliances and heating systems. Woodburning and natural gas/propane shall be prohibited on-site.

c. Significance of Impacts

The project would be consistent with the measures and policy goals of the City of Chula Vista General Plan, San Diego Forward, and the 2008 and 2017 Scoping Plans. However, the project would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan. The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, therefore GHG impacts would be significant.

d. Mitigation Measures

GHG-CV-1 **Transit Passes.** Prior to first occupancy, the Permittee shall implement a transit subsidy program. The subsidy value will be limited to the equivalent value of 25 percent of the cost of an MTS "Regional Adult Monthly/30-Day Pass" (currently $72, which equates to a subsidy value of $18 per month). Subsidies will be available on a per unit basis to residential tenants for a period of five years (five years after issuance of the first occupancy permit). Permittee shall provide an annual report to the City Engineer in each of the first five years demonstrating how the offer was publicized to residents and documenting the results of the program each year, including number of participants and driveway traffic counts.

GHG-CV-2 **Commute Trip Reduction Program.** Prior to first occupancy, the Permittee shall develop and implement a commute trip reduction program that requires each homeowner and tenant to be provided with a one-page flyer every year that provides information regarding available transit, designated bicycle routes, local bicycle groups and programs, local walking routes and programs, and rideshare programs.

GHG-CV-3 **Bicycle Micro-mobility Fleet.** Prior to first occupancy, the Permittee shall provide one bicycle (up to a $400 value) per unit to the first buyer of each unit.

GHG-CV-4 **Energy Star Appliances.** Prior to the issuance of residential building permits, the Permittee shall submit building plans illustrating that residential structures shall have Energy Star rated appliances (clothes washers, dishwashers, refrigerators, and ceiling fans).

GHG-CV -5 **Alternative Water Heating.** Prior to the issuance of building permits, the Permittee shall submit building plans illustrating that residential structures shall have non-gas water heaters (e.g., electric or solar water heating).

GHG-CV-6 **Water Efficient Landscaping.** Prior to the issuance of building permits, the Permittee shall submit landscaping plans illustrating that the project would provide low-water use/drought tolerant plant species with low water use irrigation (e.g., spray head or drip), where required.

e. Significance After Mitigation

The project would implement **GHG-CV-1** through **GHG-CV-6** and project design features detailed in Chapter 3.0, Project Description, Section 3.6.3.d. Implementation of the project design features and mitigation measures would reduce the project's cumulative GHG emission impact. However, because the project would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan detailed in Table 4.5-10, it would not be consistent with the statewide GHG reduction goals required by AB 1279, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation. All feasible mitigation has been implemented as further detailed in the Greenhouse Gas Emissions Technical Report (see Appendix G).

4.5.4.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to greenhouse gas emissions:

- Would the project conflict with the City of San Diego's Climate Action Plan or an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?

As discussed in Section 4.5.3.2.a the City of San Diego determines the significance of GHG impacts through consistency with their CAP and implementation of CAP Consistency Regulations.

b. Impact Analysis

As discussed in Section 4.5.3.2.b, the project would implement the CAP Consistency Regulations; however, the project would not be consistent with the growth projections used in the development of the CAP.

c. Significance of Impacts

Under Annexation Scenario 2a, the project would implement the City of San Diego's CAP Consistency Regulations. However, because the project would not be consistent with the growth projections used in the development of the CAP, it would not be consistent with the CAP and GHG impacts related to GHG reduction plans and policies would be significant.

d. Mitigation Measures

The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** described in Section 4.5.3.2.d.

e. Significance after Mitigation

The project would implement mitigation measures **GHG-SD-1** through **GHG-SD-6** outlined in Section 4.5.3.2.d in addition to project design features (PDF-GHG-1 through PDF-GHG-9) detailed in Section 3.6.3.d of this EIR. Implementation of these measures would reduce the project's cumulative GHG emission impact. The project would also implement the City of San Diego's CAP Consistency Regulations. However, per the City of San Diego's threshold guidance, a project that would generate more emissions than planned for in the City of San Diego CAP would result in a significant impact with regard to GHG. The site is not currently within the City of San Diego and therefore the associated GHG emissions were not accounted for in the City of San Diego CAP. As such, the project would be required to achieve net zero emissions in order to not increase emissions beyond the level assumed in the CAP. All feasible mitigation has been implemented as further detailed in the Greenhouse Gas Emissions Technical Report (see Appendix G). While the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the CAP, resulting in a significant and unavoidable cumulative GHG emission impact after mitigation.

4.6 Health and Safety/Hazardous Materials

This section analyzes potential impacts that could occur related to health and safety including exposure to wildfire, hazardous materials, and interference with airport safety and emergency response plans. The impact analysis is based on a the following project-specific reports: Phase I Preliminary Environmental Site Assessment (ESA) prepared by Converse Consultants dated March 10, 2022 (Appendix H-1); Phase 1 Environmental Site Assessment Report Davies Property prepared by Converse Consultants (Appendix H-2); Soil and Groundwater Sampling Report Davies Acquisition prepared by Converse Consultants (Appendix H-3); Health Risk Assessment (HRA) prepared by SESPE Consulting, Inc. (Appendix H-4); Public Notice for the Results of Site Investigations and Request for Site Closure for the Nakano Property (Appendix H-5); Results of Site Investigations and Request for Site Closure for the Nakano Property prepared by Converse Consultants (Appendix H-6); Fire Protection Plan (FPP) prepared by Dudek (Appendix I); Evacuation Plan prepared by Dudek (Appendix J); and secondary source information from public hazardous materials databases, adopted fire hazard mapping, and the Brown Field Municipal Airport Land Use Compatibility Plan (ALUCP) (San Diego County Regional Airport Authority [SDCRAA or Airport Authority] 2010). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego for both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

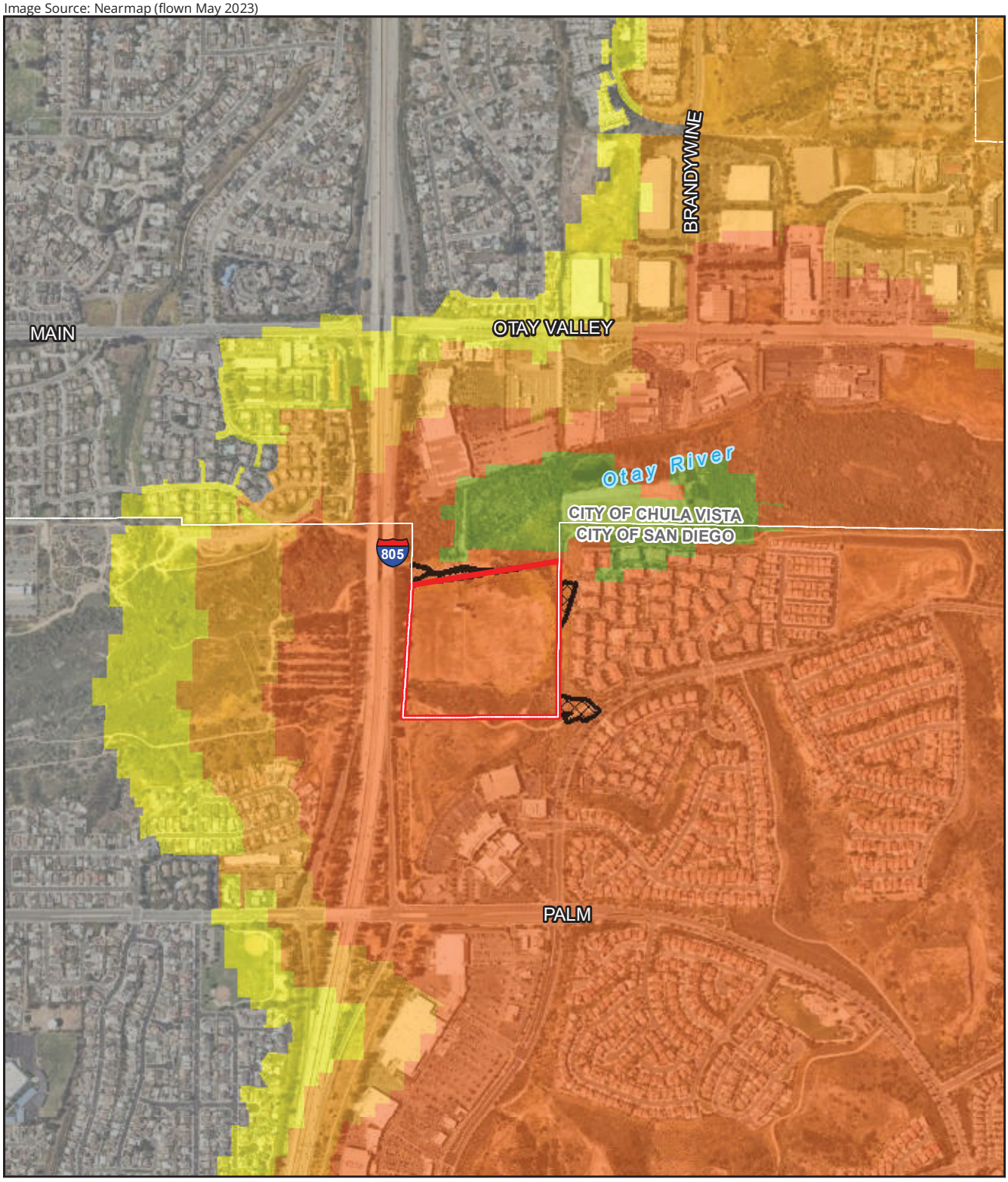
4.6.1 Existing Conditions

4.6.1.1 Wildfire

a. Wildfire Risk

Potential wildfire risk zones are areas that have steep slopes, limited precipitation, and vegetation fuel on-site or within adjacent areas. The project site lies within an area considered a very high fire hazard severity zone (VHFHSZ) as designated by the Chula Vista Fire Department (CVFD), the San Diego Fire-Rescue Department (SDFRD), and on California Department of Forestry and Fire Fire Hazard Severity Zone maps (Figure 4.6-1). The project site is additionally considered a wildfire urban interface area.

Image Source: Nearmap (flown May 2023)



Project Site

Off-site Improvements

Fire Hazard Severity

Very High

High

Moderate

Non-Wildland/Non-Urban

Urban Unzoned

0 Feet 1,000

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FIGURE 4.6-1
Fire Hazard Severity Zone

b. Attorney General Wildfire Guidance

The California Office of the Attorney General issued guidance (Guidance) outlining best practices for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA) (California Office of the Attorney General 2022). The Guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help project design in a way that minimizes wildfire ignition and incorporates emergency access and evacuation measures. Importantly, the Guidance does not impose additional legal requirements on local governments, nor does it alter any applicable laws or regulations. The Guidance suggests best practices including establishing baseline conditions, guidance for local governments in establishing thresholds of significance, modeling fire behavior and risk, providing qualitative assessment of fire risk, and offering potential measures to mitigate fire risk. The Guidance additionally addresses wildfire evacuation analysis best practices.

4.6.1.2 Hazardous Materials

a. On-site Conditions

The 2022 Phase I ESA prepared for the project site (see Appendix H-1) summarizes the results of several prior site investigations completed in August 2000, April 2003, September 2003, and November 2006 in addition to providing updated record search information. During prior investigations, soil sampling and exploratory trenching activities were completed across the property. According to these reports elevated levels of pesticides were detected on-site, as well as total petroleum hydrocarbon (TPH) contamination in the vicinity of one boring site. However, a follow up investigation in 2023, summarized in the Results of Site Investigations and Request for Site Closure for the Nakano Property and accompanying Public Notice (Appendix H-5 and H-6) concluded that these contaminants were at a level below regulatory thresholds for residential land uses. No evidence of burn ash fill was discovered on-site.

The Phase I ESA included interviews with the property owner representatives; property and vicinity reconnaissance; review of regulatory agency records; description of physical setting; and historical review which included aerial photos and maps. The Phase I ESA confirmed the two previously identified on-site recognized environmental conditions (REC): identification of pesticides in shallow soils in the vicinity of former on-site pesticide storage; and TPH in soils (see Appendix H-1). An application to the Department of Environmental Health and Quality (DEHQ) Voluntary Assistance Program (VAP) was made in 2022 to initiate cleanup of contaminated soils. Due to this active VAP case, the project site is identified in regulatory databases as a "cleanup program site" being processed under the oversight the County of San Diego (County) Local Oversite Program.

b. Off-Site Conditions (Davies Property)

The project requires off-site remedial grading north of the project site within a property owned by the City of Chula Vista, referred to as the Davies property (the name of the prior property owner, Vincent Davies). A Phase I ESA prepared in 2003 was reviewed to assess the environmental conditions of the Davies property (see Appendix H-2). Based on the findings of the Davies property Phase I ESA, soil and ground water sampling was conducted as reported in a Soil and Groundwater

Sampling report (Appendix H-3). The Phase I ESA for the Davies property included interviews with the property owners, site reconnaissance, review of records and previous assessments, and a historical review of aerial photos and maps. The Phase I ESA for the Davies property revealed multiple RECs associated with the property including: drums of waste oil that appeared leaking with staining; a spray paint area with containers of paint and paint thinner with staining; 14 car batteries with staining of dirt beneath the batteries; staining of dirt surrounding portable storage bins; staining surrounding 55-gallon unlabeled drums; plastic containers of waste oil observed to be leaking with staining; multiple additional areas where staining was observed. Additionally, the 2006 soil sampling (see Appendix H-3) identified the presence of soil containing burn ash. The burn ash is assumed to be associated with the Shinohara II burn site (see Section 4.6.1.2.c) where solid waste was historically burned, leaving behind residual burn ash and debris. The Davies property has been listed in regulatory databases as a U.S. Brownfield site as detailed in Section 4.6.1.2.c. The Davies property in relation to the project site and the Shinohara II burn site in addition to the estimated historical location of potential burn ash is depicted on Figure 4.6-2.

Since preparation of the 2003 Phase I report for the Davies property, some cleanup activities have occurred as the property has changed ownership and the noted waste drums, batteries, and trash are no longer present. The Davies site was reviewed by Converse Consultants to determine any ongoing RECs. In the location of the proposed remedial grading area, there are soils impacted by petroleum hydrocarbons that would need to be remediated. No RECs were identified in the location of the off-site trail improvements.

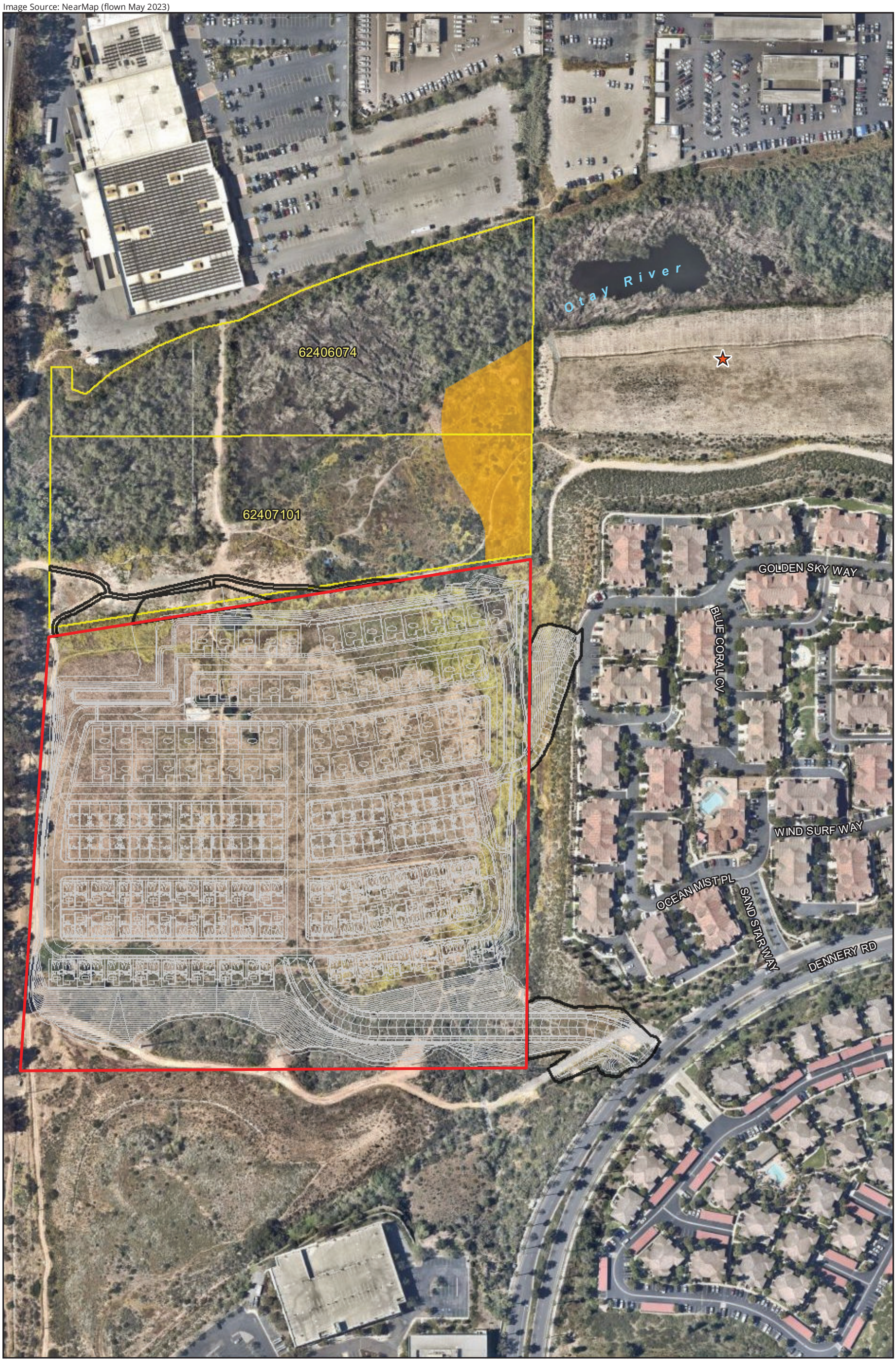
c. Hazardous Materials Sites Database Evaluation (Cortese List)

The Hazardous Waste and Substances Sites (Cortese) List is a planning document that provides information about the location of hazardous materials release sites in the state. California Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop, at least annually, an updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List that is contained in their Envirostor database. The other main source of information for sites in the Cortese List is the California State Water Resources Control Board's (State Water Board) Geotracker Database.

An environmental database record search was completed for the project site and surrounding areas as part of the project site's Phase I ESA dated March 2022 (Appendix H-1). An additional database search of sites listed on the Cortese List (see Section 4.6.2.2.e, below) was performed on August 23, 2023 via Envirostor to identify information pertaining to documented and/or suspected releases of regulated hazardous substances and/or petroleum products within the following specified search distances: sites within 1,000 feet of the project site and border zone properties (also known as Superfund Sites) within 2,000 feet.

No active Border Zone properties (i.e., Superfund sites) were identified within 2,000 feet of the project site. Three border zone properties were listed as approximately 0.5 mile from the project site including Shell located at 4555 Auto Park Drive, Unocal Service Station located at 4360 Palm Avenue, and Arco located at 4430 Otay Valley Road. All three sites have closed cases with no further action required (DTSC 2023).

Image Source: NearMap (flown May 2023)



0 Feet 200

Project Site
Off-site Improvements
Site Plan
Capped Shinohara II Burn Site (approx. 588 ft from Nakano Project)
Davies Property (Adjacent to Nakano Project)
Potential Burn Ash Based on the 2006 Soil and Groundwater Sampling Preport prepared by Converse Consultants

FIGURE 4.6-2
Nakano Site in Relation to
Shinohara II and Potential Burn Ash

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Figure 4.6-3 depicts the location of listed Envirostor and Geotracker hazardous materials sites within 1,000 feet of the project site. As shown in Table 4.6-1 there are two active cases, including the project site, and one completed/ closed case.

Table 4.6-1
Hazardous Materials Sites Listed within 1,000 feet of the Project Site

Site ID	Site Name	Case Type	Status	Status Date	Lead Agency
T10000018723	Nakano Property	Cleanup Program Site	Open	04/22/2022	County of San Diego LOP
N/A	Davies property	U.S. Brownfields Site	N/A	N/A	N/A
L10009070811	Shinohara II Burn site	Land Disposal Site	Open – Closing/with Monitoring	01/13/2014	San Diego RWQCB Region 9
T10000002226	Kaiser Foundation Health Plan, Inc.	Cleanup Program Site	Completed, Case Closed	06/07/2011	County of San Diego LOP

NOTE: Source data obtained from Geotracker (SWRCB 2023) and Envirostor (DTSC 2023) database searches in addition to Appendix H-1.

Nakano Property Cleanup Program Site (Open)

As detailed in Sections 4.6.1.2.a and 4.6.1.2.b, elevated levels of pesticides were detected on the Nakano site, as well as TPH contamination at the northern property boundary and extending partially into the Davies property. No evidence of burn ash fill was discovered on-site. The property owner submitted an application to the DEHQ VAP in 2022 to initiate cleanup of contaminated soils. Due to this active VAP case, the project site is identified in regulatory databases as a "cleanup program site" being processed under the oversight of the County of San Diego Local Oversite Program. However, a follow up investigation in 2023, summarized in the Results of Site Investigations and Request for Site Closure for the Nakano Property and accompanying Public Notice (see Appendices H-5 and H-6) concluded that these contaminants were at a level below regulatory thresholds for residential land uses.

Davies Property

The Davies property is listed as a U.S. Brownfield site (Appendix H-2). The listing identifies the site was developed for agriculture and previously used as a dairy farm from 1928 through 1967, and as an open storage site from 1967 to 2004. The site has been vacant from 2005 to the present. No other pertinent information was available from the U.S. Brownfield site listing. Refer to Section 4.6.1.2.b for additional details about historical conditions on the Davies property.

Image Source: NearMap (flown May 2023)



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FIGURE 4.6-3
Hazardous Materials Database Sites

Shinohara II Property Burn SiteBurn Site (Open – Closing with Monitoring)

Shinohara II Property burn site (Shinohara II burn site) is north of 153 Golden Sky Way on Assessor Parcel Number 644-042-10 and 644-0420-02, approximately 225 feet northeast from the project site in the City of Chula Vista, directly north of the RiverEdge Terrace development along the south side of the Otay River. The property is recorded as a known burn dump site reported as containing approximately 850,000 cubic yards of burn ash material. A burn dump is a site where solid waste has been burned at low temperature and the residual burn ash and debris have been landfilled or stockpiled (California Department of Resources Recycling and Recovery [CalRecycle] 2022). Burn ash contains a concentration of certain metals (including arsenic, beryllium, cadmium, chromium, copper, mercury, nickel, lead, and zinc) to levels that are hazardous under California regulations and, on occasion, federal regulation. Specifically, because these metals are not readily soluble in water they do not leach into the ground and could become airborne, erode into surface waters, or come in contact with skin. Exposure to contaminants via any of these routes may result in adverse health effects (CalRecycle 2022).

A contract to remediate the contamination associated with the Shinohara burn site was completed by American Integrated Services under the direction of the U.S. Army Corps of Engineers, City of Chula Vista, CalEPA, California Department of Fish and Wildlife, and CalRecycle. The effort involved containing and capping the contaminated soil. Approximately 35,000 cubic yards of burn ash debris were relocated away from the Otay River. Exposed material found along the slopes adjacent to the river were removed. Imported crushed rock and erosion control fencing was placed at the toe of the slope to ensure that remediation efforts did not result in contaminated soil or imported cap soil entering the Otay River. All contaminated material was stockpiled on the upland terrace and covered with a minimum 3-foot cap of imported soil (American Integrated Services, Inc. 2022). Remediation of the property was completed in 2019 (Otay Valley Regional Park 2022). The property remains listed as “open - closing with monitoring.”

Kaiser Foundation Health Plan, Inc. (Completed/Case Closed)

The Kaiser Foundation Health Plan site is identified on Figure 4.6-3 as being located south of the project site. On June 16, 2010, a BP gasoline tanker truck with a trailer overturned near the intersection of Palm Avenue and Dennery Road, in the City of San Diego, California, and resulted in a fire. An unknown amount of a mixture of gasoline and water spilled on the sidewalk, entered into the nearby storm drain, and flowed west underground to a California Department of Transportation storm drain that runs beneath the northbound on-ramp for Interstate 805 (I-805), and finally reached an outfall in the Otay River Valley in the City of Chula Vista, California.

Stantec Consulting performed the initial assessment of the spill of gasoline on the sidewalk along Palm Avenue and completed the assessment and cleanup of the gasoline in the storm drains and in the soil and water along the flow to the river outfall as well as in the groundwater beneath the impacted areas. Several soil/sediment samples and water samples from the storm drains were collected and analyzed. Twelve groundwater monitoring wells were installed and groundwater was monitored twice within a two-month period. The initial cleanup activities included removal of litter and debris from the outfall area, excavation of approximately 18 inches thick soil/sediment at the end of the outfall pipe followed by vacuuming liquid/sediment from storm drains in the site vicinity, pressure washing the storm drains, and ventilating the storm drains. Initially, a total of 31,000

gallons of water were removed from the outfall area and disposed off-site. A total of 99,559 gallons of water and 132 cubic yards of soil were transported off-site. The residual concentrations of gasoline and volatile organic compounds in soil and groundwater within the impacted areas ranged from non-detect to low levels, which do not threaten public health or the environment. Stantec Consulting proposed closure of the case and the DEHQ concurred with the closure in 2011 (State Water Resources Control Board 2023).

4.6.1.3 Emergency Preparedness

a. San Diego County Emergency Operations Plan

The 2018 San Diego County Emergency Operations Plan (EOP) 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. The EOP Annex-Q addresses evacuation and provides a template for development of other jurisdictional evacuation plans.

b. Office of Emergency Services

County of San Diego

The County Office of Emergency Services (OES) coordinates the overall County response to disasters. The County OES is responsible for notifying appropriate agencies when a disaster occurs, coordinating all responding agencies, ensuring that resources are available and mobilized, developing plans and procedures for response to and recovery from disasters, and developing and providing preparedness materials for the public.

The County OES staffs the Operational Area Emergency Operations Center (EOC), a central facility that provides regional coordinated emergency response, and acts as staff to the Unified Disaster Council, its governing body. The Unified Disaster Council, established through a joint powers agreement among all 18 incorporated cities and the County of San Diego, provides for the coordination of plans and programs countywide to ensure the protection of life and property.

City of San Diego

In 2021, the City of San Diego launched an OES to lead all response efforts at the city level. The City of San Diego's OES works closely with the State OES and the County's OES. The City of San Diego OES works with community members and regional organizations in providing information, training, and exercise to strengthen preparedness for man-made or naturally disastrous events.

c. Multi-Jurisdictional Hazard Mitigation Plan

The Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) is a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The MJHMP is a comprehensive resource document that serves many purposes such as enhancing public awareness, creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. The MJHMP was last revised in 2018 and is currently being revised to reflect changes to both the hazards threatening the County of San Diego as well as the programs in place to minimize or eliminate those hazards. The City of Chula Vista and the City of San Diego have specific hazard mitigation goals, objectives, and related potential actions are included in the MJHMP (County of San Diego 2018).

4.6.1.4 Airport Safety

a. Brown Field Airport Safety Zones

The 2010 Brown Field Municipal ALUCP is intended to ensure compatibility between adjacent land uses and the operation and/or expansion of the airport. Surrounding jurisdictions are required to comply with Airport Authority policies and restrictions set forth in the Brown Field Municipal ALUCP. This airport is a port of entry for private aircrafts coming from Mexico. Brown Field is a busy general aviation airport. General aviation encompasses all aviation except air carrier and military, although the military continues to maintain a strong presence. The types of general aviation aircraft that operate at Brown Field include private, corporate, charter, air ambulance, law enforcement, fire rescue, flight training, cargo, skydiving, banner towing, and airships. The Federal Aviation Administration (FAA) has classified Brown Field Municipal as a reliever airport for San Diego International Airport–Lindbergh Field. A reliever airport is an airport that serves general aviation aircraft that might otherwise use a congested air carrier airport (City of San Diego 2023a)

Risks associated with airport operations include risks to people and property located in the vicinity of an airport in the event of an accident, and risks to the safety of persons aboard an aircraft. Airspace protection policies may address the height of objects on the ground and activities that can cause electronic or visual impairment to navigation or attract large numbers of birds.

The project is within Review Area 2 of the Airport Influence Area but is outside the Brown Field ALUCP compatibility maps for noise and safety. The project is also outside of the Part 77 Airspace Protection, Overflight, and Overflight Notification areas. No compatibility determination would be required.

4.6.2 Regulatory Framework

4.6.2.1 Federal Regulations

a. U.S. Environmental Protection Agency

The U.S. EPA is the primary federal agency regulating hazardous wastes and materials. U.S. EPA broadly defines a hazardous waste as one that is specifically listed in U.S. EPA regulations, has been tested and meets one of the four characteristics established by the U.S. EPA (toxicity, ignitability, corrosiveness, and reactivity), or that has been declared hazardous by the generator based on its knowledge of the waste. The U.S. 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 Code of Federal Regulations (CFR). The terms hazardous wastes and hazardous materials are used interchangeably in this section.

The 2002 Small Business Liability Relief and Brownfields Revitalization Act (Public Law 107-118) (H.R. 2869) codified many of EPA's practices, policies and guidance and amended the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund). H.R. 2869 was signed into law by the President on January 11, 2002 and enacted as Public Law 107-118 This expanded EPA's assistance by providing new tools for the public and private sectors to promote sustainable brownfields cleanup and reuse. H.R. 2869 incorporates S. 350, the "Brownfields Revitalization and Environmental Restoration Act of 2001", which passed the Senate on April 25, 2001 by a vote of 99-0. S. 350 contained three titles dealing with funding and liability for assessing and cleaning up contaminated properties. Title I codified and expanded EPA's current Brownfields program by authorizing funding for assessment and cleanup of brownfields properties. Title II exempted from Superfund liability contiguous property owners, prospective purchasers, and clarified appropriate inquiry for innocent landowners. Title III authorized funding for State response programs and limited EPA's Superfund enforcement authority at sites cleaned up under a State response program. All three titles were combined into a single title in H.R. 2869. H.R. 2869 also incorporates H.R. 1831, the "Small Business Liability Protection Act", which passed the House on May 22, 2001 by a vote of 419-0. H.R. 1831 exempts de micromis contributors of hazardous substances and household, small business, and nonprofit generators of municipal solid waste from liability for Superfund response costs at National Priority List sites. Additionally, the bill provides for expedited settlements with certain persons based on a limited ability to pay.

The 2018 Brownfields Utilization, Investment and Local Development (BUILD) Act reauthorized EPA’s Brownfields Program, and authorized changes that affect brownfield grants, ownership and liability provisions, and State & Tribal Response Programs. The EPA’s Brownfields Program provides grants and technical assistance to communities, states, tribes and others to assess, safely clean up and sustainably reuse contaminated properties.

b. Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act of 1976 (42 United States Code 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 the U.S. EPA to establish a comprehensive regulatory program for underground storage tanks. The corresponding regulations in 40 CFR Parts 260–299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste.

c. 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 Part 171, Subchapter C) governs the transportation of hazardous materials. These regulations are promulgated by the U.S. Department of Transportation and enforced by the U.S. EPA.

d. Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Disaster Mitigation Act also established a new requirement for local mitigation plans.

4.6.2.2 State Regulations

a. Environmental Health Standards for the Management of Hazardous Waste

California Code of Regulations (CCR) Title 22, Division 4.5 provides standards applicable to generators and transporters of hazardous wastes, as well as standards for operators of hazardous waste transfer facilities, among other regulations.

b. Hazardous Materials Release Response Plans and Inventory

Two programs in the California Health and Safety Code (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 (HMBP) program and the California Accidental Release Prevention (CalARP) program. The County Department of Environmental Health and Quality (DEHQ) is responsible for the implementation of the HMBP program and the CalARP program in San Diego County. The HMBP and CalARP programs provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, an HMBP or Risk Management Plan is required pursuant to the regulations.

Congress requires U.S. EPA Region 9 to make Risk Management Plan information available to the public through the U.S. EPA's Envirofacts Data Warehouse. The Envirofacts Data Warehouse is considered the single point of access to select U.S. EPA environmental data.

California 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 Regional Water Quality Control Boards (RWQCBs) and the State Water Resources Control Board (SWRCB).

c. Senate Bill 1889, Accidental Release Prevention Law/Chemical Accident Release Prevention Program

Senate Bill 1889 required California to implement a federally mandated program governing the accidental airborne release of chemicals listed under Section 112 of the Clean Air Act. Effective January 1, 1997, CalARP replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. CalARP addresses facilities containing specified hazardous materials that, if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

d. 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 the CalEPA, California Highway Patrol, California Department of Fish and Wildlife, and RWQCB.

e. Cortese List

The Cortese List refers to provisions in Government Code Section 65962.5, which requires that the DTSC, State Department of Health Services, SWRCB, and designated local enforcement agencies compile and update lists of hazardous materials sites under their purview as specified in the code. The "Cortese List" consists of the information provided by these agencies under the code.

The DTSC Brownfields and Environmental Restoration Program EnviroStor database provides DTSC's component of the Cortese List data by identifying State Response, Federal Superfund, and Backlog sites listed under H&SC Section 25356, as well as Certified with Operation and Maintenance sites. The EnviroStor database identifies sites that have known contamination or potentially contaminated sites requiring further investigation, and facilities permitted to treat, store, or dispose of hazardous waste. The EnviroStor database includes lists of the following site types: federal Superfund; State Response, including military facilities and State Superfund; voluntary cleanup; and school sites.

The SWRCB GeoTracker database tracks sites that impact groundwater or have the potential to impact groundwater. It includes sites that require groundwater cleanup such as Leaking Underground Storage Tanks, Department of Defense, and Site Cleanup Program sites, as well as

permitted facilities that could impact groundwater such as operating Underground Storage Tanks (USTs), irrigated lands, oil and gas production sites, and land disposal sites.

f. California Department of Toxic Substances Control

Within the CalEPA, the 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, the DTSC has been authorized to implement the state's hazardous waste management program for the CalEPA.

g. Local Enforcement Agency/Integrated Waste Management Board: Burn Ash Sites

The Local Enforcement Agency (LEA) covers the process for evaluating and remediating burn dump sites. The LEA provides guidance on the appropriate procedures to follow in evaluating the risks to public health and safety and the environment posed by burn ash dump sites and identify the steps to take to control these risks. The Integrated Waste Management Board conducts site assessments to classify and regulate burn sites. The City of San Diego is the LEA for land within its jurisdictional boundaries. The County of San Diego is the LEA for land outside of the City of San Diego and within the County of San Diego. In the event the project proceeds under the No Annexation Scenario or Annexation Scenario 2b, the County of San Diego LEA would provide oversight for development occurring within 1,000 feet of the Shinohara II burn site. In the event the project proceeds under Annexation Scenario 2a, the City of San Diego LEA would provide oversight for development within 1,000 feet of the Shinohara II burn site. The LEA has authority to review and approve land use changes on or within 1,000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c).

h. State Water Resources Control Board

The San Diego RWQCB is authorized by the SWRCB to enforce provisions of the Porter–Cologne Water Quality Control Act of 1969. This act gives the San Diego RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the state is threatened and to require remediation of the site, if necessary.

i. The California Department of Transportation

The California Department of Transportation manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. The California Department of Transportation is also the first responder for hazardous material spills and releases that occur on highway and freeway lanes and inter-city rail services.

j. State Hazard Mitigation Plan

The State Hazard Mitigation Plan (SHMP) is the state's hazard mitigation guidance document and provides a comprehensive description of California's historical and current hazard analysis, mitigation strategies, goals, and objectives. The SHMP reflects the state's commitment to reduce or

eliminate potential risks and impacts of natural and human-caused disasters by making California's families, homes, and communities better prepared and more disaster-resilient. The SHMP is also a federal requirement under the Disaster Mitigation Act of 2000 for the State of California to receive federal funds for disaster assistance grant programs.

k. State Aeronautics Act

Through the State Aeronautics Act, every county that contains a public airport must develop and comply with an ALUCP with a 20-year planning horizon. The purpose of an ALUCP is to protect public health, safety, and welfare by providing for the orderly growth and land use development of the area surrounding the airport. ALUCP policies generally set controls on land use and development standards that ensure safe and efficient airport and flight operations and minimize the public's exposure to excessive noise and safety hazards within the airport's vicinity. An ALUCP does not designate land uses, but instead establishes criteria to encourage the development of compatible land uses. It also has no ability to alter existing non-conforming uses; the focus is on future development.

The body responsible for creating and carrying out the ALUCP is each respective county's Airport Land Use Commission (ALUC) or other designated agency. The Airport Authority serves as the ALUC for San Diego County.

l. California Underground Storage Tank Regulations

The California Underground Storage Tank Regulations (CCR Title 23, Chapter 16) includes guidelines and standards to protect waters from hazardous substance discharges from USTs. The regulations establish construction requirements for new USTs; establish separate monitoring requirements for new and existing USTs; establish uniform requirements for unauthorized release reporting and for the repair, upgrade, and closure of USTs; and specify variance request procedures. It requires responsible parties to remediate any unauthorized releases from USTs.

m. California Fire Code

The California Fire Code (CFC) provides regulatory direction for the maintenance of brush management zones (BMZs), access road standards, placement of fire hydrants, and numerous other design and maintenance requirements for development projects. With respect to construction and demolition activities, Chapter 33 of the CFC outlines general fire safety precautions for all structures and all occupancies during construction and demolition operations. In general, these requirements seek to maintain required levels of fire protection, limit fire spread, establish the appropriate operation of equipment, and promote prompt response to fire emergencies. Features regulated include fire protection systems, fire fighter access to the site and building, means of egress, hazardous materials storage, and use and temporary heating equipment and other ignition sources.

Chapter 7A of the CFC addresses structural ignition resistance and reducing ember penetration into homes. The CFC focuses on mitigating structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated (Chapter 7-A, Section 701A Scope, Purpose, and Application).

n. California Division of Occupational Safety and Health

The California H&SC is the collection of state laws that govern the handling of hazardous waste, corrective action (remediation), and permitted facilities. The California Division of Occupational Safety and Health, or Cal/OSHA, defines and enforces worker safety standards and requires proper handling and disposal of hazardous materials including asbestos containing materials and lead containing surfaces according to the Occupational Safety and Health Act and federal and state EPA regulations. The Occupational Safety and Health Act/EPA Occupational Chemical Database compiles information from several government agencies and organizations. This database provides reports on physical properties, exposure guidelines, and emergency response information, including the U.S. Department of Transportation emergency response guide.

4.6.2.3 Regional Regulations

a. Certified Unified Program Agency

In 1993, Senate Bill 1082 gave the 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. The CalEPA oversees the Unified Program with support from DTSC, the RWQCBs, OES, and the state Fire Marshal.

State law requires the 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 Hazardous Materials Division (HMD) of the County's DEHQ is the Certified Unified Program Agency for San Diego County.

b. County of San Diego Department of Environmental Health

Hazardous Materials Division

The HMD of the County's DEHQ regulates hazardous waste and tiered permitting, USTs, aboveground petroleum storage and risk management plans, hazardous materials business plans and chemical inventory, and medical waste. The HMD'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 2023).

The County's DEHQ HMD offers a VAP that provides staff consultation, project oversight, and technical and environmental report evaluation on projects pertaining to properties suspected or known to be contaminated with hazardous substances. This program allows for oversight of environmental assessment, cleanup, and risk evaluation to facilitate the rapid and cost-effective resolution of soil and groundwater contamination problems. A "No Further Action" letter or "Concurrence" letter is issued when the technical information, findings and recommendations in the reports submitted demonstrate that human health and the environment are adequately protected.

Local Enforcement Agency

The County of San Diego LEA is certified by CalRecycle to enforce state laws and regulations at solid waste facilities, including closed disposal sites. The County LEA serves all portions of the City of Chula Vista; therefore, in the event the project is developed in Chula Vista (No Annexation Scenario or Annexation Scenario 2b), the County LEA would provide oversight of the project grading due to its location being within 1,000 feet of the Shinohara II burn site.

4.6.2.4 Local Regulations - City of Chula Vista

a. City of Chula Vista General Plan

In the Environmental Element of the Chula Vista General Plan, the following policies related to air quality are found in Section 3.1.6 of the Environmental Element in the Chula Vista General Plan:

Objective E 6: Improve local air quality and reduce greenhouse gas emissions by minimizing the release of air pollutants and toxic air contaminants and limiting the exposure of people to such pollutants.

> **Policy E 6.10:** The siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of a health risk assessment as part of the California Environmental Quality Act (CEQA) review of the project. Attendant health risks identified in the health risk assessment (HRA) shall be feasibly mitigated to the maximum extent practicable, in accordance with CEQA, in order to help ensure that applicable federal and state standards are not exceeded.

The Environmental Element of the City of Chula Vista General Plan contains policies focused on safe storing and handling of hazardous materials and waste. Policies relevant to the project include the following:

Objective E 18: Minimize the use of toxic products by residents and small businesses and facilitate the proper disposal of household hazardous waste.

> **Policy E 18.1:** Provide convenient and affordable household hazardous waste collection facilities and services for residents and small businesses, including City facilities, community collection events, and curbside collection.
>
> **Policy E 18.2:** Minimize the use of toxic products by residents and small businesses through public education on alternative products and methods.

Objective E 20: Ensure that facilities using, storing, and handling hazardous materials and waste do not result in significant adverse effects to existing and planned surrounding land uses.

> **Policy E 20.2:** Through the environmental review of proposed developments, in accordance with CEQA, the City shall ensure that significant and potentially significant adverse effects from facilities using, storing, and handling hazardous materials and waste to existing and planned surrounding land uses will be avoided.

> **Policy E 20.3:** Prior to the issuance or renewal of business licenses for businesses involving hazardous materials and/or generating hazardous waste, the City shall continue to require licensees to prepare and submit an acceptable Business Plan and Risk Management Prevention Program to the County DEHQ, as applicable, and to obtain all other necessary licenses and permits.

b. City of Chula Vista Municipal Code

Hazardous Materials

The Hazardous Materials section of the City of Chula Vista Municipal Code (CVMC) (CVMC Chapter 8.34.020) adopts the County hazardous materials disclosure ordinance and hazardous waste surveillance program ordinance. This enables the City of Chula Vista to enforce the requirement that all persons handling hazardous materials disclose such information to the County DEHQ in a manner required by the department.

Fire Safety

CVMC Chapter 15.36, Fire Code, adopts by reference the 2019 edition of the CFC (or current edition at the time of project approval).

4.6.2.5 Local Regulations - City of San Diego

a. City of San Diego General Plan

The **Land Use and Community Planning Element** (City of San Diego 2015) presents goals and policies relating to airport land use compatibility. Relevant policies include the following:

> **Policy LU-G.6:** Require that all proposed development projects (ministerial and discretionary actions) notify the FAA in areas where the proposed development meets the notification criteria as defined by Code of Federal Regulation Title 14, Part 77.

The **Land Use and Community Planning Element** of the City of San Diego General Plan (City of San Diego 2015) includes the following policy regarding toxic air emissions and associated health risks:

> **Policy LU-I.14:** As part of community plan updates or amendments that involve land use or intensity changes, evaluate public health risks associated with identified sources of hazardous substances and toxic air emissions (see also Conservation Element, Section F). Create adequate distance separation, based on documents such as those recommended by the California Air Resources Board and site-specific analysis, between sensitive receptor land use designations and potential identified sources of hazardous substances such as freeways, industrial operations or areas such as warehouses, train depots, port facilities, etc.

The **Public Facilities, Services and Safety Element** (City of San Diego 2023b) includes policies related to hazardous materials, disaster preparedness, and maintenance of emergency and evacuation plans. Relevant policies include the following:

Policy PF-D.12: Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones.

a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment (see also LU-C.2.a.4).

b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after a fire.

c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires.

d. Provide and maintain water supply systems to supplies for structural fire suppression.

e. Provide adequate fire protection (see also PF-D.1 and PF-D.2).

Policy PF-D.13: Incorporate fire safe design into development within very high fire hazard severity zones to have fire-resistant building and site design, materials, and landscaping as part of the development review process.Locate, design and construct development to provide adequate defensibility and minimize the risk of structural loss from wildland fires.

a. Design development on hillsides and canyons to reduce the increased risk of fires from topography features (i.e., steep slopes, ridge saddles).

b. Minimize flammable vegetation and implement brush management best practices in accordance with the Land Development Code.

c. Design and maintain public and private streets for adequate fire apparatus vehicles access (ingress and egress), and install visible street signs and necessary water supply and flow for structural fire suppression.

d. Coordinate with the Fire-Rescue Department to provide and maintain adequate fire breaks where feasible or identify other methods to slow the movement of a wildfire in very high fire hazard severity zones.

Policy PF-D.14: Implement brush management along City maintained roads in very high fire hazard severity zones adjacent to open space and canyon areas.

Policy PF-D.15: Maintain access for fire apparatus vehicles along public streets in very high fire hazard severity zones for emergency equipment and evacuation.

b. City of San Diego Municipal Code

Hazardous Materials

The Hazardous Waste Establishment section of the San Diego Municipal Code (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 health care information and other appropriate technical assistance on a 24-hour basis to emergency responders in the event of a hazardous waste incident involving community exposure. The Disclosure of Hazardous Materials section (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 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 are compatible with respect to airport-related noise, public safety, airspace protection, and aircraft overflight areas. Regulations include safety compatibility and aircraft overflight notification.

Fire Safety

SDMC Chapter 5, Article 5: Fire Protection and Prevention is the San Diego Fire Code (SDFC). The SDFC adopts the 2016 CFC, as amended.

Brush Management

SDMC Section 142.0412 provides brush management regulations. Brush management is required in all base zones on publicly or privately-owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. There are two BMZs, as identified in this section of the municipal code. BMZ 1 the area adjacent to a structure, shall be least flammable, and shall typically consist of pavement and permanently irrigated ornamental planting. BMZ 2 is the area between BMZ 1 and any area of native or naturalized vegetation and typically consists of thinned, native or naturalized, non-irrigated vegetation.

Local Enforcement Agency

The City of San Diego Solid Waste LEA is certified by CalRecycle to enforce state laws and regulations at solid waste facilities, including closed disposal sites. The City LEA serves all portions of the City of San Diego; therefore, in the event the project is developed in San Diego (Annexation Scenario 2a), the City LEA would provide oversight of the project grading due to its location being within 1,000 feet of the Shinohara II burn site. The LEA has authority to review and approve land use changes on or within 1000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c).

4.6.3 Issues 1, 2, 3, and 4: Hazardous Materials Transport, Use and Disposal; Accidental Release; Emissions Near a School; Hazardous Materials Site

4.6.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to hazardous materials in the City of Chula Vista:

- Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 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?

b. Impact Analysis

Routine Use, Transport, and Disposal

Hazardous materials are any substance or combination of substances that may pose a risk to human health and safety or to the environment. Hazardous materials include toxic, corrosive, infectious, flammable, explosive and radioactive materials. The project is a residential development and does not include any proposed uses that would involve the ongoing or routine use of substantial quantities of hazardous materials during operations. Hazardous materials associated with the residential dwellings, associated landscape, and recreational uses would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. Although the project would introduce dwelling units to the site resulting in an increased use of commercially available potentially hazardous materials, the use of these substances would be subject to all applicable safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials. Only small quantities of hazardous materials associated with household hazards would be anticipated to occur. The City of Chula Vista General Plan includes Objective E 18 which focuses on the minimization of risk from residential toxic products. City of Chula Vista General Plan Policies E 18.1 and E 18.2 support the provision of convenient and affordable household hazardous waste

collection facilities and services for residents, as well as the provision of education materials relating to alternative products.

With respect to project construction, activities would involve temporary transport, management, handling, use, and storage of hazardous materials such as diesel fuels, lubricants, petroleum products, paints, solvents, and other typical chemicals required during construction. These activities could potentially expose workers, the public, and/or the environment to hazardous materials. Any potential exposure to hazardous materials would be handled in accordance with current and applicable federal, state, and local laws regarding safe transport, handling, and management. Such laws include the Cal/OSHA program (CCR Title 8, Section 330 et seq.), which would require the enforcement of worker safety standards and requires proper handling and disposal of hazardous materials. Additionally, the DTSC implements the state's hazardous waste management program which ensures local regulatory agencies consistently apply statewide standards when they issue permits, conduct inspections, and engage in enforcement activities.

Accidental Release

An accidental release of hazardous materials could occur during: (1) the routine use, transport, and disposal of materials during project operation (as discussed above); or (2) through the accidental upset of hazardous materials – either known or unknown – during excavation and construction of future development. Exposure to hazardous materials could occur through contact with contaminated soil or groundwater, skin contact, or the inhalation of vapors or dust.

Construction Activities

Standard Construction Emissions

General construction activities include transport of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, and solvents. These materials would be used and stored in designated construction staging areas within the boundaries of the project site, and once the proposed project has been constructed, any remaining materials would be transported off-site. These materials would be transported, handled, and disposed of in accordance with all applicable federal, state, and local laws and regulations pertaining to the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or the environment.

Toxic air contaminants would potentially be emitted during construction activities as a result of diesel particulate matter (DPM) emitted from heavy-duty construction equipment and heavy-duty trucks. As discussed in Section 4.2.5, construction activities would be regulated by California Air Resource Board standards related to particulate matter emissions and application of Best Available Control Measures to reduce potential DPM release. Overall, due to the short duration of project construction (two years) and the location of the closest sensitive receivers to the construction site (115 feet), it was concluded that there would be minimal exposure of sensitive receptors in the vicinity of the project site to substantial pollutant concentrations resulting from on-site construction activities. Refer to Section 4.2.5.1.b for additional details.

Grading in Contaminated Soils

As detailed in Section 4.6.1.2.a, historic use of the property has resulted in some concentrations of pesticides in shallow soils in the vicinity of a former on-site pesticide storage area within the project site. Additionally, areas of TPH contamination were identified in on-site soils and extending off-site into the Davies property in a location of proposed remedial grading.

Pesticides and TPH impacted soil are considered an REC. As detailed in Appendix H-1, the term REC is defined in Section 1.1.1 of the American Society of Testing and Materials Standard Practice as the presence or likely presence of any hazardous substances or petroleum products in, at or on a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. Absent the removal or remediation of the on-site RECs, development of the project could release hazardous materials into the environment. However, a follow up investigation in 2023, summarized in the Results of Site Investigations and Request for Site Closure for the Nakano Property and accompanying Public Notice (Appendix H-5 and H-6) concluded that these contaminants were at a level below regulatory thresholds for residential land uses.

Release of these contaminants during grading activities could impact nearby surface water. Construction activities could degrade water quality due to the release of pollutants including the possible release of pesticides and TPH as identified in on-site soils and within off-site remedial grading areas. Additionally, the potential to encounter burn ash during grading activities and the possible downstream release could adversely affect water quality. These activities would impact off-site aquatic habitat, upland wildlife, and aesthetic land values. However, the project prepared a project-level PDP SWQMP identifying a preliminary list of BMPs, which would be implemented as project design features, to limit or prevent various pollutants from entering surface water runoff.

No RECs were identified within the off-site improvement areas within the City of San Diego.

No grading is proposed within the portion of the Davies property identified to potentially contain burn ash and no burn ash has been identified on the Nakano site. However, due to the proximity of the project site grading to the Shinohara II burn site and the burn ash identified on the Davies property in 2006, there is a potential risk that site grading could uncover soils containing burn ash which could present a health risk during site grading. Under the No Annexation Scenario and Annexation Scenario 2b where the site would be developed in Chula Vista, the County of San Diego LEA would have authority to review and approve land use changes on or within 1,000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c). This potential risk of encountering burn ash would apply to all on-site and off-site grading activities.

Operational Activities

Residential Operations

The project includes a residential development with open and private recreational spaces. Hazardous materials associated with the residential dwellings, landscape, and recreational uses would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. Although the project would

introduce dwelling units to the site resulting in an increased use of commercially available potentially hazardous materials, the use of these substances would be subject to all applicable safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials.

Freeway Emissions

Due to the project site's location, new sensitive receivers would be placed within 500 feet of the I-805 freeway resulting in potential exposure to DPM. As required by Policy E 6.10 in the City of Chula Vista's General Plan Environmental Element (City of Chula Vista 2005), the siting of new sensitive receivers within 500 feet of highways resulting from development or redevelopment projects shall require the preparation of an HRA as part of the CEQA review of the project. The project residences would be located adjacent to Interstate 805 (I-805); therefore, the project is subject to this requirement. An HRA was performed to estimate the Maximum Individual Cancer Risk and Chronic Hazard Index from the I-805 freeway on future sensitive receptors of the project (see Appendix C). As discussed in Section 4.2.5.1.b and Appendix C, DPM emissions from I-805 would result in a Residential Maximum Individual Cancer Risk of 25.60 in 1 million which would exceed 10 in 1 million. The Residential Chronic Hazard Index of 0.007 would be below the level of 1.0 at which adverse non-cancer health risks would be anticipated. As detailed in Section 4.2.5.1.b, Diesel Particulate Matter – Freeway, the HRA was prepared for informational purposes only and does not contribute to a significance determination under CEQA due to this issue being an effect of the environment on the project and not an effect of the project on the environment.

Davies Property – Burn Ash

The presence of burn ash within the eastern portion of the Davies property was documented in 2006 (see Figure 4.6-2). The burn ash is assumed to be associated with the Shinohara II burn site that was previously located adjacent to the Davies property to the east and has since been remediated through site capping. Due to the potential presence of burn ash within the Davies property, there is a potential for the project site to be exposed to windblown dust containing burn ash identified within the Davies property that could affect future project residents. An additional HRA (see Appendix H-4) was performed to determine whether windblown dust from the Davies property would contain enough total suspended particulate emissions to result in a negative effect on adjacent residents. Conservatively, 14.3 acres of the Davies property were assumed to be emitting windblown dust. Dispersion modelling was performed to calculate windblown emissions based on wind speed and direction. Receptors were identified throughout the Nakano project site in the location of proposed residences (see Figure 2 of Appendix H-4). The HRA concluded that the maximum threshold values would not be exceeded from dispersion of burn ash from the Davies property.

Similar to the discussion under freeway emissions, the HRA related to potential windblown burn ash was prepared for informational purposes only to comply with Policy E 6.10 in the City of Chula Vista's General Plan Environmental Element (City of Chula Vista 2005) and does not contribute to a significance determination under CEQA due to this issue being an effect of the environment on the project and not an effect of the project on the environment. Implementation of project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water

quality standards would ensure adverse impacts to water quality resulting potential erosion of soils containing burn ash from long term operations would not occur.

Emissions near a School

The closest schools to the project site are Juarez-Lincoln Elementary schools (0.6 mile) and Finney Elementary School (0.7 mile). Therefore, the project is not within a quarter-mile of an existing school.

Hazardous Materials Sites

Nakano Property Cleanup Program Site

As detailed in Section 4.6.3.1.b, Accidental Release, concentrations of pesticides in shallow soils in the vicinity of former on-site pesticide storage, constituting RECs, were identified on-site, along with TPH in soils extending into the Davies property. The Nakano site appears on regulatory databases due to a current application with the DEHQ VAP to initiate cleanup of contaminated soils prior to site development.

In accordance with federal, state, regional, and local requirements, any new development that involves contaminated property would necessitate the clean-up and/or remediation of the property in accordance with applicable requirements and regulations. No construction would be permitted at such locations until a "no further action" clearance letter from the responsible agency. Absent remediation, ground disturbing activity within the project site and the remedial grading area within the Davies property could release hazardous materials into the environment.

As of October 2023, a public notice (Appendix H-5) was issued with a public comment period of October 25, 2023 through November 24, 2023 for the Results of Site Investigations and Request for Site Closure (Report) (Appendix H-6). The Report requested from the San Diego County DEHQ the issuance of a No Further Action letter for the Nakano site for regulatory closure with regard to two previously identified recognized environmental conditions (RECs): pesticides in shallow soils in the vicinity of former on-site pesticide storage and hydrocarbons in the vicinity of one boring completed at the Property. Compounds identified at the site were reported at concentrations below the State of California health risk screening levels for residential land use. Since the concentrations of pesticides and TPH previously reported in soil samples from the property are all less than current regulatory thresholds for residential land use, it is expected that case closure will be granted without requiring any further assessment or remedial activities.

No RECs or hazardous materials sites were identified within the off-site improvement areas within the City of San Diego.

Davies Property

The Davies property is listed as a U.S. Brownfield site due to the site history, which included open storage of drums of waste oil that appeared leaking with staining; a spray paint area with containers of paint and paint thinner with staining; 14 car batteries with staining of dirt beneath the batteries; staining of dirt surrounding portable storage bins; staining surrounding 55-gallon unlabeled drums; plastic containers of waste oil observed to be leaking with staining; multiple additional areas where

staining was observed. Since these conditions were noted, the debris and material has been removed. Remedial grading is proposed within a portion of the Davies property that was documented to contain elevated TPH in the soils. As discussed in Section 4.6.3.1.b, Accidental Release, grading within TPH impacted soils could result in a hazardous release.

Shinohara II Burn Site

The Shinohara II burn site is listed in regulatory databases as open-closing with monitoring. The site is a former burn dump site located approximately 225 feet northeast from the project site in the City of Chula Vista, directly north of the RiverEdge Terrace development along the south side of the Otay River (Assessor Parcel Numbers 644-042-1000 and 644-0420-200). As discussed under Section 4.6.1.2.c, the site has been remediated through site capping. In 2018, the City of Chula Vista approved a Negative Declaration (State Clearinghouse 2018071027) to address proposed remediation and restoration of the Shinohara II burn site. The California Department of Fish and Wildlife issued a Notice of Determination (State Clearinghouse 2018071027) on September 25, 2018, approving a Lake and Streambed Alteration Agreement to the City of Chula Vista. The project involved remediation of contamination from the historical burn ash dump by containing and capping the contaminated soil. Exposed material found along the slopes adjacent to the river was removed using an excavator. All contaminated material was stockpiled on the upland terrace and covered with a minimum 3-foot cap of imported soil. The slopes adjacent to the river were recontoured to an approximately 3:1 ratio ensuring appropriate drainage post-remediation. Erosion control measures were implemented to protect the slopes and the area has been revegetated with native species (American Integrated Services, Inc., 2023).

Despite the site capping and remediation, the County of San Diego LEA has authority to review and approve land use changes on or within 1,000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c). This oversight ensures that any remaining hazards associated with land uses near closed landfills are addressed. Refer to 4.6.3.1.b, Accidental Release for additional discussion of potential on-site hazards related to burn ash.

The potential for environmental concern to the project site from the closed and capped Shinohara II burn site would be low due to the site remediation that has contained contaminants.

Kaiser Foundation Health Plan, Inc.

As detailed in Section 4.6.1.2.c, the Kaiser Foundation Health Plan, Inc. site is a closed site with remediation associated with a gasoline tanker truck spill having been remediated and the site closed in 2011. No further risk exists related to this site listing.

c. Significance of Impacts

Routine Use, Transport, and Disposal

The project would adhere to federal, state, and local regulations during construction activities, as well as General Plan policies focused on handling hazardous which would ensure that impacts relating to the transport, storage and disposal of hazardous materials would be less than significant.

Accidental Release

Construction Activities

Accidental release associated with standard construction activities would be less than significant based on the typical particulate matter emissions associated with construction activities, the distance of construction activities to sensitive receptors and the short duration of project construction. Grading within contaminated soils including on-site areas with elevated levels of pesticides and an area of elevated TPH occurring on-site and within the off-site remedial grading area could result in an accidental release of hazardous materials. However, according to the Results of Site Investigations and Request for Site Closure for the Nakano Property (Appendix H-6) the levels of pesticides and TPH are below regulatory thresholds for residential land uses which would be a less than significant impact.

As no RECs were identified within the off-site improvement areas located within the City of San Diego, impacts to water quality pertaining to pesticides and TPH contaminants would be less than significant.

Although no burn ash was identified within the Nakano site or within areas of the Davies property proposed for remedial grading, there is potential for burn ash to be encountered during grading of both the on-site and off-site areas. Burn ash poses a risk if it becomes airborne, is eroded into surface water, or comes in contact with skin. The potential routes for human exposure to the contaminants in burn ash are inhalation, ingestion, and direct skin contact. Exposure to metals most commonly found in burn ash via any of these routes may result in adverse health effects such as organ damage, tumors, and skin irritation if levels are above thresholds specified (County of San Diego, 2004). The potential exposure to burn ash could result in impacts to sensitive receptors would be a significant impact.

Due to the RECs on-site and the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a significant impact to water quality as well.

Operational Activities

Hazardous materials associated with residential projects would be limited to those used in landscaping, and household cleaning products, the accidental release of which would not trigger a significant health risk. Impacts related to project operational emissions would be less than significant.

The adjacent freeway DPM levels in addition to potential windblown burn ash coming from the adjacent Davies property would not pose a health risk to residents based on the results of the HRAs; however, this information was prepared for informational purposes only and does not contribute to the significance determination.

Emissions near a School

The project is not within a quarter-mile of an existing school and impacts associated with emission near a school would be less than significant.

Hazardous Materials Site

Nakano Property Cleanup Program Site

The project site is listed in hazardous materials databases due to the DEHQ VAP application to initiate cleanup of contaminated soils prior to site development. As detailed in Section 4.6.3.1.b, Accidental Release, grading within contaminated soils including on-site areas with pesticides and TPH occurring on-site and within the off-site remedial grading area could result in an accidental release of hazardous materials. The potential exposure to TPH could result in impacts to sensitive receptors and cause skin and eye irritation, breathing and neurologic problems, and stress. TPHs have a strong impact on mental health and induce physical/physiological effects, and they are potentially toxic to genetic, immune, and endocrine systems (Kuppusamy, et. Al. 2019). However, per the Results of Site Investigations and Request for Site Closure for the Nakano Property (Appendix H-6), would be a less than significant impact.

While no burn ash has been identified on the Nakano site or off-site remedial grading areas, there is a potential risk that site grading could uncover soils containing burn ash which could result in a release of hazardous materials into the environment. The potential exposure to burn ash could result in impacts to sensitive receptors which may result in adverse health effects such as organ damage, tumors, and skin irritation if levels are above thresholds specified (County of San Diego, 2004) which would be a significant impact.

No RECs or hazardous materials sites were identified within the off-site improvement areas within the City of San Diego; therefore, impacts related to hazardous materials sites within the off-site improvement area in the City of San Diego would be less than significant.

Davies Property

The Davies property is listed as a U.S. Brownfield Site due to the history of open storage of hazardous materials. An area of remedial grading is proposed within the Davies property within TPH impacted soils. Grading within TPH impacted soils could result in a hazardous release. The potential exposure to TPH could result in impacts to sensitive receptors and cause skin and eye irritation, breathing and neurologic problems, and stress. TPHs have a strong impact on mental health and induce physical/physiological effects, and they are potentially toxic to genetic, immune, and endocrine systems (Kuppusamy, et. al. 2019), which would be a significant impact.

Shinohara II Burn Burn Site

The Shinohara II burn site is listed in regulatory databases due to its history as a burn site; however, the site has been subject to remediation through site capping in order to contain contaminants. Due to the site remediation and capping, impacts related to the capped Shinohara II burn site would be less than significant.

Kaiser Foundation Health Plan, Inc.

Impacts related to the closed Kaiser Foundation Health Plan, Inc. site would be less than significant.

d. Mitigation Measures

Routine Use, Transport, and Disposal

Impacts would be less than significant. No mitigation is required.

Accidental Release

Construction Activities

No RECs were identified within the off-site improvement areas within the City of San Diego; therefore, no mitigation is required related to remediation of contaminated soils prior to issuance of City of San Diego grading permits.

Impacts related to accidental release due to on-site RECs during on-site construction activities would be less than significant, therefore, no mitigation is required related to grading on-site and within off-site areas. To mitigate impacts related to the potential for burn ash to be encountered during site grading, the following measure shall be implemented by the City of Chula Vista for grading within the City of Chula Vista. Grading within the off-site improvement areas within the City of San Diego would require implementation of **HAZ-SD-1**, detailed in Section 4.6.3.2.d.

HAZ-CV-1 **Community Health and Safety Plan**: Prior to any ground disturbance, the Permittee/Owner shall prepare a Community Health and Safety Plan (CHSP) to be reviewed and approved by the San Diego County Department of Environmental Health and Quality, Local Enforcement Agency. The CHSP shall include a site description, the scope of work to be conducted, responsibilities and key personal and contact information, analysis of hazards present, and procedures and protocols based on current regulatory standards and guidance to be utilized in the event any hazardous condition is encountered. The CHSP shall include information informing all personnel of the potential presence of burn ash and procedures to follow if any is encountered during construction activities.

The County LEA shall be invited to any preconstruction meetings and the approved CHSP shall be distributed to all contractors and implemented by the Permittee/Owner, the Contractor, and subcontractors prior to and during all soil excavation activities. The Contractor shall serve as the Site Safety Manager and oversee the implementation of the CHSP.

The Permittee/Owner shall provide the City of Chula Vista evidence of completion and approval of the CHSP prior to issuance of grading permits and to the City of San Diego prior to issuance of grading permits for the off-site improvement areas.

Operational Activities

Impacts related to accidental release due to project operations would be less than significant. Therefore, no mitigation is required.

Emissions near a School

Impacts would be less than significant. No mitigation is required.

Hazardous Materials Site

Impacts related to potential burn ash being encountered during project construction activities would be mitigated through implementation of **HAZ-CV-1**.

e. Significance of Impacts after Mitigation

Implementation of mitigation measure **HAZ-CV-1** requiring preparation of a CHSP under the oversight of the County LEA would ensure adverse impacts related potential accidental release of burn ash during grading for the areas currently within the City of Chula Vista would be reduced to less than significant.

Implementation of mitigation measure **HAZ-SD-1** requiring preparation of a CHSP under the oversight of the City LEA would ensure adverse impacts related potential accidental release of burn ash during grading of the off-site areas within the City of San Diego would be reduced to less than significant.

Implementation of these mitigation measures would reduce impacts related to hazardous materials sites to less than significant.

4.6.3.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to hazardous materials.

Would the project:

- Result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 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?
- Expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

The following City of San Diego Significance Determination Thresholds (City of San Diego 2022) are used to determine whether the project would have a significant environmental impact associated with hazardous materials.

- Projects which propose the handling, storage, and treatment of hazardous materials.
- Project sites on or near known contamination sources may result in a significant impact.
- Project sites that meet one or more of the following criteria may result in a significant impact.
    - Located within 1,000 feet of a known contamination site.
    - Located within 2,000 feet of a known "border zone property" (also known as a "Superfund" site) or a hazardous waste property subject to corrective action pursuant to the H&SC.
    - DEHQ site file closed. These cases are especially important where excavation (e.g., sewer/water pipeline projects, below grade parking, basements) is involved. DEHQ often closes a listing when there is no longer danger to the existing use on the property. Where a change in use is proposed DEHQ should be consulted. Excavation, which would disturb contaminated soils, potentially resulting in the migration of hazardous substances (e.g., along utility trench lines), would require consultation by the applicant and analyst with DEHQ. The applicant may be required to obtain a concurrence letter from DEHQ subsequent to participation in the VAP.
    - Located on or near an active or former landfill. Hazards associated with methane gas migration and leachates should be considered. Consult with the LEA for assistance.
    - Properties historically developed with industrial or commercial uses which involved dewatering (the removal of groundwater during excavation), in conjunction with major excavation in an area with high groundwater (such as downtown).
    - Located on a site presently or previously used for agricultural purposes. Pesticides are routinely used during agricultural operations. Pesticides do not degrade easily; therefore, a soils assessment may be required.

b. Impact Analysis

Handling, Storage and Treatment

This City of San Diego significance threshold is similar to the thresholds used by the City of Chula Vista, detailed in Section 4.6.3.1.b, relating to routine use, transportation, and disposal of hazardous waste. As detailed in Section 4.6.3.1.b, the project would be required to comply with existing regulations regarding the use or disposal of hazardous materials and wastes during both construction and operation of the project. The project is a residential development and does not include any proposed uses that would involve the ongoing or routine use of substantial quantities of hazardous materials during operations. Hazardous materials associated with the residential

dwellings, associated landscape, and recreational uses would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. Refer above to Section 4.6.3.1.b for additional details. The project would comply with federal and state regulations regarding handling, storage, and treatment of hazardous waste.

Exposure to Toxic Substance

Construction Activities

This City of San Diego significance threshold is similar to the threshold used by the City of Chula Vista, detailed in Section 4.6.3.1.b, relating to accidental release. As detailed in Section 4.6.3.1.b, the project could result in an accidental release of toxic contaminants during construction including through DPM emissions associated with heavy-duty construction equipment. Additionally, grading in soils contaminated with TPH and pesticides could result in exposure to toxic substances. However, as noted in the Results of Site Investigations and Request for Site Closure for the Nakano Property (Appendix H-6) the levels of pesticides and TPH are below regulatory thresholds for residential land uses. Finally, due to the proximity of the Shinohara II burn site and burn ash that was noted to be present within the Davies property in 2006, there is a potential for site grading to uncover soils potentially containing burn ash. The potential excessive exposure to burn ash could result in health hazard impacts to sensitive receptors, resulting in adverse health effects such as organ damage, tumors, and skin irritation if levels are above thresholds specified (County of San Diego, 2004). Refer to Section 4.6.3.1.b, Accidental Release for additional details. A difference with Annexation Scenario 2a is that in this scenario, site grading would occur after annexation into the City of San Diego. As a result, the City of San Diego LEA would have authority to review and approve land use changes on or within 1,000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c).

Operational Activities

As detailed in Section 4.6.3.1.b, Accidental Release, the project's residential operations would handle common household hazardous materials that would be handled consistent with all applicable safety laws and regulations. Other emissions associated with the operational component of the project that relate to exposure to toxic substances include freeway emissions due to the proximity of I-805 and potential windborne burn ash that could occur due to residual burn ash on the Davies property. An HRA was prepared, consistent with the City of San Diego General Plan Policy LU-I.14, that addresses the potential health risk related to residential use adjacent to the I-805 freeway (see Appendix C). A HRA was also performed to determine whether windblown dust from the Davies property would contain enough total suspended particulate emissions to result in a negative effect on adjacent residents (see Appendix H-4). Refer to Appendix C, Appendix H-4, and Section 4.6.3.1.b for additional information on the results of the HRAs. Both HRAs were prepared for informational purposes only and do not contribute to a significance determination under CEQA due to these issues being an effect of the environment on the project and not an effect of the project on the environment.

Emissions near a School

As detailed in Section 4.6.3.1.b, Emissions Near a School, the project would not be associated with a release of hazardous emissions within a quarter-mile of a school as there is no school within a quarter mile of the project site.

Hazardous Materials Site

As discussed in Section 4.6.3.1.b, the project site and Shinohara II burn site are listed as open Cortese Sites. The Davies property is listed as a U.S. Brownfield site. The Shinohara II burn site has been capped and remediated; however, in Annexation Scenario 2a where the City of San Diego would issue grading permits, the San Diego LEA would have authority to review and approve land use changes on or within 1,000 feet of closed disposal sites pursuant to CCR Title 27, Section 21190(c). This oversight ensures that any remaining hazards associated with land uses near closed landfills are addressed. No burn ash has been identified on the Nakano site or off-site remedial grading areas; however, there is a potential risk that site grading could uncover soils containing burn ash that could result in a release of hazardous materials into the environment. The potential burn ash release into the environment could result in impacts to human health and to water quality. Refer to Section 4.6.3.1.b for additional details.

The project site is listed in hazardous materials databases due to a DEHQ VAP application to initiate cleanup of contaminated soils prior to site development. The hazardous materials within the project site area include an area with elevated levels of pesticides and an area of elevated TPH that extends into the off-site remedial grading area. Grading within these areas could result in an accidental release of hazardous materials.

c. Significance of Impacts

Handling, Storage and Treatment

The project would adhere to federal, state, and local regulations during construction and operation activities which would ensure that impacts relating to the handling, storage and treatment of hazardous materials would be less than significant.

Exposure to Toxic Substance

RECs were discovered on-site near a pesticide storage area and within the off-site remedial grading area north of the project site. Absent the investigation, removal, and/or remediation of the on-site RECs in accordance with regulations, construction activities in the vicinity of the RECs could release hazardous materials into the environment, resulting in impacts to sensitive receptors. However, it was noted that the levels of pesticides and TPH are below the regulatory thresholds for residential land uses. As such, project-related exposure to toxic substances would result in a less than significant impact.

Emissions near a School

The project would not result in hazardous emissions within a quarter-mile of an existing school; therefore, impacts associated with emission near a school would be less than significant.

Hazardous Materials Site

Hazardous materials within the project site include an area with pesticides and TPH that extends into the off-site remedial grading area. Grading within these areas could result in an accidental release of hazardous materials. The implementation of BMPs during construction would reduce the potential for hazardous materials to be released and impact surface water quality. As noted above, the levels of these contaminants are below regulatory thresholds for residential land uses, resulting in a less than significant impact.

No burn ash has been identified on the Nakano site or off-site remedial grading areas; however, there is a potential risk that site grading could uncover soils containing burn ash which could result in a release of hazardous materials into the environment, resulting in a significant impact on the environment.

d. Mitigation Measures

Handling, Storage and Treatment

Impacts would be less than significant. No mitigation is required.

Exposure to Toxic Substances

To mitigate for impacts associated exposure to toxic substances during grading and construction under Annexation Scenario 2a, the City of San Diego would be required to implement mitigation measure **HAZ-SD-1**, detailed below.

HAZ-SD-1 **Community Health and Safety Plan**: Prior to issuance of any construction permits, including but not limited to: the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the Owner/Permittee shall prepare a Community Health and Safety Plan (CHSP) to address the project site and potential burn ash contamination to be reviewed and approved by the City of San Diego Local Enforcement Agency (LEA). The CHSP shall include a site description, the scope of work to be conducted, responsibilities and key personal and contact information, analysis of hazards present, and procedures and protocols based on current regulatory standards and guidance to be utilized in the event hazardous conditions related to burn ash is encountered. Such conditions can include visual observations that indicate evidence of burn ash such as heat frosted glass shards, or stained or discolored soil. The CHSP shall include information informing all personnel of the potential presence of burn ash and procedures to follow if any is encountered during construction activities.

The City of San Diego LEA shall be invited to any preconstruction meetings and the approved CHSP shall be distributed to all contractors and implemented by the

Owner/Permittee, the Contractor, and subcontractors prior to and during all soil excavation activities. The Contractor shall serve as the Site Safety Manager and oversee the implementation of the CHSP.

The Owner/Permittee shall provide the City of San Diego evidence of completion and approval of the CHSP prior to issuance of grading permits.

Emissions near a School

Impacts would be less than significant. No mitigation is required.

Hazardous Materials Site

Impacts related to potential burn ash being encountered during project construction activities would be mitigated through implementation of **HAZ-SD-1**.

e. Significance of Impacts after Mitigation

Implementation of mitigation measure **HAZ-SD-1** requiring preparation and approval of a Community Safety Plan prior to ground disturbance and under the oversight of the City of San Diego LEA would ensure potential release relating to burn ash would be less than significant.

4.6.4 Issue 5: Airport Safety Hazard

4.6.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to an airport safety hazard in the City of Chula Vista:

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

b. Impact Analysis

The project is located within the Brown Field Airport Influence Area (Review Area 2 as shown in Figure 2-8). However, the project site is outside of the Brown Field safety compatibility maps areas and is not within a Part 77 Airspace Protection, Overflight, and Overflight Notification area. Review Area 2 consists of locations beyond Review Area 1 but within the airspace protection and/or overflight areas. An email notice was sent by the City of Chula Vista to the ALUC on September 16, 2021. In response, it was noted that the project site is located outside the noise contours and safety zones of the Brown Field Municipal Airport ALUCP (Ed Gowens [ALUCP] email to Janice Kluth [City of Chula Vista], September 17, 2021). Accordingly, no action from the ALUC or a determination of consistency with the ALUCP is required.

c. Significance of Impacts

The project is outside of Brown Field safety compatibility areas; therefore, would not result in an airport safety hazard to future residents.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.6.4.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to airport safety:

- Would the project result in a safety hazard for people residing or working in a designated airport influence area?
- Would the project result in a safety hazard for people residing or working within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted ALUCP?

The following City of San Diego Significance Determination Thresholds (City of San Diego 2022) are used to determine whether the project would have a significant environmental impact associated with airport safety.

- Projects located in a designated airport influence area and where the FAA has reached a determination of "hazard" through FAA Form 7460-1, "Notice of Proposed Construction or Alteration" as required by FAA regulations in CFR Title 14 §77.13.
- Inconsistency with an ALUCP could be a significant impact.
- For a project within the boundaries of a comprehensive airport land use plan, or if a comprehensive land use plan has not been adopted for a project within two nautical miles of a public airport or public use airport, CEQA Section 21096 and CEQA State Guidelines Section 15154 requires that the lead agency consider whether the project would result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area in order to adopt a negative declaration or mitigated negative declaration.

b. Impact Analysis

As detailed in Section 4.6.4.1.b, the project would not require a determination by the ALUC, is located outside of the Brown Field safety compatibility areas, and is not within a Part 77 Airspace Protection, Overflight, and Overflight Notification area.

c. Significance of Impacts

The project is outside of Brown Field safety compatibility areas; therefore, would not result in an airport safety hazard to future residents. Impacts related to airport safety would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.6.5 Issue 6: Emergency Plans

4.6.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to the project's effect on an emergency plan in the City of Chula Vista:

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

b. Impact Analysis

The project would not physically interfere with an adopted emergency response or evacuation plan because the project would not introduce any changes to the surrounding roadway network that would prevent evacuation using existing area roads. A Wildfire Evacuation Plan was prepared for the project (see Appendix J) which is consistent with County EOP, Annex Q. The Wildfire Evacuation Plan covers all aspects of evacuation planning including objectives and processes of the EOP, including the following:

- Information for residents to register for emergency alerts and formation of a Community Emergency Readiness Team;
- Details of emergency readiness programs including "Ready, Set, Go" personal action plans; and
- San Diego County evacuation processes and protocols including responsibilities of first responders, and command system actions.

The project's Wildfire Evacuation Plan lists possible shelters in proximity to the project site for use during an evacuation including Juarez Lincoln Elementary School, Chula Vista Elementary School, Valle Lindo Elementary School, and North Island Credit Union Amphitheatre. Additionally, the Evacuation Plan discusses the possibility to shelter-in-place depending on the timing and nature of the emergency. The project would conform to the ignition-resistant building codes codified in Chapter 7A of the California Building Code, as a result the project would be ignition-resistant, be

defensible, and designed to require minimal firefighting resources for protection, which enables shelter in place to be a contingency option in the event it is considered safer than evacuation (see Appendix J).

Consistent with the Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act memorandum (henceforth referenced as the Bonta Memo) (State of California Office of the Attorney General 2022) the Wildfire Evacuation Plan analyzes the existing and proposed populations in light of evacuations, road capacities, and evacuation timeframes.

- **Capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.** As detailed in the Wildfire Evacuation Plan, the existing roadway capacities can accommodate project and community evacuation in addition to access by emergency responders. The road capacities are conservatively mathematically modeled to arrive at evacuation travel times for the project as well as for the existing communities with and without the project. The evacuation analysis only considers evacuations using outbound lanes, so the inbound lanes are available for incoming emergency first responders.

- **Assessment of the timing for evacuation.** The Wildfire Evacuation Plan found evacuation timing to be acceptable for the types of wildfires that may occur in the project vicinity. Additionally, evacuation procedures now rely on advanced notification technology which enables phased or sequential evacuations where threatened populations are moved in a phased approach. This method reduces traffic surges and congestion.

- **Identification of alternative plans for evacuation.** Alternative plans for evacuation, such as using alternate routes, only evacuating perimeter residents, or enacting a temporary shelter in place, would be feasible due to the high ignition resistance level of proposed structures, the low risk of ignitions, and low anticipated fire intensity.

- **Evaluation of the project's impacts on existing evacuation plans.** There are no published evacuation plans for the project area. The project would use primary evacuation routes that would be available to other evacuees, and the potential additional time needed to evacuate is considered insignificant due to the variety of options available to emergency managers that can facilitate early evacuations.

- **Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services.** The project's Fire Protection Plan (Appendix I) includes a comprehensive analysis of fire services for the project and surrounding areas. The project does not impair the ability of existing fire response resources to respond to the anticipated project calls. SDFRD Fire Station 6 is within 1.4 miles of project structures and can respond within 4.5 minutes travel time. The project provides access roads meeting code requirements for widths, dead end lengths, and secondary access. There would be acceptable access throughout the site and evacuations would not be expected to interfere with fire response.

Based on the above summary, residents of the project would be able to evacuate in the event of a wildfire. The project's Evacuation Plan identifies evacuation routes that would be used by the site's residents (Figure 4.6-54). As shown, evacuation routes consist of the project's primary access via Dennery Road and a secondary emergency only access that would provide emergency access through the adjacent residential area to the east. These improvements would provide adequate emergency ingress and egress routes are available for emergency responders as well as residents in an emergency situation. Additionally, the project's proximity to I-805 and State Route 905 provides major transportation routes as part of the project's evacuation road network.

The primary evacuation route for the project would be the main project driveway which provides access to Dennery Road, which offers connections to Palm Avenue which connects to I-805. The secondary emergency only evacuation route would provide emergency access through Golden Sky Way to Ocean Mist Place south to Sand Star Way which connects to Dennery Road. As detailed in the project's evacuation plan (see Appendix J), an additional emergency access route could be taken that follows Dennery Road to Topsail Drive, to a gated emergency access road, to the Sesame Place San Diego parking lot, to Entertainment Circle, to Heritage Road. Gates would need to be opened to access this route. Based on roadway capacities and evacuation time estimates, it is estimated that the last vehicle can be off the project site and onto Dennery Road in approximately 25.8 minutes (see Appendix J). Traffic moving off the project site would either go south along Dennery Road to Palm Avenue to I-805 or east to Golden Sky Way to Ocean Mist Place to Sand Star Way to Dennery Road to Palm Avenue to I-805. As detailed in the Evacuation Plan (see Appendix J), there are adequate emergency access points to ensure emergency response plans are not interfered with. Furthermore, emergency response planning regularly uses phased evacuation to ensure targeted areas are evacuated to not overload road capacities.

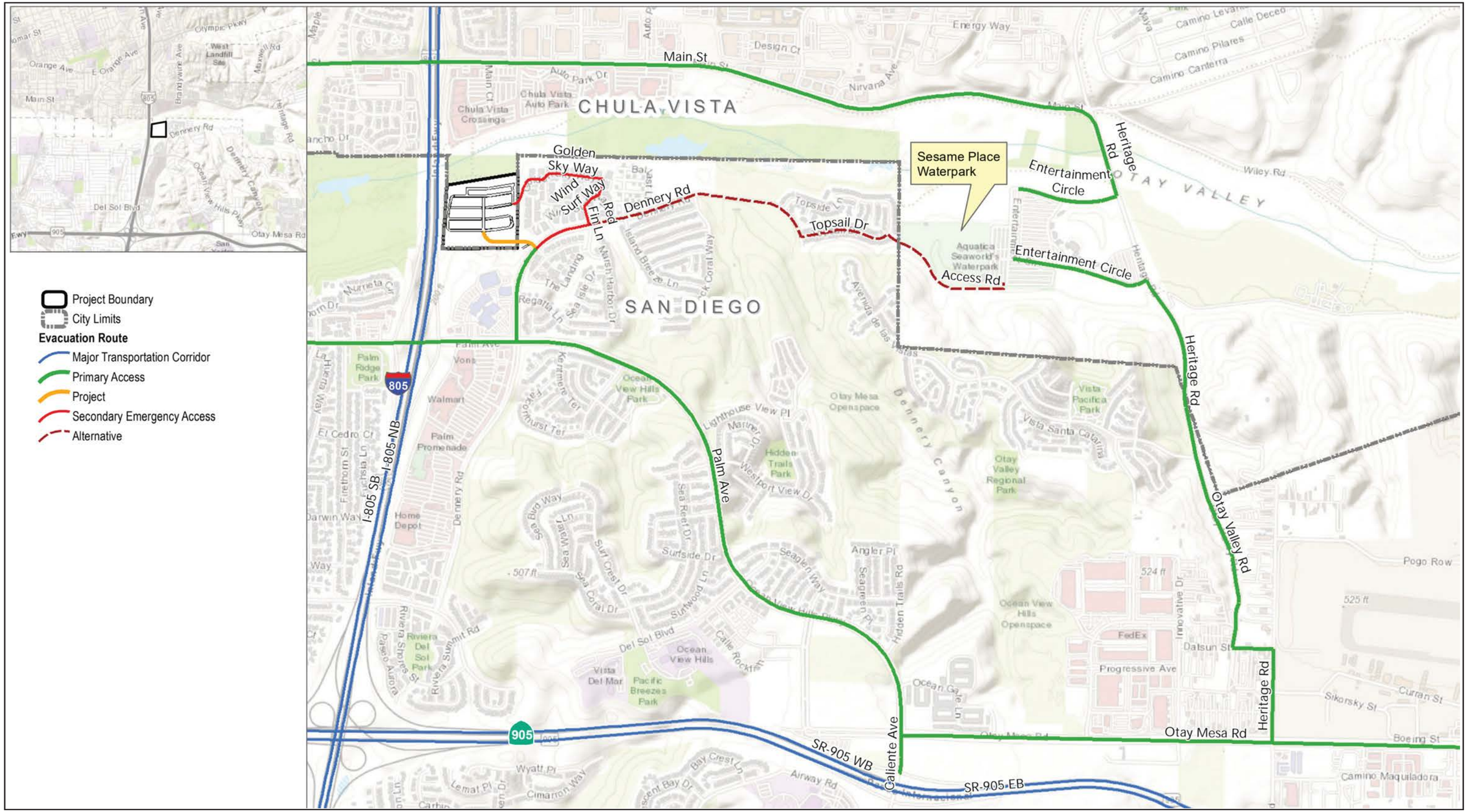
The County's MJHMP includes jurisdictional-level hazard maps and hazard mitigation goals specific to the City of Chula Vista. The City of Chula Vista has developed a number of actions intended to assist in meeting listed goals and objectives related to establishment and maintenance of emergency plans, including safe and effective evacuation. Relevant actions include the City of Chula Vista's establishment of safe and effective evacuation routes (Action 3.C.1), the development and publication of evacuation plans and routes (Action 6.B.2), and the ongoing review of evacuation plans for accuracy (Action 7.A.4) (County of San Diego 2018). Since the main roadways accessing the project site are City of San Diego roadways, the project would not result in any conflict with City of Chula Vista actions in the MJHMP.

Based on the primary and secondary evacuation routes provided by the project and the adequacy of roadways in the area to accommodate an evacuation scenario as detailed in the project's Evacuation Plan, the project would not significantly impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

c. Significance of Impacts

Through the project's incorporation of adequate primary and secondary emergency access roadways and implementation of the project's Evacuation Plan, the project would not impair or interfere with an existing emergency response or evacuation plan. Impacts would be less than significant.

Map Source: Dudek



RECON

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FIGURE 4.6-4
Evacuation Map

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.6.5.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to an emergency plan:

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

b. Impact Analysis

An analysis of the project relative to adopted emergency plans is addressed in Section 4.6.5.1.b, and supported by the Wildfire Evacuation Plan prepared for the project (see Appendix J). As with the No Annexation Scenario and Annexation Scenario 2b, under the Annexation Scenario 2a the primary site access would be provided via an off-site connection to Dennery Road, and secondary emergency only access would be provided via a connection to Golden Sky Way in the RiverEdge Terrace residential development. In the event of an emergency, residents would be evacuated to surrounding City of San Diego roadways, including Dennery Road and Palm Avenue. The project's Evacuation Plan (see Appendix J) demonstrates the ability of the site to be evacuated based on the proposed primary and secondary access routes and the existing capacity of surrounding roadways. Refer to Appendix J for more information.

The County's MJHMP includes jurisdictional-level hazard maps and hazard mitigation goals specific to the City of San Diego. The City of San Diego has developed the following action to implement goals and objectives relating to emergency planning and evacuation: enhance procedures to support identification of evacuation routes (Action 4.A.1) (County of San Diego 2018). Additionally, disaster preparedness efforts in the City of San Diego are planned through the City's EOC. The project would be consistent with the existing evacuation plans for the OMCP area and provide adequate ingress and egress points to these existing evacuation routes. The project would not prevent the City of San Diego from implementing policies of the MJHMP, its General Plan, or other evacuation plans.

Based on the primary and secondary evacuation routes provided by the project and the adequacy of roadways in the area to accommodate an evacuation scenario as detailed in the project's Evacuation Plan (see Appendix J), the project would not significantly impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

c. Significance of Impacts

Through the project's incorporation of adequate primary and secondary emergency access roadways and implementation of the project's Evacuation Plan, the project would not impair or

interfere with an existing emergency response or evacuation plan. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.6.6 Issue 7: Wildland Fires

4.6.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to wildland fires in the City of Chula Vista:

- Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

b. Impact Analysis

Placing residential land uses adjacent to or within a high fire hazard area can result in increased fire-related risk to people and structures. The project site lies within an area considered a VHFHSZ, as designated by the CVFD, the SDFRD, and the California Department of Forestry and Fire. Fire hazard designations are based on topography, vegetation, and weather, among other factors. VHFHSZ designation does not indicate that an area is not safe for development; however, it does require specific fire protection features be included in project designs.

Fire Protection Site Features

Under the No Annexation Scenario and Annexation Scenario 2b, the Fire Authority Having Jurisdiction (FAHJ) during site development would be the CVFD and the project would include fuel modification zones (FMZ) as required by the City of Chula Vista. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the wildfire exposed structures. Wildfire modeling was used to assist in determining defensible space distances for providing firefighters with room to work and minimizing structure ignition. The proposed widths between the naturally vegetated open space areas and the property lot lines are proposed to be consistent with CVFD FMZ guidelines which are 100 feet, where achievable. Due to the constraints within the project site, the full standard FMZ would not be achievable in all areas and therefore the project would include alternative fire-resistant materials and measures to provide fire protection functional equivalency as a full BMZ.

A typical landscape/fuel modification installation per the City of Chula Vista's Fire Code consists of a 50-foot-wide Zone 1 and a 50-foot-wide Zone 2 for a total of 100 feet in width. Figure 3-9 illustrates the project's proposed fuel management zones, including a minimum 5-foot-wide ember-resistant

Zone 0, 45-foot-wide irrigated Zone 1, and a 50-foot-wide thinning area Zone 2. Additionally, a 10- to 20-foot fire clearing zone is identified around streets. A discussion of the specific guidance for each zone is detailed in the project's FPP (see Appendix I). Where the FMZ width deviates from the CVFD standards, project design features are identified that would provide additional fire protection.

Project design features include a requirement for dual pane windows exceeding code requirements where structures are subject to less than 100 feet of fuel modification, and compliance with all requirements of Chapter 7a of the California Building Code including but not limited to upgraded fire rating exterior treatments and ember resistant vents. Interior fire sprinklers would be installed in all structures per code requirements (Section R313.3 of the 2019 California Residential Code, Chapter 9, Section 903 of the 2019 CFC, and Section 602 of the Urban-Wildland Interface Code). A 6-foot heat deflecting one-hour fire rated wall is proposed between structures and unmaintained open space as detailed in Figure 3-9. Additionally, masonry walls are proposed around certain lots to provide enhanced protection through ignition resistant construction materials. Project design features related to wildfire safety are identified in Chapter 3.0 Project Description, Section 3.6.3.g.

Site Access

The main access road to the project site would be via a driveway off Dennery Road (see Figure 3-2). Secondary emergency only access would be provided via an accessible emergency use road located in the northeastern portion of the project and enables travel to the east through the adjacent community (see Figure 3-3). Both the primary and secondary access roads would meet fire apparatus access requirements to ensure site accessibility for fire protection. Project site access, including road widths and connectivity, would be consistent with the City of Chula Vista's roadway and fire safety standards, as follows:

- Internal circulation would be comprised of a loop roadway system. All interior circulation roads include all roadways that are considered common or primary roadways for traffic flow through the project site and for fire department access serving all proposed residential lots. Any dead-end streets serving new residential structures that are longer than 150 feet would have approved provisions for fire apparatus turnaround.
- The road system would be developed to be consistent with the 2019 CFC, Section 503.2.1 and all roads would comply with or exceed applicable CVFD (and SDFRD) requirements regarding sizing, condition, maintenance, and secured access.
- The interior residential access roads will be designed to accommodate a minimum of a 75,000-pound fire apparatus load.
- Private and public streets shall meet all project approved fire code requirements and/or mitigated exceptions for maximum allowable dead-end distance, paving, and fuel management before combustibles being brought to the site.
- Access roads to private lots would be completed and paved prior to issuance of building permits and prior to the occurrence of combustible construction.

The fire access road zone would provide a minimum of 20 feet of fuel modification from the edge of Private Street A and the secondary access road in addition to 13.6 feet of vertical clearance.

Landscaping

The project's landscape plan is designed for fire safety. Plants used in the landscape design include drought-tolerant, fire-resistive trees, shrubs, and groundcovers. The project's landscape plan details plant selection, placement, and vegetation management within the FMZs. Ongoing compliance with all provisions of the FPP (see Appendix I) including maintenance of 1) all fuel management zones annually (or as needed), 2) all common areas including trees along roadways within the project site, and 3) a 20-foot clearance on each side of roads within the project development footprint adjacent to open space areas would be required.

Overall, the project has been designed to minimize the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires through incorporation of site design features that would ensure the site is safe in the event of a wildfire.

c. Significance of Impacts

The project is designed to protect against wildland fires. The project has been designed to include fire protection features consistent with City of Chula Vista Fire Code, Chapter 7a Fire Code requirements, in addition to safety features that exceed code requirements detailed in Chapter 3.0, Project Description, Section 3.6.2. Incorporation of all project design features including construction materials, site access and fire apparatus support, FMZs, and water systems would ensure impacts associated with wildfire hazards would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.6.6.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to wildland fires:

- 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?

Per the City's Significance Determination Thresholds (City of San Diego 2022), health and safety impacts may be significant if the project would 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.

b. Impact Analysis

As detailed in Section 4.6.6.1.b, the project has been designed to minimize the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. The project's design features identified in Chapter 3.0 Project Description, Section 3.6.3.g and discussed in Section 4.6.6.1.b would ensure impacts associated with fire hazards would be less than significant. With specific focus on the City of San Diego, the FMZ, discussed above, is equivalent to the BMZ, which is used by the City of San Diego to describe defensible space. Until the project is annexed to the City of San Diego, the CVFD is the FAHJ and would be the department charged with the approval and enforcement of the requirements of the project's FPP. However, once the project is annexed into the City of San Diego, the SDFRD would be the FAHJ and would enforce the requirements of the project's FPP.

Typical brush management for the City of San Diego includes establishment of minimum 35-foot-wide irrigated Zones A and a minimum 65-foot-wide thinning Zone B on the periphery of the project site, beginning at the structure. Although the project's FMZ, which meets the more restrictive requirements of the CVFD, the FPP demonstrates that the FMZ/BMZ developed for the project meets the intent of the SDFC, which includes enhanced building materials, fire rated walls and other design features discussed in Section 4.6.6.1.b. With incorporation of the project design features, the project provides equivalent protection from wildfire as a full 100-foot buffer. All project design features have been designed to comply with the SDFRD's Fire Code standards, and nationally accepted fire protection standards, as well as additional requirements to assist in providing reasonable on-site fire protection.

c. Significance of Impacts

The project is designed to protect against wildland fires. The project has been designed to include fire protection features consistent with the City of San Diego's brush management regulations and the SDFRD Fire Code requirements, in addition to safety features that exceed code requirements detailed in Chapter 3.0, Project Description, Section 3.6.2. With incorporation of all project design features, impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.7 Historical Resources

This section analyzes the potential for the project to result in impacts to historical resources. The analysis relies on the content and conclusions of the Historical Resources Inventory and Evaluation Report prepared by Dudek (Appendix K-1) and the Addendum to Historical Resources Inventory and Evaluation Report prepared by RECON Environmental, Inc. (RECON) (Appendix K-2). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario. The analysis of historical and archeological resources includes the evaluation of potential resources both within the project on-site and off-site grading areas in addition to other off-site improvement areas including the approximate 200 feet of water line improvements proposed within Dennery Road, off-site trail improvements, and disturbance associated with proposed wetland restoration located within the City of San Diego. All off-site improvements are detailed in Chapter 3.0, Project Description.

4.7.1 Existing Conditions

Historical (also referred to as cultural resources) include all properties or sites that are eligible or potentially eligible for the National Register of Historic Places (NRHP), as well as those that may be significant pursuant to state and local laws and registration programs such as the California Register of Historical Resources (CRHR), the City of San Diego Historical Resources Register, or a City of Chula Vista historical resources designation. Historical resources include buildings, structures, objects, archaeological sites, districts, landscaping, and traditional cultural properties possessing physical evidence of human activities that are typically over 45 years old, regardless of whether they have been altered or continue to be used. As part of the project review, information was compiled to assist with a determination of historic significance of on-site resources consistent with San Diego Municipal Code (SDMC) Section 143.0212 and the City of Chula Vista Municipal Code (CVMC) Section 21.03.084.

4.7.1.1 Known Prehistoric/Historic Resources

a. Cultural Setting

The prehistoric cultural sequence in San Diego County is generally composed of three basic periods: the Paleoindian, dating between about 11,500 and 8,500 years ago; the Archaic, lasting from about 8,500 to 1,500 years ago (A.D. 500); and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., A.D. 500 to 1769).

The Paleoindian period in San Diego County is manifested by the artifacts of the San Dieguito Complex, which consists of well-made scraper planes, choppers, scraping tools, crescentics,

elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting.

The Archaic period is manifested by the cobble and core technology of the La Jollan Complex, and reflects a shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. Along with an economic focus on gathering plant resources, the settlement system appears to have been fairly sedentary. The La Jollan Complex is dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Large deposits of marine shell at coastal sites suggest the importance of shellfish gathering to the coastal Archaic economy.

The Late Prehistoric period in San Diego County is represented by the Cuyamaca Complex and patterns that suggest the emergence of the enthohistoric Kumeyaay. This period is marked by the appearance of ceramics, small arrow points, and cremation burial practices, as well as by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, but effective technological innovations.

The people who lived in what became San Diego County prior to the Spanish invasion are today known as the Kumeyaay. Traditional Kumeyaay territory extended over the southern two-thirds of San Diego County, from Agua Hedionda (south of Carlsbad) south to some 20 miles below Ensenada, Baja California Norte. On the west, their territory started at the Pacific Ocean and extended to the mountains of the Peninsular Range and into the desert just beyond (Cline 1984; Gifford 1931:1-2; Spier 1923:298).

Subsistence focused on gathering plant foods. Acorns are thought to have been the most important dietary staple for the Kumeyaay (e.g., Luomala 1978:600; Spier 1923:334). Seeds from sages, grasses, and other plants were also dietary staples. Hunting contributed to the diet in a minor way. It was focused on small game, primarily rabbits and rodents. These were taken with bow and arrow, throwing stick, or nets. Hunting of large game was somewhat less important in the diet, with deer and bighorn sheep taken on occasion. Large game provided leather and sinew for clothing and crafts.

The Kumeyaay traditionally maintained a territorially associated band structure (Luomala 1978:602; Shipek 1982:297; Gifford 1973:378). The household was the primary social structure and consisted of a married couple together with their unmarried children, married sons and families, and dependent relatives within the father's lineage such as his parents, grandparents, and unmarried aunts or uncles (May 1975:3). At any one time, the Kumeyaay band usually maintained a main village and several outlying villages (May 1975:4; Shipek 1982:297; Luomala 1978:597). Since the economy was based on intensive utilization of locally available natural resources, these settlements were more or less temporary. Residential units often split into their constituent clans when movement to other areas was necessitated either by seasonal changes or by local overexploitation. A "permanent" village, as recorded by early European explorers, probably consisted of an area that was regularly used by local band members for a large part of the yearly cycle (Luomala 1978:597).

A wide range of tools were made of locally available and imported materials. A simple shoulder-height bow was utilized for hunting. Numerous other flaked stone tools were made including

scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available, fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets, employing either coiled or twined construction. The Kumeyaay also made pottery, utilizing the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brown ware, but some were decorated (Meighan 1954; May 1976, 1978).

A period of historic contact began in San Diego County in the mid-1700s, beginning with the Spanish (1769–1821), followed by the Mexican (1822–1848) and American (starting mid-1800s) homestead systems. One of the hallmarks of the Spanish colonial period was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made by the Spanish to meritorious or well-connected individuals.

During the Mexican colonial period, the mission system was secularized by the Mexican government and these lands allowed for the dramatic expansion of the rancho system. The local economy became increasingly based on cattle ranching. The Mexican period ended when Mexico signed the Treaty of Guadalupe Hidalgo in 1848, concluding the Mexican-American War. The great influx of Americans and Europeans resulting from the California Gold Rush in 1848-49 eliminated many remaining vestiges of Native American culture.

The American homestead system encouraged settlement beyond the coastal plain into areas where Indians had retreated to avoid the worst of Spanish and Mexican influences (Carrico 1987; Cook 1976). A rural community cultural pattern existed in San Diego County from approximately 1870 to 1930. These communities were composed of an aggregate of people who lived within well-defined geographic boundaries, on farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986; Pourade 1963). In the post-World War II period, the economy shifted from ranching and agriculture to light manufacturing, the military, and tourism.

Otay Mesa developed slowly until the 1870s. In 1869, a stage route to Yuma was opened that ran across the mesa. Farming developed through the 1870s, and by 1879 most of the mesa was under intensive agriculture. The most widely grown crops on the mesa were wheat, barley, corn, tomatoes, and beans. Water for crops was obtained from nearby streams and the Otay River, and by the early 1900s an extensive system of dams had developed (Pryde 1992). By 1890, Otay also had a store, post office, blacksmith shop, and a Lutheran church. The Otay Mesa School District was started in 1914, and the Alta schoolhouse was constructed at that time. The population of Otay Mesa fluctuated over the early 1900s due to drought and in the 1930s due to the Great Depression.

Along with its agricultural history, aviation was important in Otay Mesa's history. In 1883, John Joseph Montgomery made the world's first controlled flight with a fixed curved-wing glider from the top of a hill on Otay Mesa. In 1918, the Army Air Corps established East Field along Otay Mesa Road, later also used by the Navy for pilots in training. In 1935, East Field was transferred to the Navy and was used for training prior to and during World War II. East Field was renamed Brown Field in 1943. After World War II, the Navy leased Brown Field to San Diego County, but reopened the facility with the outbreak of the Korean War in 1951. The City of San Diego annexed Otay Mesa in 1956 and

acquired Brown Field in 1962 to relieve congestion at Lindbergh Field. The conversion of Brown Field to a general aviation airport brought new businesses, industries, and agencies to Otay Mesa.

Ranching and farming continued to be the main occupation of residents in and around the project area through most of the twentieth century. Over the past decades, large tracts of this formerly open land have been developed for light industrial and, more recently, residential projects. The result has been a dramatic change of the region from a sparsely populated rural area to an expansive suburb.

b. Records Search

Project Site and One-mile Radius

A records search was conducted in February 2020 of data obtained from the South Coastal Information Center at San Diego State University (SCIC). The search encompassed the project site (also referred to in the cultural resources analysis Area of Potential Effects; APE) and a one-mile buffer around the APE. The records search identified 52 cultural resources within one mile of the APE, two of which intersect the APE: P-37-007983 and P-37-026987.

P-37-007983/CA-SDI-7983 was recorded as a prehistoric artifact scatter with lithic flakes, debitages, cores, scrapers, hammerstones, ground stone artifacts, and shell in 1979. The resource covers approximately 50 acres. Locus A has been destroyed by the construction of the Kaiser Permanente medical offices building in 1998. Excavations in 1987 and 1990 found no subsurface deposits at Locus A. Locus B had not been evaluated as of 2010.

P-37-026987/CA-SDI-17668 was recorded as a low density lithic and shell scatter in 2005. The site measured approximately 22 by 10 meters. In 2020, an archeologist revisited the site and determined the site was incorrectly mapped and was 90 meters in diameter. The site was resurveyed and no cultural materials or features were identified on the surface. Subsurface testing of the eastern portion of the resource in 2020 found no buried deposits; the resource was recommended not eligible for listing on the NRHP.

In addition to the records search, a Sacred Lands File search was requested from the Native American Heritage Commission (NAHC). The search results were negative. Outreach letters were mailed on March 6, 2020, to all Native American tribes provided by the NAHC's contact list. The letters requested to define a general area where known resources cross the project area. The Viejas Band of Kumeyaay Indians, the Campo Band of Kumeyaay Indians, the Jamul Indian Village, and the San Pasqual Band of Diegueño Mission Indians requested consultation.

Regarding the off-site trail improvements north of the project site, an archaeologist reviewed the data search records and confirmed no previously recorded cultural resources were located within the off-site trail improvements area as detailed in Appendix K-2. An archaeologist also reviewed topographic maps and historic aerial photographs, and confirmed that no buildings or structures have existed within the off-site trail area.

Wetland Mitigation Site

For the wetland mitigation area, archaeologists reviewed in-house record search materials obtained for the nearby Southwest Village Project and noted one previously recorded cultural resource within the wetland mitigation area—CA-SDI-10,811 (see Appendix K-2).

CA-SDI-10,811 is on a small river terrace bench on the eastern side of the Spring Canyon drainage where Spring Canyon meets Wruk Canyon. The site was described as a habitation site based upon the dark color of the soil, the types and distribution of artifacts, and presence of subsistence debris in the form of marine shellfish remains. The site was measured as occupying a 50-by-50-meter area and yielded 247 flakes, 94 angular waste fragments, 1 scraper fragment, and 5 utilized/modified flakes, while the subsurface component yielded 77 flakes, 141 angular waste fragments, 3 cores, 2 mano fragments, and 1 scraper. The site was determined not a significant historical resource (see Appendix K-2).

c. Survey

Project Site

DeCarlo and Soles completed a survey and resource evaluation for the project area in March 2020 (see Appendix K-1), which included the project site and off-site improvement areas within the City of San Diego. The two existing resources (P-37-007983/CA-SDI-7983 and P-37-026987/CA-SDI-17668) and two newly recorded resources were identified during the survey. The new resources identified included historic foundations (NK-S-001) and a prehistoric lithic scatter (NK-S-002). Each of the sites are discussed in Section 4.7.1.1.d below.

Off-site Trail Improvement Area

An archaeological survey of the off-site trail improvements was completed on November 1, 2022. No cultural resources were observed during the survey of the off-site trail improvement area (see Appendix K-2).

Wetland Mitigation Area

An archaeological survey of the wetland mitigation area was completed on June 15, 2023 (see Appendix K-2). The mitigation area is located south of State Route 905 and east of Interstate 805, approximately three miles southeast of the project site within Spring Canyon. The land is within the City of San Diego Multi-Habitat Planning Area preserve, on private property. The mitigation area is surrounded by open space and occurs within existing riparian and disturbed habitat.

Archaeologists resurveyed the mapped location of CA-SDI-10,811 in 2023, and did not observe any site material. The absence of site material is consistent with the provided information within the recording of CA-SDI-10,811, that the cultural material within the site area was surface collected. Several isolated lithics were recovered from the surface scrape. Archaeologists observed isolated flakes at the crest of the upslope terrace, near the wetland mitigation area but no tools or concentrations were noted. These isolated flakes are interpreted as part of the erosion of the likely location of CA-SDI-10,811.

d. Evaluation

Previously Identified Historic Resources within the Project Site Vicinity

P-37-007983/CA-SDI-7983

This site was originally recorded in 1979 by L. McCoy. The portion of P-37-007983 within the project area consisted of very steep hills, graded transmission tower pads and a leveled dirt road. A pedestrian survey of these terraces did not identify any cultural materials. Due to the steepness of the hillside and the disturbance of the access road and transmission tower pads, it is unlikely that any cultural materials from P-37-007983 were present within the current project APE.

P-37-026987/CA-SDI-17668

In 2005 Mooney, Jones & Stokes conducted a site significance evaluation testing of a portion of P-37-026987 and found to have no buried deposits. Dudek completed excavation testing at P-37-026987/CA-SDI-17668. One shovel test pit was excavated within the 22-by-10-meter recorded area for P-37-026987, a lithic and shell scatter. No cultural material was recovered.

Previously Identified Historic Resources within the Wetland Mitigation Area

CA-SDI-10,811

CA-SDI-10,811 is on a small river terrace bench on the eastern side of the Spring Canyon drainage where Spring Canyon meets Wruk Canyon. The site was described as a habitation site based upon the dark color of the soil, the types and distribution of artifacts, and presence of subsistence debris in the form of marine shellfish remains. The site was measured as occupying a 50-by-50-meter area and was surface-collected and tested in 1986 by WESTEC Services, Inc. The surface collection yielded 247 flakes, 94 angular waste fragments, 1 scraper fragment, and 5 utilized/modified flakes, while the subsurface component yielded 77 flakes, 141 angular waste fragments, 3 cores, 2 mano fragments, and 1 scraper. The site was determined not a significant historical resource (see Appendix K-2).

Newly Identified Historical Resources

NK-S-001

This resource consists of four concrete foundations located in a fallow agricultural field. The associated structures that were once supported by the foundations had been completely removed and no associated artifacts were noted. Review of historic aerial photographs indicates that three foundations were built after 1971 and the other was built between 1968 and 1971. No refuse or artifacts were identified on the surface. It is unlikely that there are any buried deposits due to the waste removal services available during the early 1970s and, if there were buried deposits, the refuse would date to the early 1970s. Additionally, as detailed in the Historical Resources Inventory (see Appendix K-1), the site did not meet any criteria which would make it eligible for listing under the NRHP or the CRHR.

NK-S-002

This resource consists of prehistoric lithic scatter within the project APE was first noted on July 24, 2020. The scatter is located in a flat field with dense, dry vegetation and a dirt road traveling east to west through it. Due to the dense vegetation, artifacts were only visible in the dirt road. During the initial survey, Dudek identified 18 volcanic flakes, one volcanic core fragment, and two bifaces. Upon return to the site, site for archaeological testing, only seven volcanic lithic debitage fragments were identified on the surface and the lithic tools were missing. Considering the low yield of cultural material from the archaeological excavations, the lack of artifact diversity, and the disturbed soils, NK-S-002 does not possess a significant subsurface archaeological deposit. Further research at NK-S-002 is unlikely to yield information important in prehistory and NK-S-002 is not eligible for listing on the NRHP and the CRHR (see Appendix K-1).

4.7.2 Regulatory Framework

4.7.2.1 Federal Regulations

a. 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 on 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) on 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 on the NRHP.

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

- Are associated with events that have made a significant contribution to the broad patterns of history.
- Are associated with the lives of persons significant in the past.
- Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- Have yielded, or may be likely to yield, information important in prehistory or history.

Eligible properties are typically over 50 years old, 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 California Environmental Quality Act (CEQA) Guidelines (Section 15065.5).

b. United States Code, Title 25, Sections 3001 et seq.

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

4.7.2.2 State Regulations

a. California Register of Historic Resources

In California, the term "historical resource" includes, but is not limited to, "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (Public Resources Code Section 5020.1[j])." The CRHR was established to identify historical resources to be protected from substantial adverse change. A resource is eligible for listing in the CRHR if it meets any of the following NRHP criteria (Public Resources Code Section 5024.[c]):

1. Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage;

2. Is associated with the lives of persons important in our past;

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

4. Has yielded, or maybe likely to yield, information important to prehistory or history.

Resources less than 50 years old generally are not considered for listing on the CRHR but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource.

b. California Environmental Quality Act

For the purposes of CEQA, a significant historical resource is one that qualifies for the CRHR or is listed in a local historic register or deemed significant in a historical resources survey, as provided under Public Resources Code Section 5025.1(g). A resource that is not listed in or is not determined to be eligible for listing in the CRHR, is not included in a local register or historic resources, or is not

deemed significant in a historical resources survey may nonetheless be deemed significant by a CEQA lead agency.

According to CEQA Section 15064.5 (a), a historical resource includes the following:

1. A resource listed in, or determined to be eligible for listing on, the California Register of Historical Resources.

2. A resource included in the local register.

3. A resource which an agency determines to be historically significant. Generally a resource shall be considered to be "historically significant," if the resource meets the criteria for listing on the California Register of Historical Places (Public Resources Code Section 5024.1 Title 14 California Code of Regulations, Section 4852) including the following:

    A. Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage;

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

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

    D. Has yielded, or maybe likely to yield, information important to prehistory or history.

4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR or a local register does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

A resource must meet one of the above criteria and must have integrity; that is, it must evoke the resource's period of significance or, in the case of criterion D, it may be disturbed, but it must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues. Most archaeological sites typically qualify for listing under criterion D.

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

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

- Has a special and particular quality such as being the oldest or best available example of its type.

- Is directly associated with a scientifically recognized important prehistoric or historic event or person

According to CEQA Section 15064.5 (b), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

1. Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

2. The significance of a historical resource is materially impaired when a project:

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

    B. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in the local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

    C. Demolishes or materially alters in an adverse manner those physical characteristics of n historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

c. 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 NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 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.

d. California Health and Safety Code, Section 7050.5

This law requires that if human remains are discovered in the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC.

e. California Public Resources Code, Sections 5020–5029.5

This law continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

f. California Public Resources Code, Section 5024.1

The CRHR is the state version of the NRHP program. The CRHR was enacted in 1992 and became official on January 1, 1993. The CRHR was established to serve as an authoritative guide to the state's significant historical and archaeological resources. Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. CEQA identifies a historic resource as a property that is listed on—or eligible for listing on—the NRHP, CRHR, or local registers. NRHP-listed properties are automatically included on the CRHR.

The CRHR also includes properties that are points of historical interest that have been reviewed and recommended to the State Historical Resources Commission for listing; or are City- and County-designated landmarks or districts (if criteria for designation are determined by Office of Historic Preservation to be consistent with CRHR criteria).

g. Assembly Bill 52

Assembly Bill 52 (AB 52), the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. Projects subject to AB 52 are those that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration on or after July 1, 2016. AB 52 adds tribal cultural resources to the specific cultural resources protected under CEQA. Under AB 52, a tribal cultural resource is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a tribal cultural resource. AB 52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

h. Senate Bill 18

California Senate Bill 18 (SB 18), which took effect on March 1, 2005, requires local (city and county) governments to consult with California Native American tribes identified by the NAHC for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans (Government Code Section 65352.3).

4.7.2.3 Local Regulations - City of Chula Vista

a. City of Chula Vista Municipal Code

Historic Preservation Ordinance

Section 21.04.100 of the City of Chula Vista Historic Preservation Ordinance (Title 21, CVMC Chapter 21.04) establishes general standards by which the Historical Significance of a Historical Resource is judged as eligible for designation:

- A Resource is at least 45 years old; and
- A Resource possesses historical Integrity. Integrity is defined under Chula Vista Municipal Code §21.03.084 as follows: Integrity means the authenticity of a resource's historic identity, evidenced by the survival of physical characteristics that existed during the resource's historic or prehistoric period. Within the concept of "integrity" there are seven recognized aspects or qualities that in various combinations define integrity. The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association.
- Pursuant to §21.04.100 (discussed below) and the Resource is determined to have historical significance by meeting at least one of the following criteria:
    - It is associated with an event that is important to prehistory or history on a national, state, regional, or local level.
    - It is associated with a person or persons that have made significant contributions to prehistory or history on a national, state or local level.
    - It embodies those distinctive characteristics of a style, type, period, or method of construction, or represents the work of a master or important creative individual, and/or possesses high artistic values.
    - It is an outstanding example of a publicly owned Historic Landscape, that represents the work of a master landscape architect, horticulturalist, or landscape designer, or a publicly owned Historical Landscape that has potential to provide important information to the further study of landscape architecture or history.
    - It has yielded, or may be likely to yield information important in prehistory or the history of Chula Vista, the state, region or nation.

4.7.2.4 Local Regulations - City of San Diego

a. City of San Diego Municipal Code

Historical Resources Regulations

In January 2000, the City of San Diego's Historical Resources Regulations (Regulations), part of the SDMC (Chapter 14, Article 3, Division 2: Purpose of Historical Resources Regulations or Sections

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

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

Compliance with the Historical Resources Regulations begins with the determination of the need for a site-specific survey for a project. Section 143.0212(b) of the Regulations requires that historical resource sensitivity maps be used to identify properties in the City of San Diego that have a probability of containing archaeological sites. These maps are based on records maintained by the South Coastal Information Center of the California Historic Resources Information System, as well as site-specific information in the City of San Diego's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City of San Diego 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 one-mile radius, or if a qualified consultant or knowledgeable City of San Diego staff member recommends it. A historic property (built environment) survey can be required on a project if the properties are over 45 years old and appear to have integrity of setting, design, materials, workmanship, feeling, and association.

Section 143.0212(d) of the Regulations states that if a property-specific survey is required, it shall be conducted according to the Guidelines criteria. Using the survey results and other available applicable information, the City of San Diego shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located.

Historical Resources Register

The City of San Diego provides a broader set of criteria for eligibility for the City of San Diego's Historical Resources Register. As stated in the City of San Diego's Historical Resources Guidelines (City of San Diego 2011), "Any improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria:"

a) Exemplifies or reflects special elements of the City of San Diego'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 or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office (SHPO) 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 of San Diego.

If a resource is not listed in, or determined eligible for listing in, the California Register, not included in a local register, or not deemed significant in a historical resource survey, City of San Diego criteria states that it may nonetheless be historically significant.

b. City of San Diego General Plan

Historic Preservation Element

The **Historic Preservation Element** of the City of San Diego General Plan (City of San Diego 2008) 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 Element sets a series of goals for the City of San Diego 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.

However, only HP-A.3 through HP-A.5 are directly applicable at the project level. . This includes policies to provide for comprehensive historic resource planning and integration of such plans within City of San Diego land use plans. These policies also focus on coordinated planning and preservation of tribal resources, promoting the relationship with Kumeyaay/Diegueño tribes. However, only HP-B.3 through HP-B.4 are directly applicable at the project level.

4.7.3 Issue 1: Prehistoric/Historic Resources

4.7.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to prehistoric and historic resources in the City of Chula Vista:

- Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

b. Impact Analysis

Built Environment

As discussed in Section 4.7.1.1.d, the site survey identified remnants of four concrete foundations, the structures supported by which had been completely removed and no associated artifacts were noted. As detailed in Appendix K-1, the foundations were not found to meet any criterion associated with historical significance. They were not associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of the nation or California; the site is not associated with the lives of persons important to national, local, or California history; and the foundations do not embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

No refuse or artifacts were identified on the surface near the concrete foundations and it was deemed unlikely that any buried deposits would be present due to waste removal services that were available during the early 1970s. If there were buried deposits, the refuse would date to the early 1970s. It was concluded that this resource does not contain any data potential that could provide information regarding the history of the area. Because the foundations lacked integrity and could not be associated with a significant person or event, the resource was not recommended eligible for the NRHP or the CRHR.

Archaeological Resources

Project Site

The records search and survey did not identify any historic built environment resources within the project site.

The project would result in impacts to three prehistoric archaeological resources (P-37-007983, P-37-026987, and NK-S-002) and one historic-era archaeological resource (NK-S-001). As noted above, NK-

S-001, the foundations, lacked potential for buried deposits and therefore would not be likely to yield additional data. Because only the foundations remained, the foundations lacked integrity and could not be associated with a significant person or event; therefore, the resource was not recommended eligible for the NRHP, the CRHR, or under the City of Chula Vista's criteria for significance.

The artifact scatter, P-37-007983, was recommended not eligible for the NRHP, the CRHR, or under the City of Chula Vista's criteria for significance due to its location on steep hills and lack of integrity from the graded areas. The results of the excavation testing at the lithic and shell artifact scatter, P-37-026987, indicated that there was no subsurface cultural material and therefore was recommended not eligible for the NHRP, the CRHR, or under the City of Chula Vista's criteria for significance. The lithic scatter, NK-S-002, was also recommended not eligible for the NRHP, the CRHR, or under the City of Chula Vista's criteria for significance because of the low artifact yield, the lack of artifact diversity, and disturbed soils identified during excavation testing. Because none of the prehistoric resources were recommended eligible, they do not meet the City of Chula Vista's criteria for significance.

Based on the presence of archaeological resource sites within the project area, sensitivity of the area and site conditions, there is a potential for unknown buried archaeological resources to be impacted from grading within the project site

Off-site Improvements in City of San Diego

The project includes grading and construction of the primary access road from Dennery Road to the project site, in addition to an emergency only fire access road within an existing manufactured slope. Additionally, 300 feet of water pipelines require installation from the project site driveway to the Sand Star Way, within Dennery Road. The SCIC records search results do not indicate previously recorded cultural resources mapped within the off-site improvement areas. The possibility of buried significant cultural resources being present within the existing manufactured slope for the emergency only access road is considered low because of the prior disturbance associated with the manufactured slope. Although the location of the primary access road and trenching required within Dennery Road have been subject to prior disturbance with a low likelihood of resources being encountered, a potential remains for resources to be encountered within these areas during site grading.

Off-site Trails Improvement Area

Off-site trail improvements are proposed north of the project site within the Otay Valley Regional Park (OVRP) on a property known as the Davies Property (see Figure 3-6). The off-site trail improvements would consist of placement of decomposed granite within an eight-foot-wide trail alignment. Peeler pole fencing would be installed on one side of the trail. No grading is required for the off-site trail improvement and ground disturbance associated with the off-site trail improvement would be limited to digging fence post holes for the trail fencing.

The SCIC records search results do not indicate previously recorded cultural resources mapped within the off-site trails improvement area. The possibility of buried significant cultural resources being present within the developed trail improvement area is considered low because no grading is

required and limited disturbance would occur associated with installation of fence posts. Additionally, considerable past ground disturbance has reduced the likelihood of any near surface resources. Because of the disturbed condition of the survey area, including its current use as an informal trail, it is unlikely that impacts to historic resources would occur.

Wetland Mitigation Area

The SCIC records search results indicate the previously recorded CA-SDI-10,811 as mapped within the wetland mitigation area. The 2023 archaeological survey of this mapped location did not locate any site material (see Appendix K-2). This observation is consistent with the recording of CA-SDI-10,811 as the site was surface-collected. The possibility of buried significant cultural resources being present within the wetland mitigation area is considered low due to the naturally disturbed condition of the active drainage. Furthermore, CA-SDI-10,811 was determined not a significant historical resource in 2005. Because of the lack of observed cultural material within the survey area, as well as the naturally disturbed condition of the survey area, it is determined that there is a low potential for impacts to unknown historical resources within the wetland mitigation areas to occur.

c. Significance of Impacts

Based on the results of the record search and surveys of the project site, implementation of the project would not result in impacts to built environment historical resources, as the on-site foundations did not meet the criteria for eligibility for the NRHP or the CRHR.

Impacts to potentially buried prehistoric archaeological resources associated with grading within the City of Chula Vista portion of the project site and remedial grading area could occur, resulting in a significant impact.

Additionally, grading within the off-site improvement areas within the City of San Diego including the primary access road and trenching within Dennery Road could result in a significant impact to buried prehistoric archaeological resources.

d. Mitigation Measures

Impacts to potentially buried prehistoric archaeological resources associated with grading within the City of Chula Vista would require implementation of **HIST-CV-1.**

Impacts to potentially buried prehistoric archaeological resources associated with grading within the off-site improvement areas within the City of San Diego including the primary access road and trenching within Dennery Road would require City of San Diego implementation **HIST-SD-1**, detailed in Section 4.7.3.2.d.

HIST-CV-1: **Archaeological Monitoring.** To mitigate impacts to historical resources to a level that is less than significant, procedures for proper treatment of unanticipated archaeological finds must comply with the State CEQA Guidelines. Adherence to the following requirements during initial earth-disturbing activities will assure the proper treatment of unanticipated archaeological or Native American cultural material:

1. An archaeological monitor and a Kumeyaay Native American monitor shall be present full-time during all initial ground-disturbing activities. If proposed project excavation later presents evidence suggesting a decrease in cultural sensitivity, the monitoring schedule can be reduced pending archaeological, Native American, and City of Chula Vista consultation.

2. In the event that previously unidentified potentially significant historical resources are discovered, the archaeological monitor, Native American monitor, construction or other personnel shall have the authority to divert or temporarily halt ground disturbance operations in the area of the find. The archaeological monitor shall evaluate and minimally document isolates and clearly non-significant deposits in the field. More significant deposits shall be evaluated by the cultural Primary Investigator in consultation with the Native American monitor and City of Chula Vista staff. For significant historical resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the qualified archaeologist and approved by the City of Chula Vista, then carried out using professional archaeological methods. The Research Design and Data Recovery Program shall include (1) reasonable efforts to preserve (avoidance) “unique” historical resources or Sacred Sites pursuant to CEQA Section 21083.2(g) as the preferred option; (2) the capping of identified Sacred Sites or unique historical resources and placement of development over the cap, if avoidance is infeasible; and (3) data recovery for non-unique historical resources. Construction activities will be allowed to resume in the affected area only after proper evaluation.

e. Significance of Impacts after Mitigation

The incorporation of archaeological and Native American monitoring during grading would ensure adverse impacts to unknown potentially significant buried prehistoric resources would be reduced to less than significant. The presence of an archaeological and Native American monitor during ground disturbing activities would allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated. If significant resources are recovered, implementation of a Research Design and Data Recovery Program would ensure significant resources are treated properly to avoid significant impacts.

4.7.3.2 Annexation Scenario 2a

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related prehistoric and historic resources:

- Would the project result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic archaeological site (including an architecturally significant building), structure, or object or site?

a. Threshold of Significance

In accordance with the City of San Diego's Significance Determination Thresholds (2022), prehistoric and historic resource impacts may be significant if the project would result in impacts to any of the following:

- A resource listed in, eligible or potentially eligible for listing in the NRHP.
- A resource listed in, or determined to be eligible by, the State Historical Resources commission, for listing in the CRHR (Public Resources Code Section 5024.1).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (Public Resources Code Section 5024.1).
- An archaeological site consisting of at least three associated artifacts/ecofacts (within a 40-square-meter area) or a single feature. (Testing is required to document the absence of subsurface deposit.) 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 "traditional cultural property." A site would be considered to possess ethnic significance if it is associated with a burial or cemetery; religious, social or transitional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

The determination of significance of impacts on historical and unique archaeological resources is based on the criteria found in Section 15064.5 of the State CEQA Guidelines. Section 15064.5 clarifies the definition of a substantial adverse change in the significance of a historical resource as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

b. Impact Analysis

Built Environment

The analysis and conclusions contained in Section 4.7.3.1.b, Built Environment are the same for Annexation Scenario 2a. The concrete foundations (NK-S-001) lacked integrity and could not be associated with a significant person or event, the resource was not recommended eligible for the NRHP, the CRHR. The foundations would also not be eligible for the City of San Diego's Historical Resources Register. Refer to Section 4.7.3.1.b for additional information.

Archaeological Resources

The analysis and conclusions contained in Section 4.7.3.1.b, Archeological Resources are similar for Annexation Scenario 2a. As detailed in that section, the project would result in impacts to three prehistoric archaeological resources (P-37-007983, P-37-026987, and NK-S-002)

The artifact scatter, P-37-007983, was recommended not eligible for the NRHP, the CRHR, or City of San Diego's Historical Resources Register due to its low potential for significant intact subsurface deposits as a result of its location on steep hills and lack of integrity from the graded areas. The results of the excavation testing completed (see Appendix K-1) at the lithic and shell artifact scatter, P-37-026987, indicated that there was no subsurface cultural material and therefore was recommended not eligible for the NHRP, the CRHR, or City of San Diego's Historical Resources Register. The lithic scatter, NK-S-002, was also recommended not eligible for the NRHP, the CRHR, or City of San Diego's Historical Resources Register because of the low artifact yield, the lack of artifact diversity, and disturbed soils identified during excavation testing (see Appendix K-1). Because none of the prehistoric resources were recommended eligible, they do not meet the criteria for significance.

As detailed in Section 4.7.3.1.b, there is a potential for unknown buried archaeological resources to be impacted through implementation of the project, specifically associated with project site grading and grading within the City of San Diego off-site components including the primary access road and trenching within Dennery Road. Therefore, there is the potential for ground-disturbing activities to result in impacts to unknown historical resources (archaeology)

Traditional Cultural Property

Native American consultation was conducted for the project. No traditional cultural property was identified as being present within the project site. Refer to Section 4.10.1 for additional information regarding the results of tribal consultation.

c. Significance of Impacts

Based on the results of the record search and surveys of the project site, implementation of the project would not result in impacts to known historical (built environment) resources. Additionally, impacts to traditional cultural property would be less than significant as none exist on-site.

A potentially significant impact to unknown prehistoric/archaeological resources could result during on-site grading and grading within the City of San Diego off-site components including the primary access road and trenching within Dennery Road for installation of a water pipeline. Therefore, impacts to historical resources associated with potential discovery of buried archaeological remains would be significant.

d. Mitigation Measures

HIST-SD-1: Archaeological and Native American Monitoring

I. Prior to Permit Issuance

A. Entitlements Plan Check

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. The applicant shall submit a letter of verification to the Mitigation Monitoring and Coordination (MMC) office identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.

2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.

3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (¼-mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.

2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼-mile radius.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified archaeologist and Native American monitor shall attend any grading/excavation related precon meetings to make comments and/or suggestions concerning the archaeological monitoring program with the CM and/or Grading Contractor.

   If the PI is unable to attend the precon meeting, the applicant shall schedule a focused precon meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Identify Areas to be Monitored

   a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.

   b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

3. When Monitoring Will Occur

   a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.

b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

III. During Construction

A. Monitor(s) Shall be Present During Grading/Excavation/Trenching

1. The archaeological monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities that could result in impacts to archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances Occupational Safety and Health Administration (OSHA) safety requirements may necessitate modification of the AME.

2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B–C and IV.A–D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.

4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVRs shall be faxed or emailed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the archaeological monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.

2. The monitor shall immediately notify the PI (unless monitor is the PI) of the discovery.

3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered, shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section IV below.

a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.

b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP), which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC. Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also a historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Guidelines Section 21083.2 shall not apply.

c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the final monitoring report. The letter shall also indicate that no further work is required.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.3(e), the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) shall be undertaken:

A. Notification

1. Archaeological monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the monitor is not qualified as a PI. MMC will notify the appropriate senior planner in the Environmental Analysis Section of the Development Services Department to assist with the discovery notification process.

2. The PI shall notify the medical examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the medical examiner in consultation with the PI concerning the provenance of the remains.

2. The medical examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.

3. If a field examination is not warranted, the medical examiner will determine with input from the PI, if the remains are or are not most likely to be of Native American origin.

C. If human remains ARE determined to be Native American

1. The medical examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the medical examiner can make this call.

2. NAHC will immediately identify the person or persons determined to be the most likely descendent (MLD) and provide contact information.

3. The MLD will contact the PI within 24 hours or sooner after the medical examiner has completed coordination, to begin the consultation process in accordance with CEQA Guidelines Section 15064.3(e), and the California Public Resources and Health & Safety Codes.

4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.

5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:

   a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;

   b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC Section 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN

c. To protect these sites, the landowner shall do one or more of the following:

(1) Record the site with the NAHC;

(2) Record an open space or conservation easement; or

(3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC Section 5097.98. The document shall be indexed as a notice under the name of the owner.

V. Night and/or Weekend Work

A. If night and/or weekend work is included in the contract:

1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.

2. The following procedures shall be followed.

a. No Discoveries

In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8 a.m. of the next business day.

b. Discoveries

All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.

c. Potentially Significant Discoveries

If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV – Discovery of Human Remains shall be followed.

d. The PI shall immediately contact MMC, or by 8 a.m. of the next business day, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.

B. If night and/or weekend work becomes necessary during the course of construction:

1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.

2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

A. Preparation and Submittal of Draft Monitoring Report

1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.

a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report.

b. Recording Sites with State of California Department of Parks and Recreation

The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms—DPR 523A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City of San Diego's HRG, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report.

3. The PI shall submit revised Draft Monitoring Report to MMC for approval.

4. MMC shall provide written verification to the PI of the approved report.

5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Artifacts

1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and cataloged.

2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

3. The cost for curation is the responsibility of the property owner.

C. Curation of artifacts: Accession Agreement and Acceptance Verification

1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.

2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5.

D. Final Monitoring Report(s)

1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.

2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

e. Significance of Impacts after Mitigation

The incorporation of archaeological and Native American monitoring (**HIST-SD-1**) during on-site grading and off-site improvements within the City of San Diego for the primary access road and water pipeline installation in Dennery Road would ensure adverse impacts to unknown potentially significant buried prehistoric resources would be reduced to less than significant. The presence of an archaeological and Native American monitor during ground disturbing activities would allow for the identification of buried resources to occur so that work can stop and any resources be

evaluated. The measure details appropriate handling and treatment of artifacts and specifies curation requirements and a monitoring report. Implementation of this measure during construction would ensure potential impacts to archeological resources reduced to less than significant.

4.7.4 Issue 2: Human Remains

4.7.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to human remains in Chula Vista:

- Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

b. Impact Analysis

No known burial sites or cemeteries exist within the vicinity of the project site and it is not expected that human remains would be disturbed as a result of the project. In the unlikely event of the discovery of human remains during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) shall be undertaken.

c. Significance of Impacts

Although it is not expected that human remains would be located on the project site, there is a potential for buried human remains to be disturbed by grading and construction activities. Therefore, impacts within the City of Chula Vista associated with human remains would be potentially significant.

Grading within the off-site improvement areas within the City of San Diego would have a similar potential for encountering buried human remains. However, the City of San Diego considers impacts less than significance through regulatory compliance, specifically adherence to Public Resources Code Section 5097 relating to the protection of Native American burial sites. Through regulatory compliance impacts associated with the discovery of human remain would be less than significant for the City of San Diego off-site improvement areas.

d. Mitigation Measures

The following mitigation measure would be applied by the City of Chula Vista to address potentially significant impacts to human remains within proposed grading areas in the City of Chula Vista.

Grading within the off-site improvement areas within the City of San Diego would be less than significant with adherence to Public Resources Code Section 5097 relating to the protection of Native American burial sites; therefore, no mitigation is required.

HIST-CV-2: **Discovery of Human Remains.** To mitigate impacts to human remains to a level that is less than significant, procedures for proper treatment of unanticipated finds must comply with the State CEQA Guidelines. In the event of discovery of unanticipated human remains, personnel shall comply with Public Resources Code Section 5097.98, CEQA Guidelines Section 15064.5, and Health and Safety Code Section 7050.5 during earth-disturbing activities:

1. If any human remains are discovered, the construction personnel or the appropriate representative shall contact the County Coroner and City of Chula Vista. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the Most Likely Descendant regarding their recommendations as required by California Public Resources Code Section 5097.98 has been conducted. California Public Resources Code Section 5097.98, CEQA Guidelines Section 15064.5 and Health & Safety Code Section 7050.5 shall be followed.

e. Significance of Impacts after Mitigation

The project would implement mitigation measure **HIST-CV-2** which would ensure all applicable provisions of Public Resources Code Section 5097.98, CEQA Guidelines Section 15064.5, and Health and Safety Code Section 7050.5 are implemented during earth-disturbing activities. Implementation of the mitigation measure for grading within the City of Chula Vista areas would reduce potential impacts related to human remains to less than significant.

4.7.4.2 Annexation Scenario 2a

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to human remains:

- Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

a. Threshold of Significance

In accordance with the City of San Diego's Significance Determination Thresholds, discovery of human remains shall always be treated as a significant discovery.

b. Impact Analysis

No known burial sites or cemeteries exist within the vicinity of the project site and it is not expected that human remains would be disturbed as a result of the project. In the unlikely event of the discovery of human remains during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) shall be undertaken. These regulations detail specific procedures to follow in the event of a discovery of human remains, i.e., work would be required to halt and no soil would be exported off-site until determination could be made via the County Coroner and other authorities as required.

c. Significance of Impacts

The project would adhere to Public Resources Code Section 5097 relating to the protection of Native American burial sites. Through regulatory compliance, impacts associated with the discovery of human remain would be less than significant.

d. Mitigation Measures

Impacts would be less than significant; therefore, no mitigation is necessary.

4.7.5 Issue 3: Religious/Sacred Uses

4.7.5.1 No Annexation Scenario and Annexation Scenario 2b

The City of Chula Vista does not have a specific threshold related to religious/sacred uses; therefore, this issue is not discussed further for the No Annexation Scenario or Annexation Scenario 2b. Refer to Section 4.10 for discussion of tribal cultural resources.

4.7.5.2 Annexation Scenario 2a

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to religious and sacred uses:

- Would the project result in any impact to existing religious or sacred uses within the potential impact area?

a. Threshold of Significance

In accordance with the City of San Diego's Significance Determination Thresholds (2022), prehistoric and historical resource impacts may be significant if the project would result in:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance.
- A site associated with a burial or cemetery; religious, social, or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the belief system of a discrete ethnic population.

b. Impact Analysis

No religious or sacred uses were identified on-site or within the immediate vicinity of the project site as a result of a Sacred Lands Search by the Native American Heritage Commission and of Native American consultation completed by the City of Chula Vista.

c. Significance of Impacts

No religious or sacred uses have been identified within the project area; thus, project impacts to religious or sacred uses would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8 Noise

This section addresses potentially significant impacts relating to noise that may result from implementation of the Nakano Project (project), including construction and operational noise, vibration impacts, and airport noise. This section is based on the Noise Technical Report prepared by RECON Environmental, Inc. (Appendix L). Land use compatibility as it relates to the noise environment is addressed in Section 4.1, Land Use. As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.8.1 Existing Conditions

4.8.1.1 Noise Characteristics

Sound is mechanical energy transmitted by pressure waves in a compressible medium, such as air. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired. The sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of measurement of sound pressure is a decibel (dB). Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice or half as loud (California Department of Transportation [Caltrans] 2013). A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the number of daily trips along a given road) would result in a barely perceptible change in sound level.

Sound may be described in terms of level or amplitude (measured in dB), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). Because the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel [dB(A)] scale performs this compensation by discriminating against low and very high frequencies in a manner approximating the sensitivity of the human ear.

Several descriptors of noise (also known as, noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise. These descriptors include the equivalent noise level over a given period (L_{eq}), the day–night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dB(A).

L_{eq} is a decibel quantity that represents the constant or energy-averaged value equivalent to the amount of variable sound energy received by a receptor during a time interval. For example, a 1-hour L_{eq} measurement of 60 dB(A) would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors, which can then be compared to an established L_{eq} standard or threshold of the same duration. Another descriptor is maximum sound level (L_{max}), which is the greatest sound level measured during a designated time interval or event. The minimum sound level (L_{min}) is often called the floor of a measurement period.

Unlike the L_{eq}, L_{max}, and L_{min} metrics, L_{dn} and CNEL descriptors always represent 24-hour periods and differ from a 24-hour L_{eq} value because they apply a time-weighted factor designed to emphasize noise events that occur during the non-daytime hours (when speech and sleep disturbance is of more concern). *Time weighted* refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 a.m. to 7:00 p.m.) receives no penalty. Noise during the evening (7:00 p.m. to 10:00 p.m.) is penalized by adding 5 dB to the actual levels, and nighttime (10:00 p.m. to 7:00 a.m.) noise is penalized by adding 10 dB to the actual levels. L_{dn} differs from CNEL in that the daytime period is longer (defined instead as 7:00 a.m. to 10:00 p.m.), thus eliminating the dB adjustment for the evening period. L_{dn} and CNEL are the predominant criteria used to measure roadway noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5–1 dB and are often considered or actually defined as being essentially equivalent by many jurisdictions.

4.8.1.2 Vibration Fundamentals

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale and with respect to a reference quantity. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes.

4.8.1.3 Ambient Noise Monitoring

Noise measurements were conducted near the project site on June 4, 2020, to quantify and characterize the existing outdoor ambient sound levels.

Four short-term (ST) noise level measurement locations (ST1–ST4) that represent existing noise-sensitive receivers were selected on and near the project site. These locations are depicted on Figure 4.8-1, Noise Assessment Locations. The measured L_{eq} and L_{max} noise levels are provided in Table 4.8-1. The primary noise sources at the sites consisted of traffic along adjacent roadways, the sounds of leaves rustling, audible distant aircrafts, and birdsong. As shown, noise levels ranged from approximately 62 dB(A) L_{eq} at ST1 to 65.6 dB(A) L_{eq} at ST4.

Table 4.8-1
Measured Baseline Outdoor Ambient Noise Levels

Site	Location/Address	Time (Measurements Taken on 6/4/2020)	L_{eq} [dB(A)]	L_{max} [dB(A)]
ST1	Southeast of project site boundary; north of Dennery Road	10:50 a.m. to 11:00 a.m.	62.0	75.1
ST2	South of southern project site boundary; northeast corner of Kaiser Permanente parking structure	11:45 a.m. to 11:55 a.m.	62.1	66.3
ST3	East of project site; near 122 Golden Sky Way, San Diego, CA 92154	10:30 a.m. to 10:40 a.m.	62.8	64.5
ST4	Southwest corner of project site boundary	11:20 a.m. to 11:30 a.m.	65.6	74.6

SOURCE: Appendix L.
NOTES: L_{eq} = equivalent continuous sound level (time-averaged sound level); L_{max} = maximum sound level during the measurement interval; dB(A) = A-weighted decibels; ST = short-term noise measurement locations.

4.8.2 Regulatory Framework

4.8.2.1 Federal Regulations

a. Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment guidance manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dB(A) L_{eq} over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such noise limits at the state and local jurisdictional levels.

Image Source: NearMap (flown May 2023)



Project Site

Off-site Improvements

Measurement Location

0 Feet 300

RECON

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FIGURE 4.8-1
Noise Measurement Locations

4.8.2.2 State Regulations

a. California Code of Regulations, Title 24

Title 24 of the California Code of Regulations sets standards that new development in California must meet. According to Title 24, interior noise levels are not to exceed 45 CNEL in any habitable room (International Construction Code 2019).

b. California Department of Health Services Guidelines

The California Department of Health Services has developed guidelines of community noise acceptability for use by local agencies (State of California 2017). Selected relevant levels are listed here:

- Below 60 dB(A) CNEL: normally acceptable for low-density residential use
- 50 to 70 dB(A): conditionally acceptable for low-density residential use
- Below 65 dB(A) CNEL: normally acceptable for high-density residential use and transient lodging
- 60 to 70 dB(A) CNEL: conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

The normally acceptable exterior noise level for high-density residential use is up to 65 dB(A) CNEL.

c. California Department of Transportation

Per their Transportation and Construction Vibration Guidance Manual (Caltrans 2020), Caltrans recommends 0.5 ips PPV as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of groundborne vibration. For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV (Caltrans 2020) at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous groundborne vibration at a level of 0.1 ips PPV would find it either “strongly perceptible” or “begins to annoy” and thus for purposes of this assessment would be considered a likely significant impact. Although these Caltrans guidance thresholds are not regulations, they can serve as quantified standards in the absence of such limits at the local jurisdictional level.

4.8.2.3 Local Regulations – City of Chula Vista

Refer to Section 4.1, Land Use for a discussion of the City of Chula Vista General Plan Noise Element regulatory framework.

a. City of Chula Vista Municipal Code 19.68 (Noise Ordinance)

The City of Chula Vista Noise Ordinance (Chula Vista Municipal Code [CVMC] Chapter 19.68) (City of Chula Vista 2020) contains regulations restricting land use related noise-generating activities and operations, so as to avoid noise nuisance in the community. Section 19.68.030 of the CVMC establishes the maximum allowable exterior noise limits, based upon the classification of the receiving land use. These standards typically apply to stationary sources such as noise from mechanical equipment (including mechanical ventilation and air condition noise, pool pump noise, etc.) or event noise, as opposed to traffic noise. For instance, a school, commercial enterprise, or industrial operation must not generate noise that exceeds a certain specified noise level at any property boundary where an adjacent residential use exists. The property line noise standards are presented in Table 4.8-2.

Table 4.8-2
City of Chula Vista Exterior Property Line Noise Limits

Receiving Land Use Category	Noise Level [dB(A)]	
	10 p.m. to 7 a.m. (Weekdays) 10 p.m. to 8 a.m. (Weekends)	7 a.m. to 10 p.m. (Weekdays) 8 a.m. to 10 p.m. (Weekends)
All residential (except multiple dwelling)	45	55
Multiple-dwelling residential	50	60
Commercial	60	65
Light industry – I-R and I-L zone	70	70
Heavy industry – I zone	80	80
NOTE: dB(A) = A-weighted decibels.		

Title 17 of the CVMC (Environmental Quality), Chapter 17.24, addresses managing noisy and disorderly conduct. Section 17.24.040(C)(8) specifically addresses restrictions against generation of construction noise in overnight periods. The use of any tools, power machinery, or equipment, or the conduct of construction and building work in residential zones so as to cause noises disturbing to the peace, comfort, and quiet enjoyment of property of any person residing or working in the vicinity, shall be prohibited between the hours of 10:00 p.m. and 7:00 a.m., Monday–Friday, and between the hours of 10:00 p.m. and 8:00 a.m., Saturday and Sunday, except when the work is necessary for emergency repairs required for the health and safety of any member of the community (City of Chula Vista 2020).

Although the City of Chula Vista does not set specific numerical limits for noise associated with temporary construction activities, it can be perceived as a nuisance; thus, the City of Chula Vista restricts the times of day when construction may occur (7:00 a.m.–10:00 p.m., Monday–Friday, and 8:00 a.m.–10:00 p.m., Saturday and Sunday).

b. City of Chula Vista Multiple Species Conservation Program Subarea Plan

The municipalities of southwestern San Diego County collaborated in producing the Multiple Species Conservation Program (MSCP) Subregional Plan (City of San Diego 1997). The MSCP Subregional Plan is implemented through individual Subarea Plans adopted by each jurisdiction in order to receive

take authorization for impacts to covered species and habitats. The MSCP is implemented in Chula Vista through the City of Chula Vista's MSCP Subarea Plan (City of Chula Vista 2003). The MSCP Subarea Plan regulates impacts to sensitive biological resources, including noise impacts. In accordance with Section 7.5.2 of the Chula Vista Subarea Plan, Adjacency Management Issues, uses in or adjacent to the Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy areas or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species, consistent with Table 3-5 of the MSCP Subregional Plan, included as Appendix A to the MSCP Subarea Plan. In general, the construction noise threshold for sensitive biological resources is an hourly average noise level of 60 dB(A) and no clearing, grubbing, and/or grading is permitted within the MSCP Preserve during the breeding season of the sensitive species present. Within the City of Chula Vista Subarea Plan, the project area is designated as "Development Area Outside Covered Projects" (i.e., not designated a preserve or conservation area) and is not located immediately adjacent to any 75 percent or 100 percent Conservation Areas. The closest Chula Vista Subarea Plan conservation area (75 percent) is located approximately 197 feet north of the project area within the Otay River.

Refer to Section 4.3, Biological Resources, Section 4.3.6.1.b for a discussion of consistency with the City of Chula Vista MSCP Subarea Plan and associated noise compatibility criteria.

4.8.2.4 City of San Diego

The City of San Diego General Plan Noise Element (City of San Diego 2015) establishes noise compatibility guidelines for uses affected by traffic noise, as detailed in Section 4.1 Land Use, Section 4.1.2.3.b.

a. City of San Diego Municipal Code Article 9.5 (Noise Abatement and Control Ordinance)

Applicable noise standards for the project are codified in the following City of San Diego regulations found in Chapter 5, Article 9 (City of San Diego 2010):

Section 59.5.0401: Sound Level Limits

It shall be unlawful for any person to cause noise by any means to the extent that the one–hour average sound level exceeds the applicable limit given in Table 4.8-3, at any location in the City of San Diego on or beyond the boundaries of the property on which the noise is produced.

Table 4.8-3 San Diego Exterior Noise Limits		
Land Use	Time of Day	One-Hour Average Sound Level (Decibels)
Single Family Residential	7 a.m. to 7 p.m. 7 p.m. to 10 p.m. 10 p.m. to 7 a.m.	50 45 40
Multi-Family Residential (Up to a maximum density of 1/2000)	7 a.m. to 7 p.m. 7 p.m. to 10 p.m. 10 p.m. to 7 a.m.	55 50 45
All Other Residential	7 a.m. to 7 p.m. 7 p.m. to 10 p.m. 10 p.m. to 7 a.m.	60 55 50
Commercial	7 a.m. to 7 p.m. 7 p.m. to 10 p.m. 10 p.m. to 7 a.m.	65 60 60
Industrial or Agriculture	Anytime	75
SOURCE: City of San Diego 2010.		

Section 59.5.0404: Construction Noise

Construction noise is regulated by the San Diego Municipal Code (SDMC). Section 59.5.0404 of the SDMC, the Noise Abatement and Control Ordinance, states, "It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the SDMC, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise" and "it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m. "

b. Brown Field Airport Land Use Compatibility Plan

The Airport Land Use Compatibility Plan (ALUCP) for Brown Field identifies land uses compatible with annual noise levels due to operations at Brown Field. These land use compatibility noise levels are to be used in determining whether a proposed land use is consistent with ALUCP policies and guidelines. The Brown Field Municipal ALUCP residential exterior and interior noise exposure standards are 65 CNEL and 45 CNEL, respectively (San Diego County Regional Airport Authority 2010). Refer to Section 4.1 Land Use, Section 4.1.2.1.d for further details.

4.8.3 Issue 1: Ambient Noise Levels

4.8.3.1 No Annexation Scenario and Annexation Scenario 2b

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to ambient noise levels in Chula Vista:

- Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

a. Threshold of Significance

Construction Noise - The City of Chula Vista regulates construction noise by restricting the allowable hours of construction. Section 9.40.110 of the CVMC exempts construction noise from the stationary noise standards, provided construction occurs between 7:00 a.m. and 10:00 p.m., Monday through Friday, and 8:00 a.m. to 10:00 p.m., Saturday and Sunday. Through adherence to the limitation of allowable construction times provided in the CVMC, the construction-related noise levels would not exceed any municipal standards. However, since the City of Chula Vista lacks a quantified construction noise level threshold, consistent with the "or applicable standards of other agencies" clause in the first bulleted CEQA Guidelines Appendix G criterion above for noise, for purposes of information disclosure this assessment adopts the FTA guidance-based standard of 80 dB(A) over an 8-hour L_{eq} at the exterior of a residential land use. This FTA standard would be applied to the nearest existing medium (zoned "R2") and high-density (zoned "R3P13") City of Chula Vista residential receptors that are approximately 700 feet northwest of the project site.

Off-site Project-Attributed Transportation Noise - For purposes for this analysis, a direct roadway noise impact would be considered significant if increases in roadway traffic noise levels attributed to the project are greater than 3 dB(A) at an existing noise-sensitive land use.

Off-site Project-Attributed Stationary Noise - For purposes for this analysis, a noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning and other electro-mechanical systems associated with the project exceeded 55 dB(A) hourly L_{eq} at the property line from 7:00 a.m. to 9:59 p.m., and 45 dB(A) hourly L_{eq} from 10:00 p.m. to 6:59 a.m.

b. Impact Analysis

Construction

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor.

Equipment that would be in use during construction would include, in part, graders, backhoes, concrete saws, excavators, dump trucks, loaders, cranes, manlifts, cement mixers, pavers, rollers,

welders, and air compressors. The typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 4.8-4. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the listed maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 4.8-4
Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment [L_{max}, dB(A) at 50 feet]
Air compressor	78
Backhoe	78
Concrete pump truck	81
Grader	85
Crane	81
Dump Truck	76
Roller	80
Manlift	75
Generator	72
Front End Loader	79
Paver	77
Concrete Saw	90
Welder	74

SOURCE: U.S. Department of Transportation 2006.
NOTE: L_{max} = maximum sound level; dB(A) = A-weighted decibels.

Aggregate noise emission from project construction activities, broken down by sequential phase, was predicted at two distances to the nearest existing noise-sensitive receptor (NSR): (1) from the nearest position of the construction site boundary (which includes off-site improvements) and (2) from the geographic center of the construction site, which serves as the time-averaged location or geographic acoustical centroid of active construction equipment for the phase under study. The intent of the former distance is to help evaluate anticipated construction noise from a limited quantity of equipment or vehicle activity expected to be at the boundary for some period of time, which would be most appropriate for phases such as site preparation, grading, and paving. The latter distance is used to evaluate construction noise from the acoustical centroid. For the former, the NSR would be one of the existing multi-family residential structures to the east of the project site on Golden Sky Way in the "RiverEdge Terrace" community; and for the latter, there are multi-family homes south of Rancho Drive immediately west of the Interstate 805 southbound lanes.

At the project site boundary, this analysis assumes that up to only one piece of equipment of each listed type per phase will be involved in the construction activity for a limited portion of a typical 8-hour construction work shift. For the acoustical centroid case, which is a geographic average position for all equipment during the indicated phase, this analysis assumes that all on-site equipment would be active.

Distances to the closest NSRs are summarized in Table 4.8-5. Construction noise levels are summarized in Table 4.8-6.

Table 4.8-5
Estimated Distances between Construction Activities and the Nearest Existing City of San Diego and City of Chula Vista Noise-Sensitive Receptors (NSR)

Construction Phase (and Equipment Types Involved)	Distance from Construction Site Boundary (feet) to City of San Diego NSR	Distance from Acoustical Centroid of Site (feet) to City of San Diego NSR	Distance from Construction Site Boundary (feet) to City of Chula Vista NSR	Distance from Acoustical Centroid of Site (feet) to City of Chula Vista NSR
Site Preparation (Dozer, Loader)	180	743	700	1,230
Grading (Excavator, Grader, Dozer, Scraper, Backhoe)	60	743	700	1,230
Building Construction (Crane, Forklift, Loader, Welder, Generator)	210	743	700	1,230
Architectural Finishes (Air Compressor)	210	743	700	1,230
Paving (Roller, Backhoe, Dump Truck, Paver)	60	743	700	1,230

Table 4.8-6
Predicted Construction Noise Levels per Activity Phase at Sensitive Receptors

Construction Phase (and Equipment Types Involved)	12-Hour L_{eq} at Nearest NSR to Construction Site Boundary dB(A) at nearest City of San Diego NSR	12-Hour L_{eq} at Nearest NSR to Acoustical Centroid of Site dB(A) at nearest City of San Diego NSR	8-Hour L_{eq} at Nearest NSR to Construction Site Boundary dB(A) at nearest City of Chula Vista NSR	8-Hour L_{eq} at Nearest NSR to Acoustical Centroid of Site dB(A) at nearest City of Chula Vista NSR
First-Floor Receptors				
Site Preparation (Dozer, Loader)	52.9	54.5	51.6	51.3
Grading (Excavator, Grader, Dozer, Scraper, Backhoe)	70.2	56.8	57.5	53.6
Building Construction (Crane, Forklift, Loader, Welder, Generator)	55.7	55.2	53.3	52.0
Architectural Finishes (Air Compressor)	47.0	43.5	44.6	40.3
Paving (Roller, Backhoe, Dump Truck, Paver)	62.4	50.4	49.7	47.2
Second-Floor Receptors				
Site Preparation (Dozer, Loader)	63.2	54.5	51.6	51.3
Grading (Excavator, Grader, Dozer, Scraper, Backhoe)	74.0	56.8	57.5	53.6
Building Construction (Crane, Forklift, Loader, Welder, Generator)	63.3	55.2	53.3	52.0
Architectural Finishes (Air Compressor)	54.6	43.5	44.6	40.3
Paving (Roller, Backhoe, Dump Truck, Paver)	66.2	50.4	49.7	47.2

SOURCE: Appendix L.
NOTES: L_{eq} = equivalent noise level; dB(A) = A-weighted decibels; NSR = noise-sensitive receptor

As shown, the estimated construction noise levels at the nearest City of Chula Vista NSR are predicted to be less than 80 dB(A) L_{eq} over an 8-hour period—even when phase activities may take place near the northwest project boundaries. At the nearest City of San Diego NSR, construction noise levels are predicted to be less than 75 dB(A) L_{eq} over a 12-hour period. Hence, under these conditions, predicted operation of construction equipment and processes do not exceed both the FTA based guidance construction noise threshold of 80 dB(A) 8-hour L_{eq} and the City of San Diego code-based threshold for construction noise level of 75 dB(A) 12-hour L_{eq}. Under the No Annexation Scenario and Annexation Scenario 2b, construction activities would be limited to the times specified in the CVMC, which are 7:00 a.m.–10:00 p.m., Monday–Friday, and 8:00 a.m.–10:00 p.m., Saturday and Sunday. Construction activities within the off-site grading areas within the City of San Diego would be limited to the times specified in the SDMC Section 59.5.0404, which are 7:00 a.m.–7:00 p.m. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of Chula Vista's noise level limits. For the off-site components, the City of San Diego noise level limits would not be exceeded as detailed in 4.8.3.2.b. Temporary construction noise would be less than significant.

Operation

Roadway Traffic Noise

The analysis of traffic noise compatibility is addressed in Section 4.1, Land Use. The following is an analysis of the increase in off-site traffic noise resulting from project implementation.

The project would increase traffic volumes on local roadways. However, the project would not substantially alter the vehicle classifications mix on local or regional roadways nor would the project alter the speed on an existing roadway or create a new roadway. Thus, the primary factor affecting off-site noise levels would be increased traffic volumes. While changes in noise levels would occur along any roadway where project-related traffic occurs, for noise assessment purposes, noise level increases are assumed to be greatest nearest the project site, as this location would represent the greatest concentration of project-related traffic. A substantial noise increase is defined as an increase of 3 dB above existing conditions.

The roadways included in the local mobility analysis are Dennery Road and Palm Avenue. Traffic noise levels were calculated based on the total average daily traffic volumes on each roadway segment. Existing (year 2020), near term (opening year 2025), and future (horizon year 2062) traffic volumes on Dennery Road and Palm Avenue with and without the project were obtained from the Local Mobility Analysis prepared for the project (see Appendix M-2). Noise levels were calculated at 50 feet from the centerline using the FHWA RD-77-108 model. Table 4.8-7 presents a conservative assessment of traffic noise levels without and with the project. For modeling purposes, "hard" ground conditions were used for the analysis of future conditions since a majority of the project area is paved and the hard site provides the most conservative impact assessment.

Table 4.8-7
Traffic Noise Level with and without Project and Ambient Noise Increases (CNEL)

Roadway Segment	Existing Year 2020			Near Term (Opening) Year 2025			Horizon Year 2062			Cumulative Increase Over Existing
	No Project	Project	Increase	No Project	Project	Increase	No Project	Project	Increase	
Dennery Road										
Palm Avenue to Regatta Lane	69.6	70.2	0.6	69.6	70.2	0.6	71.1	71.5	0.4	1.9
Regatta Lane to Landing Driveway	67.4	68.3	0.9	67.5	68.3	0.8	69.2	69.8	0.6	2.4
Landing Driveway to Red Coral	67.3	68.2	0.9	67.4	68.3	0.9	69.2	69.8	0.6	2.5
Palm Avenue										
I-805 Southbound Ramps to I-805 Northbound Ramps	75.9	76.0	0.1	76.1	76.2	0.1	76.9	77.0	0.1	1.1
I-805 Northbound Ramps to Dennery Road	77.2	77.3	0.1	77.4	77.5	0.1	78.0	78.1	0.1	0.9

SOURCE: Appendix L.
NOTE: Increase calculations may vary due to independent rounding.

As shown, the project would result in direct noise level increases ranging from 0.4 to 0.9 dB on Dennery Road, and a direct noise level increase of 0.1 dB on Palm Avenue. Cumulatively, when comparing future horizon year 2062 traffic noise levels to existing noise levels, the increase would range from 0.9 to 2.5 dB. The project would not result in a direct or cumulative noise increase of more than 3 dB.

On-Site Generated Stationary Noise

The proposed residential project includes a variety of noise-producing mechanical equipment. Each of the proposed units would be expected to feature mechanical ventilation and an outdoor-exposed air-cooled condenser (ACC) that provides cooling (expressed herein as refrigeration tonnage). For purposes of this analysis, each single-family structure was assigned an ACC rated for 1.5 to 3 tons of cooling, which can be represented by a Carrier 16NA18 model having a sound pressure level of 68 dB(A) at a distance of one meter (Carrier 2012). Each duplex and townhome structure would have two such Carrier units (or comparable from a different manufacturer) or a larger unit delivering twice the refrigeration capacity but emitting a 3 dB(A) (i.e., double the sound energy) higher noise level.

The project would also include pocket parks throughout the site. These pocket parks would include mostly passive uses such as benches, shade structures, trails, and decorative landscaping that would not be a significant source of noise. However, pocket parks may also include play structures or tot-lots that would generate noise from children at play. A sound power level of 55 dB(A) was modeled at each pocket park location (Navcon Engineering, Inc. 2018).

Noise levels were modeled at receivers located at the multi-family residential uses to the east and at the project property lines. Predicted noise levels associated with the post-construction operation of the project on-site stationary equipment have been calculated using the SoundPLAN model. The results are summarized in Table 4.8-8. Operational noise contours are shown in Figure 4.8-2.

Table 4.8-8
Predicted Project Stationary Source Operations Noise

Modeled Receiver Position	Receiver Position Description	Predicted hourly L_{eq} [dB(A)]
R01	Near southwestern corner of RiverEdge Terrace building north of Golden Sky Way	36
R02	Near RiverEdge Terrace building east of Golden Sky Way	35
R03	Near RiverEdge Terrace building east of Golden Sky Way	36
R04	Near RiverEdge Terrace building west of Ocean Mist Place	40
R05	Near RiverEdge Terrace building west of Ocean Mist Place	40
R06	Near RiverEdge Terrace building west of Ocean Mist Place	38
R07	Near RiverEdge Terrace building south of Ocean Mist Place	30
REPL	Approximate midpoint of eastern project property line	44
RSPL	Approximate midpoint of southern project property line	39
RWPL	Approximate midpoint of western project property line	45
RNPL	Approximate midpoint of northern project property line	44
SOURCE: Appendix L.		

The most restrictive City of Chula Vista noise level limit for multi-family uses is 50 dB(A) L_{eq}, and the most restrictive City of San Diego noise level limit for multi-family uses is 45 dB(A) L_{eq}. As shown, property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits for the City of Chula Vista.

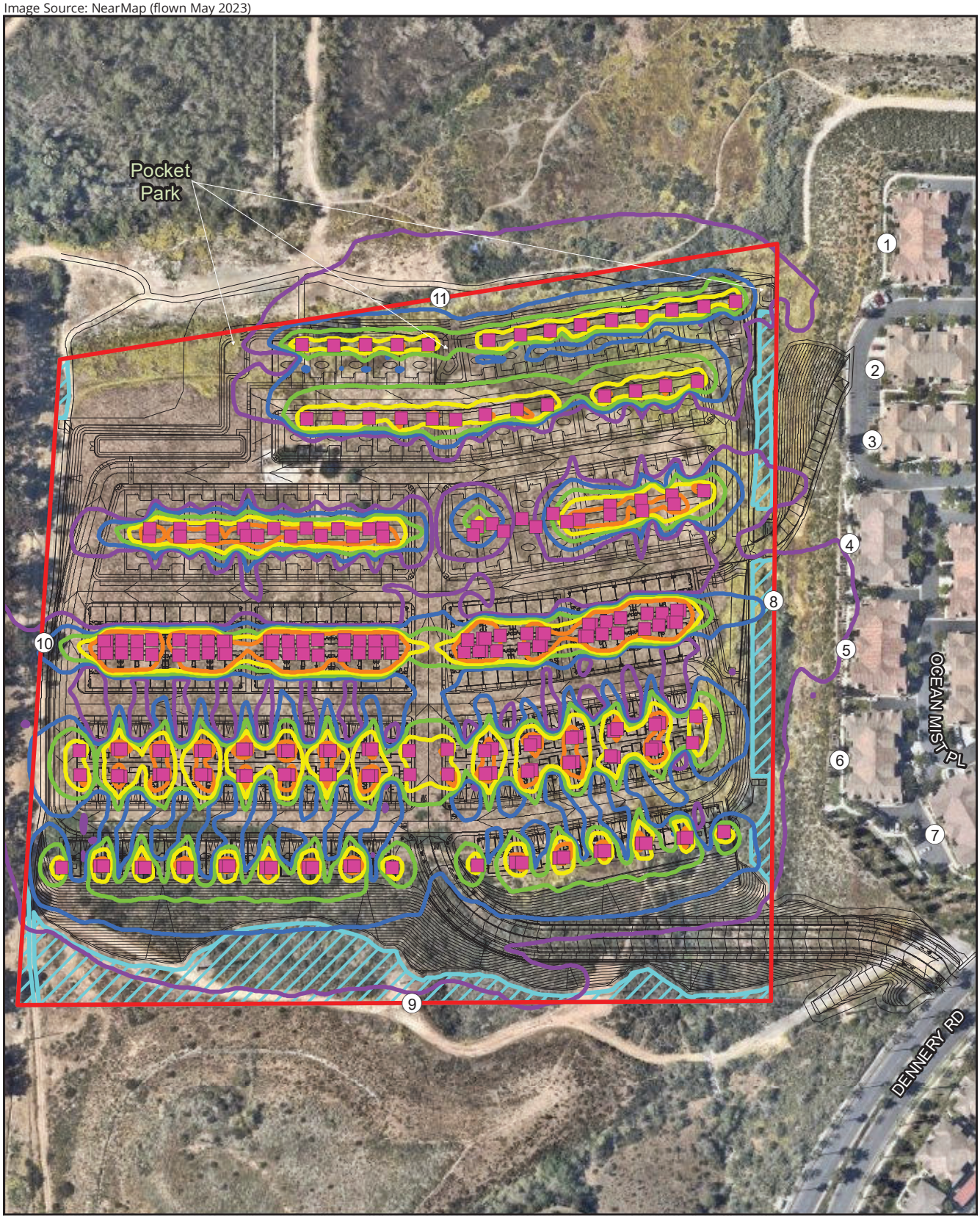
c. Significance of Impacts

Under the No Annexation Scenario and Annexation Scenario 2b, construction activities for the portions of the project within the City of Chula Vista would be limited to the times specified in the CVMC, which are 7:00 a.m.–10:00 p.m., Monday–Friday, and 8:00 a.m.–10:00 p.m., Saturday and Sunday. Construction activities within the off-site grading areas within the City of San Diego, would be limited to the times specified in the SDMC Section 59.5.0404, which are between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of Chula Vista or City of San Diego's noise level limits. Temporary construction noise would be less than significant.

The project would not result in a direct or cumulative traffic noise increase of more than 3 dB. Therefore, the project would result in less than significant direct and cumulative impacts related to traffic noise.

Property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits for the City of Chula Vista. Noise impacts due to on-site noise sources would be less than significant.

Image Source: NearMap (flown May 2023)



Project Site
Covenant of Easement
Receivers
HVAC
Site Plan

Operational Noise

40 dB(A) L_{eq}
45 dB(A) L_{eq}
50 dB(A) L_{eq}
55 dB(A) L_{eq}
60 dB(A) L_{eq}

0 Feet 200

RECON

M:\JOBS\3396-1\common_gis\Reports\EIR\Fig4.8-2.mxd 09/08/2023 bma

FIGURE 4.8-2
Operational Noise Contours

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8.3.2 Annexation Scenario 2a

Based on the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022), noise impacts may be significant if the project would:

- Result or create a significant increase in the existing ambient noise levels.
- Exposure of people to noise levels which exceed the City's adopted noise ordinance or are incompatible with the Noise Element land use noise compatibility guidelines.

a. Threshold of Significance

Based on the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022), noise impacts may be significant if the project would:

- Construction noise – Result in construction noise exposure levels that exceeds 75 dB(A) L_{eq} (12-hour) at the property line of a residentially-zoned property from 7:00 a.m. to 7:00 p.m. (as identified in Section 59.5.0404 of the City of San Diego's Municipal Code) or if non-emergency construction occurs during the 12-hour period from 7:00 p.m. to 7:00 a.m. Additionally, where temporary construction noise would substantially interfere with normal business communication, or affect sensitive receptors, such as day care facilities, a significant noise impact may be identified.

- Project-attributed stationary noise – Result in the exposure of people to noise levels that exceed the City of San Diego's adopted Noise Ordinance, SDMC Section 5.9.5.0401.

- Project-attributed transportation noise – Result in the exposure of people to transportation noise levels that exceed the sound level limits as presented in City of San Diego Land Use – Noise Compatibility Guidelines and generates more than a 3 dB increase.

b. Impact Analysis

Construction

The calculation of construction noise levels under Annexation Scenario 2a would be the same as the construction noise levels presented in Section 4.8.3.1.b and detailed in Table 4.8-6. The only difference would be the allowable times of construction activities specified in the City of San Diego's Municipal Code. As detailed in Table 4.8-6, construction noise levels at the nearest City of San Diego noise sensitive receptors (NSR) would range from 43.5 to 56.8 and construction noise levels at the nearest City of Chula Vista NSRs would range from 40.3 to 53.6. As shown in Table 4.8-6, construction noise levels are not anticipated to exceed 80 dB(A) L_{eq} averaged over an 8-hour period at the nearest City of Chula Vista NSR or exceed 75 dB(A) L_{eq} over a 12-hour period at the nearest City of San Diego NSR. Under Annexation Scenario 2a, construction activities would be limited to the

times specified in the SDMC, which are 7:00 a.m.–7:00 p.m. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of San Diego's noise level limits.

Operation

Roadway Traffic Noise

The analysis of traffic noise compatibility on the project site is addressed in Section 4.1, Land Use. The calculation of the increase in off-site traffic noise under Annexation Scenario 2a would be the same as those calculated for the No Annexation Scenario and Annexation Scenario 2a. As shown in Table 4.8-7, the project would result in direct noise level increases ranging from 0.4 to 0.9 dB on Dennery Road, and a direct noise level increase of 0.1 dB on Palm Avenue. Cumulatively, when comparing future horizon year 2062 traffic noise levels to existing noise levels, the increase would range from 0.9 to 2.5 dB. The project would not result in a direct or cumulative noise increase of more than 3 dB.

On-Site Generated Stationary Noise

The calculation of property line noise levels under Annexation Scenario 2b would be the same as those calculated for the No Annexation Scenario and Annexation Scenario 2a. The most restrictive City of Chula Vista noise level limit for multi-family uses is 50 dB(A) L_{eq}, and the most restrictive City of San Diego noise level limit for multi-family uses is 45 dB(A) L_{eq}. As shown, property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits.

c. Significance of Impacts

Under Annexation Scenario 2a, construction activities would be limited to the times specified in the SDMC, which are 7:00 a.m.–10:00 p.m. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of San Diego's noise level limits. Temporary construction noise would be less than significant.

The project would not result in a direct or cumulative noise increase of more than 3 dB. Therefore, the project would result in less than significant direct and cumulative impacts related to traffic noise.

Property line noise levels due to on-site noise sources are not predicted to exceed the most restrictive noise level limits. Noise impacts due to on-site noise sources would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8.4 Issue 2: Groundborne Vibration

4.8.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to groundborne vibration in Chula Vista:

- Would the project generate excessive groundborne vibration or groundborne noise levels?

b. Impact Analysis

Construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a velocity amplitude of approximately 0.1 ips PPV can be characterized as being "strongly perceptible" or "begins to annoy" building occupants. For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the project site, have peak particle velocities of approximately 0.089 ips PPV or less at a reference distance of 25 feet (FTA 2018).

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. By way of example, for a bulldozer operating on site and as close as the eastern project boundary (i.e., approximately 60 feet from the nearest receiving occupied structure on Golden Sky Way, when the project emergency access roadway would be graded) the estimated vibration velocity level would be 0.024 ips PPV. As this predicted PPV is less than the 0.1 ips PPV guidance-based threshold, vibration-induced annoyance to occupants of nearby existing homes would not occur as construction generated vibration would not be perceptible.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, the predicted 0.024 ips PPV at the nearest residential receiver 60 feet away from on-site operation of the bulldozer during grading would not surpass the guidance limit of 0.3 to 0.5 ips PPV for preventing damage to residential structures (Caltrans 2020). Because the predicted vibration level at 60 feet (in the City of San Diego) is less than both the annoyance and building damage risk thresholds, vibration from project conventional construction activities is considered less than significant.

Once operational, the project would not be expected to feature major on-site producers of groundborne vibration.

c. Significance of Impacts

Construction-related groundborne vibration levels are not anticipated to exceed the annoyance threshold of 0.1 ips PPV or the building damage thresholds of 0.3 to 0.5 ips PPV at the nearest structure. Once operational, the project would not be a source of groundborne vibration. Construction and operational groundborne vibration impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8.4.2 Annexation Scenario 2a

a. Threshold of Significance

Based on the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022), the City of San Diego has identified the following issue question to provide guidance in determining potential significance of impacts related to groundborne vibration:

- Would the project generate excessive groundborne vibration or groundborne noise levels?

The City of San Diego commonly relies on the Caltrans thresholds for determining groundborne vibration impacts, as discussed under 4.8.4.1.b.

b. Impact Analysis

As detailed in Section 4.8.4.1.b, impacts due to groundborne vibration during construction or operation are not anticipated. Groundborne vibration impacts associated with Annexation Scenario 2a would be the same as those identified under the No Annexation Scenario and Annexation Scenario 2b.

c. Significance of Impacts

Construction-related groundborne vibration levels are not anticipated to exceed the annoyance threshold of 0.1 ips PPV or the building damage thresholds of 0.3 to 0.5 ips PPV at the nearest structure. Once operational, the project would not be a source of groundborne vibration. Construction and operational groundborne vibration impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8.5 Issue 3: Airport Noise

4.8.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to utilities in Chula Vista:

- For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

b. Impact Analysis

There are no private airstrips within the vicinity of the project site. The closest airport to the project site is the Brown Field Municipal Airport approximately 2.3 miles southeast of the site. Although the project site is located within "Review 2 Area" Airport Influence Area per Exhibit III-6 of the Brown Field Municipal ALUCP (San Diego County Regional Airport Authority 2010), the project site is located outside of the 55 CNEL future aviation noise contour and thus well below the 65 CNEL compatibility standard. Hence, future residences would not be exposed to significant aircraft noise levels.

c. Significance of Impacts

The project site is located outside of the 55 CNEL future aviation noise contour. Impacts from aviation overflight noise exposure would be considered less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.8.5.2 Annexation Scenario 2a

Based on the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego 2022), airport noise is addressed as a land use compatibility issue. Refer to Section 4.1.4.2.b for discussion of airport land use compatibility for Annexation Scenario 2a.

4.9 Transportation

This section evaluates potential impacts related to transportation due to implementation of the Nakano Project (project). Information presented in this section is based on the Vehicle Miles Traveled (VMT) Analysis prepared by LOS Engineering, Inc. (Appendix M-1). Additionally, the results of the Local Mobility Analysis (LMA) Report prepared by Los Engineering, Inc. (Appendix M-2), required by the City of San Diego, are discussed in this section; however, this analysis is not related to the significance of transportation impacts under the California Environmental Quality Act (CEQA). Since the project site is accessible from City of San Diego roadways and project-generated traffic would flow primarily onto City of San Diego roadway facilities, the project LMA is based on the City of San Diego Transportation Study Manual (TSM) (see Section 4.9.2.4.f).

As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b used applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site public improvements in the City of San Diego would require a separate right-of-way permit issued by the City of San Diego in both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.9.1 Existing Conditions

4.9.1.1 Roadway Network

Existing major roads surrounding the project site include Palm Avenue and Dennery Road, as described below. These roadways are in the City of San Diego.

Palm Avenue from Interstate 805 (I-805) southbound (SB) ramps to I-805 northbound (NB) ramps is classified as 6-Lane Prime in the City of San Diego Otay Mesa-Nestor Community Plan, December 1996. Palm Avenue from I-805 NB Ramps to Dennery Road is classified as a 7-Lane Prime in the City of San Diego Otay Mesa Community Plan (OMCP) Update, March 2014. Palm Avenue from I-805 SB Ramps to I-805 NB Ramps is constructed as a four-lane undivided roadway with center double-double yellow striping. There are Class II bike lanes in each direction. On-street parking is prohibited on both sides of the roadway. From I-805 NB Ramps to Dennery Road, Palm Avenue is currently constructed as a seven-lane divided roadway (four westbound travel lanes and three eastbound travel lanes). There are Class II bike lanes in each direction and on-street parking is prohibited on both sides of the roadway. A posted speed limit was not observed on Palm Avenue between I-805 SB Ramps and Dennery Road; however, west of I-805 the posted speed limit is 35 miles per hour.

Dennery Road is classified as a 4-Lane Major between Palm Avenue and Regatta Lane and as a 4-Lane Collector between Regatta Lane and Red Fin Lane/Red Coral Lane in the OMCP Update, March 2014. Dennery Road between Palm Avenue and Red Fin Lane/Red Coral Lane is constructed

as a four-lane divided roadway with Class II bike lanes in each direction. On-street parking is prohibited on both sides of the roadway. The posted speed limit is 35 miles per hour.

Golden Sky Way is a private drive within the adjacent RiverEdge Terrace community that would provide an emergency-only evacuation route for residents. Golden Sky Way would connect to **Ocean Mist Place** (private drive) south to **Sand Star Way** (private drive), which provides a connection to Dennery Road. From Dennery Road, residents can access Palm Avenue, which provides a connection to I-805.

4.9.1.2 Pedestrian Conditions

The following describes existing pedestrian facilities focusing on any deficiencies such as missing sidewalk sections, curb ramps, and major obstructions within a half-mile walking from the project access along the study roadways.

Dennery Road from approximately 1,200 feet south of Palm Ave to approximately 250 feet east of Black Coral Way currently has either contiguous or non-contiguous sidewalks on both sides of the street and pedestrian curb ramps at intersections. There were no major sidewalk obstructions observed along this segment.

Palm Avenue from I-805 NB Ramps to Dennery Road currently has contiguous sidewalks on both sides of the street and pedestrian curb ramps at intersections. There were no major sidewalk obstructions observed along this segment.

Ocean View Hills Parkway from Dennery Road to approximately 500 feet east of Kentmere Terrace currently has either contiguous or non-contiguous sidewalks on both sides of the street and pedestrian curb ramps at intersections. There were no major sidewalk obstructions observed along this segment.

The pedestrian facilities along the study roadways did not have any observed missing sidewalk sections, curb ramps, or major obstructions. There is existing parkway and non-contiguous sidewalk along the project frontage on Dennery Road.

In addition to the roadway pedestrian connections, there are trails in the project vicinity that provide connections to the planned regional Otay Valley Regional Park (OVRP) trail network. A segment of the OVRP trail has been established northeast of the project site, along the northern edge of the adjacent RiverEdge Terrace development. Existing informal trails connect to that trail north of the project site and offer an informal connection across the river to the north in addition to east and west along Otay River. An informal trail connection also exists along the western edge of the project site connecting Otay River to areas south of the project site, although this connection is not identified as a planned segment in the OVRP concept plan.

4.9.1.3 Bicycle Conditions

The following describes existing bicycle facilities focusing on any deficiencies such as bike lane gaps or obstructions within a half-mile bicycling distance from the project access along the study roadways.

Dennery Road from approximately 1,200 feet south of Palm Avenue to approximately 250 feet east of Black Coral Way currently has Class II bike lanes on both sides of the roadway. There were no observed bike lane gaps nor major obstructions along this segment. The observed Class II bike lane is consistent with what is shown in the City of San Diego Bicycle Master Plan Update and the OMCP Update.

Palm Avenue from I-805 NB Ramps to Dennery Road currently has Class II bike lanes on both sides of the roadway. There were no observed bike lane gaps nor major obstructions along this segment. The observed Class II bike lane is consistent with what is shown in the City of San Diego Bicycle Master Plan Update and the OMCP Update.

Ocean View Hills Parkway from Dennery Road to approximately 500 feet east of Kentmere Terrace currently has Class II bike lanes on both sides of the roadway. There were no observed bike lane gaps nor major obstructions along this segment. The observed Class II bike lane is consistent with what is shown in the City of San Diego Bicycle Master Plan Update and the OMCP Update.

The Class II bicycle facilities within a half-mile bicycling distance along the study roadways are consistent with what is shown in the City of San Diego Bicycle Master Plan Update and the OMCP Update. As detailed above, existing and planned OVRP trails are located north of the project site within the Otay River valley. These trails are identified as multi-use trails in the OVRP concept plan which may offer recreational bicycle pathways and connections as the OVRP concept trails are formalized.

4.9.1.4 Transit Conditions

The project location is technically within a half-mile (as a crow flies) of Transit Priority Area (TPA) that is located within the City of Chula Vista. However, there is no formal access and no Americans with Disability Act compliant accessible path to the bus stops on Main Street due to undeveloped land and Otay River, which is located between the project site and access to Main Street; therefore, the project is not considered to have reasonable access to a TPA. However, an informal path to cross the river exists and the OVRP concept plan identifies this crossing as a conceptual trail corridor.

Metropolitan Transit System lists Bus Routes 933 and 934 within a half-mile walking distance from the project access. There are four bus stops within the half-mile walking distance of the project driveway; two are on Palm Avenue and two are on Dennery Road. The bus stops on Palm Avenue are located on the north and south sides of the street approximately 100 feet west of Dennery Road. The bus stop on the north side of the roadway includes a combined bench with open air shelter. The bus stop on the south side of the roadway includes two benches. The bus stops on Dennery Road are located on the east and west sides of the street, approximately 1,100 feet south of Palm Avenue.

The bus stop on the east side of the roadway has a bench. The bus stop on the west side of the roadway includes a combined bench with open air shelter.

4.9.2 Regulatory Framework

4.9.2.1 State

a. California Department of Transportation

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

b. Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, changing the way transportation impact analysis is conducted under the 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 the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts for CEQA, were finalized and made effective. CEQA Guidelines Section 15064.3, and the associated OPR Technical Advisory, provide that use of automobile 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 was required beginning on July 1, 2020.

4.9.2.2 Regional

a. San Diego Association of Governments San Diego Forward: The Regional Plan

The San Diego Association of Governments (SANDAG) serves as the forum for decision-making on regional issues such as growth, transportation, land use, economy, environment, and criminal justice. The SANDAG San Diego Forward: The Regional Plan (Regional Plan) is an update of the Regional Comprehensive Plan and the 2050 Regional Transportation Plan and Sustainable Communities Strategy, combined into one document. The Regional Plan includes an SCS, in compliance with SB 375. The SCS aims to create sustainable, mixed-use communities conducive to public transit, walking, and biking by focusing future growth in the previously developed, western portion of the region along the major existing transit and transportation corridors. The Regional Plan has a horizon year of 2050, and forecasts regional growth and the construction of transportation projects over this time period.

4.9.2.3 Local Regulations – City of Chula Vista

a. City of Chula Vista General Plan

One of the overall goals of the **Land Use and Transportation (LUT) Element** of the City of Chula Vista General Plan is the development of "a sustainable circulation/mobility system that provides transportation choices and is well-integrated with the City's land uses" (City of Chula Vista 2005). Specific objectives and policies addressing this goal, relevant to the project include the following:

Objective LUT 16: Integrate land use and transportation planning and related facilities.

> **Policy LUT 16.1**: Promote the development of well-planned communities that will tend to be self-supportive and, thus, reduce the length of vehicular trips, reduce dependency on the automobile, and encourage the use of other modes of travel.
>
> **Policy LUT 16.2**: Ensure that new development and community activity centers have adequate transportation and pedestrian facilities.

Objective LUT 17: Plan and coordinate development to be compatible and supportive of planned transit.

> **Policy LUT 17.2**: Direct higher intensity and mixed-use developments to areas within walking distance of transit, including San Diego Trolley stations along E, H, and Palomar streets, and new stations along future transit lines, including Bus Rapid Transit (BRT).
>
> **Policy LUT 17.4**: Require developers to consult and coordinate with San Diego Association of Governments (SANDAG) and the City to ensure that development is compatible with and supports the planned implementation of public transit.

Objective LUT 18: Reduce traffic demand through Transportation Demand Management (TDM) strategies, increased use of transit, bicycles, walking, and other trip reduction measures.

> **Policy LUT 18.1**: Support and encourage the use of public transit.
>
> **Policy LUT 18.3**: Provide and enhance all feasible alternatives to the automobile, such as bicycling and walking, and encourage public transit ridership on existing and future transit routes.

Objective LUT 21: Continue efforts to develop and maintain a safe and efficient transportation system with adequate roadway capacity to serve future residents, while preserving the unique character and integrity of recognized communities within the City.

Objective LUT 23: Promote the use of non-polluting and renewable alternatives for mobility through a system of bicycle and pedestrian paths and trails that are safe, attractive, and convenient forms of transportation.

Chapter 10 of the LUT Element of the General Plan focuses on the East Planning Area, providing a vision specific to this part of the City of Chula Vista. The transportation-related visions for the planning area are to create more integrated communities including implementation of an integrated transportation network, establishing pedestrian-friendly development standards, and creating incentive to reduce driving (City of Chula Vista 2005).

The **Growth Management (GM) Element** provides integrated components that create an overall Growth Management Program (GMP). Specifically, the GM Element provides a framework for directing new development, redevelopment, and community enhancement through a set of comprehensive goals, objectives, and policies (City of Chula Vista 2005). The GM Element includes the following objective relevant to the project:

Objective GM 1: Concurrent public facilities and services.

b. City of Chula Vista Transportation Study Guidelines

The City Council adopted the Transportation Study Guidelines (TSG) in June 2020 (updated January 2022) to comply with SB 743 requirements and provide guidance on preparing transportation impact studies for CEQA compliance. The TSG provides criteria to evaluate projects for consistency related to the City's transportation goals, policies, and plans. The TSG establishes procedures for analyzing and documenting VMT impacts. With respect to residential projects, if a project is required to complete a VMT analysis, the project's impacts to the transportation system would be significant if the project generated VMT exceeds 15 percent below regional average VMT.

4.9.2.4 Local Regulations – City of San Diego

a. City of San Diego General Plan

Theme 4 of the City of San Diego General Plan **Land Use Element** focuses on improved mobility.

The **Mobility Element** of the City of San Diego General Plan serves to further the attainment of a balanced, multimodal transportation network that gets us where we want to go and minimizes environmental and neighborhood impacts. The following policies would be applicable to the project.

- **Policy ME-A.2**: Design and implement safe pedestrian routes.
- **Policy ME-A.4**: Make sidewalks and street crossings accessible to pedestrians of all abilities.
- **Policy ME-A.6**: Work toward achieving a complete, functional and interconnected pedestrian network.
- **Policy ME-E.6**: Require new development to have site designs and on-site amenities that support alternative modes of transportation. Emphasize pedestrian and bicycle-friendly design, accessibility to transit, and provision of amenities that are supportive and conducive to implementing Transportation Demand Management strategies.

- **Policy ME-F.3**: Maintain and improve the quality, operation, and integrity of the bikeway network and roadways regularly used by bicyclists.

The **Urban Design Element** includes the following policies (relevant portions) focused on mobility issues, including trail and neighborhood connectivity:

- **Policy UD-A.2**: Use of open space and landscape to define and link communities.
    - Policy UD-A.2(b): Link villages, public attractions, canyons, open space, and other destinations together by connecting them with trail systems, bike ways, landscaped boulevards, formalized parks, and/or natural open space, as appropriate.
    - Policy UD-A.2(d): Recognize that open spaces sometimes prevent the continuation of transportation corridors and inhibit mobility between communities. Where conflicts exist between mobility and open space goals, site-specific solutions may be addressed in community plans.
- **Policy UD-B.5**: Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity.
    - Policy UD-B.5(d): Emphasize the provision of high-quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.
    - Policy UD-B.5(h): Develop a hierarchy of walkways that delineate village pathways and link to regional trails.

The **Recreation Element** serves to increase and enhance public recreational opportunities including pedestrian and biking trails, as follows.

- **Policy RE-C.6**: Provide safe and convenient linkages to and within park and recreation facilities and open space areas.
    a. Provide pedestrian and bicycle paths between recreation facilities and residential development.
    b. Designate pedestrian and bicycle corridors, and where appropriate, equestrian corridors, that link residential neighborhoods with park and recreation facilities, trails, and open space.
    c. Improve public access through development of, and improvements to, multi-use trails within urban canyons and other open space areas.
- **Policy RE-D.6**: Establish a policy to address underutilized or unnecessary city rights-of-way.
    a. Development and maintain an inventory of underutilized or unnecessary rights-of1way, including underlying ownership.

b. Develop criteria to determine potential value of underutilized or unnecessary rights-of-way for bike, pedestrian, and equestrian linkages for trail access to open space canyons, and as overlooks into open space or beaches.

b. Otay Mesa Community Plan

The OMCP **Land Use Element** provides directions for the establishment and implementation of specific plans within the community planning area. Overall, specific plans must create sustainable and efficient land use patterns and must meet all the criteria within Policies 2.1-1 and 2.1-2. Policy 2.1-1 applies to projects within the Southwest and Central Village area, and therefore would not be relevant to this project upon annexation. The relevant portions of Policy 2.1-2 as they relate to transportation/mobility include the following:

- **Policy 2.1-2**: Achieve sustainable and efficient land use patterns with comprehensive neighborhood and community village development through Specific Plans that:
    - Policy 2.1-2(e): Illustrate a separate system of pedestrian and bicycle facilities and pathways linking the activity centers with residential areas, public facilities, and open space systems.
    - Policy 2.1-2(g): Identify specific locations for schools, parks, pedestrian pathways and trails.
    - Policy 2.1-2(g)(2): Include pathways and trails that connect public facilities with each other and to residential areas.

The OMCP **Mobility Element** guides how to achieve mobility and environmental goals through a balanced, multi-modal transportation network. The OMCP refines the Mobility Element of the General Plan through community-specific pedestrian, bicycle, transit, streets, goods movement, truck traffic, and regional collaboration recommendations. Mobility Element policies relevant to the project include the following:

- **Policy 3.1-1**: Provide a sidewalk and trail system with connections to villages, activity centers, and open spaces.
    - Policy 3.1-1(a): Prioritize connections that link activity centers and create safe routes to schools, transit, and village areas.
    - Policy 3.1-1(c): Create the pedestrian realm in accordance with the standards and guidelines of the Street Design Manual.
    - Policy 3.1-1(d): Improve the quality of the walking experience through streetscape, shading, and separation from travel lanes.
- **Policy 3.3-1**: Provide an interconnected network of public streets and internal project circulation systems as an organizing framework for development.

- **Policy 3.3-2**: Avoid street design configurations that rely on free-flow turn lanes that conflict with bicycle and pedestrian movements.

- **Policy 3.4-1**: Refine and implement the BMP in the Otay Mesa Community Plan area.

    a. Develop bicycle facilities that implement internal connectivity to activity areas within the community and links to regional bicycle network.

c. City of San Diego Bicycle Master Plan

The 2013 City of San Diego Bicycle Master Plan, which updates the City's 2002 plan, presents a bicycle network, projects, policies, and programs for improving bicycling through 2030 and beyond, consistent with the City's General Plan mobility, sustainability, health, economic, and social goals. The goals of the Bicycle Master Plan are to create: a city where bicycling is a viable travel choice, particularly for trips of less than five miles; a safe and comprehensive local and regional bikeway network; and environmental quality, public health, recreation, and mobility benefits through increased bicycling. These goals are supported by twelve key policies to help bicycling become a more viable transportation mode for trips of less than five miles, to connect to transit, and for recreation. The Bicycle Master Plan addresses existing bicycling conditions, the relationship of the Plan to other plans and policies, a bicycle needs analysis, bicycle facility recommendations, bicycle program recommendations, and implementation and funding issues. The City of San Diego Bicycle Master Plan Figure 6-2 displays the proposed bicycle network. As shown therein, the Master Plan identifies Class II bike lanes along Dennery Road from Del Sol Boulevard and across Palm Avenue.

d. City of San Diego Pedestrian Master Plan

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

The Otay Mesa community ranks low in the pedestrian priority model which was developed to determine high-priority areas for pedestrian improvements. Nonetheless, the project includes enhanced pedestrian amenities to accommodate internal sidewalks that would connect to the existing non-contiguous sidewalk along Dennery Road and would ensure accessible pedestrian access to bus stops located along Palm Avenue and Dennery Road.

e. City of San Diego Mobility Choices Program

To implement SB 743, the City of San Diego adopted the Mobility Choices Program. The Mobility Choices Program ensures that new development mitigates transportation VMT impacts to the extent feasible, while incentivizing development within the City's TPAs and urban areas. The Mobility Choices Program included amendments to the San Diego Municipal Code (SDMC) to adopt the Mobility Choices Regulations (Chapter 14, Article 3, Division 11 of the SDMC). Additionally, the

Mobility Choices Program included adoption of a new CEQA significance threshold for transportation to implement SB 743. Notably, the City of San Diego TSM identifies VMT thresholds, consistent with CEQA Guidelines Section 15064.3 (see Section 4.9.2.4.f, below).

The Mobility Choices program was evaluated as part of the City's Complete Communities: Housing Solutions and Mobility Choices Final Program EIR (PEIR) (City of San Diego 2020, incorporated by reference herein). The Complete Communities: Housing Solutions and Mobility Choices PEIR found that implementation of the Mobility Choices Program would support reductions in per capita VMT by either requiring the construction of, or funding for, transportation infrastructure and amenities within Mobility Zones 1 and 2 (e.g., Downtown or in a TPA) that would encourage non-vehicular travel. The Complete Communities: Housing Solutions and Mobility Choices PEIR found that implementation of the Mobility Choices program and the new significance threshold for transportation impacts, would result in VMT impacts for any new development that occurs in an area that generates resident VMT per capita or employee VMT per employee that is greater than 85 percent of the base year regional average, absent any mitigation. While the Mobility Choices Regulations were intended to serve as mitigation to ensure an overall reduction in citywide VMT, the PEIR concluded that VMT impacts would remain significant and unavoidable because at a program level of analysis it could not be determined with certainty whether the improvements associated with program implementation would fully mitigate VMT impacts at the project level.

The Mobility Choices regulations include the identification of Mobility Zones, VMT Reduction Measures as outlined in SDMC Section 143.1103(b) and Land Development Manual Appendix T, and an Active Transportation In-Lieu Fee used to mitigate VMT impacts from new development in VMT inefficient areas by collecting funds for implementation of active transportation improvements in VMT efficient areas.

f. City of San Diego Transportation Study Manual

The City of San Diego Transportation Study Manual, updated September 2022 states that all projects must complete an LMA unless they meet the following trip generation screening criteria:

- Land uses consistent with the Community Plan/Zoning Designation: Generate less than 1,000 daily unadjusted driveway vehicle trips,
- Land uses inconsistent with the Community Plan/Zoning Designation: Generate less than 500 daily unadjusted driveway vehicle trips, or
- Projects in the Downtown Community Planning Area that generate less than 2,400 daily unadjusted trips.

As detailed below, the project would qualify for the requirement to prepare an LMA. The LMA is intended to identify the transportation effects of proposed development projects and to determine the need for any improvements to the adjacent and nearby road system to achieve acceptable mobility for vehicles, bicyclists, pedestrians, and transit. While the LMA is required by the City of San Diego, the analysis is not related to the determination of significance related to transportation impacts under CEQA. However, should the LMA find that road improvements would be necessary to

maintain acceptable mobility standards, such improvements would be included as project design features.

The TSM provides guidance for the City of San Diego's CEQA significance thresholds, screening criteria, and methodology for conducting the VMT analysis, while the LMA is required to identify any off-site infrastructure improvements in the project vicinity that may be triggered with the development of the project. The LMA also analyzes site access and circulation and evaluate the local multi-modal network available to serve the project.

4.9.3 Issue 1: Circulation System

4.9.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to conflicts with plans, ordinances, or policies in the City of Chula Vista:

- Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

b. Impact Analysis

Regarding active transportation, the project is consistent with planned trail connections associated with the Otay Valley Regional Park as detailed in Chapter 4.1, Land Use, Section 4.1.4.1.b. Trail connections and improvements would ensure connectivity through the project site to the regional trail network.

SANDAG San Diego Forward: The Regional Plan

The Regional Plan includes an Active Transportation Plan and identifies existing and planned bicycle facilities in the project area. The project would provide a publicly accessible connection along its western boundary, offering a connection to the south to the existing bicycle network that connects to a freeway shoulder bike facility along I-805 between Palm Avenue in the City of San Diego and Main Street in the City of Chula Vista.

The project would be consistent with SANDAG's Regional Plan, which aims to create sustainable, mixed-use communities conducive to public transit, walking, and biking. The project is in proximity to existing bus stops 933 and 934, approximately 0.4-mile walking distance from the project site, and the project includes on- and off-site improvements to ensure adequate circulation and accessibility for pedestrians and bicyclists. Therefore, the project would be consistent with SANDAG's mobility planning policies.

City of Chula Vista General Plan

The City of Chula Vista's LUT Element includes objectives, goals, and policies focused on improved mobility. Since the project trips would be distributed onto City of San Diego streets, the project would not affect City of Chula Vista streets and would therefore not conflict with plans, policies, or ordinances in the City of Chula Vista related to transportation. The City of San Diego TSM were used to evaluate transportation impacts of proposed development since project traffic would flow onto City of San Diego roadways. Regarding bicycle and pedestrian connectivity, the project would provide trail improvements along the Otay River, supporting completion of a regional trail network that provides access to the City of Chula Vista. A summary of the project's consistency with relevant mobility policies is included in Table 1 of Appendix B.

City of Chula Vista Transportation Study Guide

The Chula Vista TSG was applied to the project for VMT analysis, detailed in Section 4.9.2.3.b. Given that the project's traffic (i.e., non-CEQA) impacts are primarily on City of San Diego streets, the City of Chula Vista elected to use the LMA requirements specified in the San Diego TSM, which was reviewed and approved by City of San Diego staff.

City of San Diego Plans and Policies

The No Annexation Scenario and Annexation Scenario 2b require off-site improvements within the City of San Diego to implement the primary access and emergency only access roads. An evaluation of consistency with applicable City of San Diego policies is provided in Section 4.9.3.2.b.

c. Significance of Impacts

The project would be consistent with relevant mobility plans and policies. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation measures are required.

4.9.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue question related to consistency with circulation plans and policies:

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

The City of San Diego's CEQA Significance Determination Thresholds (2022) states the TSM should be used to determine the significance of a project, plan, or policy's transportation impacts.

b. Impact Analysis

Project consistency with the SANDAG Regional Plan and trail planning policies of the Otay Valley Regional Park are addressed in Section 4.9.3.1.b and Section 4.1.4.1.b, respectively.

As described in Section 4.1, Land Use, 4.1.4.2.b Plan Consistency under the Annexation Scenario, the project has demonstrated consistency with the City of San Diego General Plan, and OMCP related transportation goals and policies (see Table 2 of Appendix B). The project's internal roadways would connect to the City of San Diego's Dennery Road. The project would replace the existing driveway with full height curb, gutter, and non-contiguous sidewalk and construct a new 25-foot-wide private driveway would be constructed approximately 40 feet southwest of the existing driveway. Both pedestrian and trail improvements are proposed as detailed in Chapter 3.0, Project Description, Sections 3.4.4.2 and 3.4.5. Proposed project on and off-site roadway and circulation improvements are discussed in Section 3.0, Project Description, Section 3.4.3 and included as project design features (see Section 3.6.3.e). The inclusion of the off-site road intersection improvements as part of the project design would ensure adequate functioning of the circulation systems.

The following off-site and frontage improvements are included as part of the project design:

- At the project entrance along Dennery Road and the project driveway, the Owner/Permittee would replace the existing driveway with height full curb and gutter and non-contiguous sidewalk, and a new 25-foot-wide driveway would be constructed approximately 40 feet southwest of the existing driveway.

- The Owner/Permittee would extend the existing eastbound dual left turn bay storage at the intersection of Palm Avenue and Dennery Road by an additional 85 feet of storage per lane to provide approximately a total of 365 feet of left turn bay storage per lane. This improvement would remove the existing transition and construct a new transition 85 feet to the west. Removal of existing landscaping, including trees and plants would be required. Stamped concrete would be provided to match the raised median nose to the east (see Figure 3-4).

- The Owner/Permittee would extend the southbound right turn bay at the intersection of Palm Avenue and Dennery Road by an additional 50 feet to provide a total of approximately 145 feet of right turn bay storage. This improvement would construct a new transition, pavement, curb, and gutter and remove and replace existing curb, gutter, landscaping including trees and plants (see Figure 3-4).

- The Owner/Permittee would extend the eastbound left turn lane by an additional 50 feet to provide a total of approximately 240 feet of left turn lane storage at the intersection of Dennery Road and Red Fin Lane. This improvement would remove the existing transition and construction a new transition, pavement, curb, and gutter, and remove and replace existing curb, gutter, and landscaping including trees and plants (see Figure 3-5).

- As part of the City of San Diego's Systemic Safety The Data-Driven Path to Vision Zero (City of San Diego 2019), to increase the visibility of traffic signals and reduce vehicles from proceeding through red lights, upgraded signal heads with backplates with retroreflective

borders would be installed by the Owner/Permittee at all intersection approaches at the intersection of Palm Avenue and Dennery Road.

- As part of the City of San Diego's Systemic Safety The Data-Driven Path to Vision Zero (City of San Diego 2019), at the intersection of Palm Avenue and Dennery Road, proposed improvements include the installation of audible countdown pedestrian heads for each pedestrian phase and upgrading the traffic controller to a 2070 controller including software update and communications equipment per current City of San Diego standards by the Owner/Permittee.

- Additional improvements include upgrading the existing bicycle loop detectors along Dennery Road at Red Fin Lane and installing Type E Modified front loops on all approaches by the Owner/Permittee.

These proposed improvements are consistent with the City of San Diego's TSM and City of San Diego policies promoting non-vehicular travel and enhancements to the pedestrian and bicycle network. Specifically, the project would be consistent with the City of San Diego's General Plan (see policies ME-A.4, ME-A.6, ME-E.6, UD-A.2, and RE-C.6) and OMCP mobility policies (see 3.1-1, 3.3-1, and 3.4-1) through the inclusion of new street connections, sidewalks, paseos, trail connections, and bicycle facilities that would serve residents and visitors. These mobility improvements would tie into the existing local and regional mobility network. Specifically, as detailed in Chapter 3.0, Project Description, Section 3.4.5, the project includes paseos enhanced with pedestrian and bicycle pathways that would be linked to all internal neighborhoods (see Figure 3-7). On-site private drives would have sidewalks and landscaping that would connect to proposed park areas as well as trail access to the Otay Valley Regional Park. Internal mobility and pedestrian access to Dennery Road would ensure accessible pedestrian access to bus stops located along Palm Avenue and Dennery Road.

No project features have been identified that would be inconsistent with the City of San Diego General Plan, OMCP, or City of San Diego Pedestrian and Bicycle Master Plan.

c. Significance of Impacts

With the inclusion of both on- and off-site road improvements in addition to proposed pedestrian, bicycle, and trail connections supporting alternative modes of transportation, the project would not conflict with any plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.9.4 Issue 2: Vehicle Miles Traveled

4.9.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to VMT in the City of Chula Vista:

- Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?

The City of Chula Vista TSG provides screening levels and thresholds of significance related to VMT analysis. Projects below a certain screening level may be presumed to have a less than significant VMT impact. Projects that do not meet screening criteria must include a detailed evaluation of the VMT produced by the project. The significant thresholds and specific VMT metrics used to measure VMT are determined by land use as detailed in Section 3.3 of the City of Chula Vista TSG. Specifically, with respect to residential projects, the project's impacts to the transportation system would be significant if the project's VMT exceeds 15 percent below regional average VMT per capita.

b. Impact Analysis

The analysis of VMT is based on the City of Chula Vista TSG because the City of Chula Vista is the lead agency for purposes of the CEQA document and the project sits within the boundaries of the City of Chula Vista. The purpose of the VMT Analysis (see Appendix M-1) is to determine if there is a significant transportation impact related to VMT per capita consistent with City of Chula Vista thresholds and CEQA guidelines. The project VMT was obtained from the City of Chula Vista VMT Screening Tool, which is based on the current edition of the SANDAG Series 14 ABM 2+ base year 2016 regional model. A residential project's impacts to the transportation system would be significant if the VMT would exceed 15 percent below regional average VMT per capita. The project is forecasted to have a significant VMT transportation impact because the project location and proposed land use within Census Tract 100.14 are forecasted to generate VMT per capita at 92 percent of the regional mean, which is above 85 percent of the regional mean of 18.9 VMT per capita. VMT per capita generation for the project is estimated at 17.42, which does not meet the threshold of 15 percent below the regional average VMT per capita.

For projects with a significant VMT impact, the City of Chula Vista TSG recommends VMT reductions through either reducing the number of automobile trips or by reducing the distance that people drive. This may be achieved through implementation of a TDM program. As detailed in Appendix M-1, potential TDM measures from the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* were reviewed for project applicability. CAPCOA measures to be incorporated into the project design are listed in Table 4.9-1. These measures are included with the greenhouse gas related project design features (PDFs) included in Chapter 3.0 Project Description, Section 3.6.3.d. Consistent with CAPCOA guidance, each of these measures results in incremental

reductions in VMT per capita as detailed in Table 4.9-1. Calculations for the noted VMT per capita reductions are included in Appendix B of the VMT Analysis (see Appendix M-1).

Table 4.9-1
VMT Reduction Strategies/Project Design Features

CAPCOA 2021 VMT Reduction Strategy	VMT Reduction Range %	Application	Project VMT % Reduction
T-1. Increase Residential Density (PDF-GHG-1)	0-30 %	A project with increased density results in shorter and fewer trips by single occupancy vehicles.	-0.5%
T-4. Integrate Affordable and Below Rate Housing (PDF-GHG-2)	0-28.6%	A project with affordable housing provides greater opportunity for lower income families to live closer to job centers.	-1.4%

SOURCE: VMT Analysis (see Appendix M-1, Table 1)
NOTE: CAPCOA Measure T-1 is applicable to this project in accordance with the City of Chula Vista TSG (see Appendix M-1).

VMT reduction measures are not directly additive and require application of a multiplicative formula to account for measure redundancy. The multiplicative formula is as follows:

Overall VMT % Reduction = 1-(1-A)*(1-B)

In the formula, A and B are the individual reduction measures. Using this formula, the project's CAPCOA VMT percent reduction is calculated as follows:

1-(1-0.5%)*(1-1.4%) = -1.9%.

Therefore, based on the project's final VMT as 92 percent of the regional mean, the 1.9 percent reduction would reduce the project's VMT to 90.1 percent. Because 91 percent is above the 85th percentile mean VMT per capita, the project's VMT would exceed the City of Chula Vista's significance threshold.

In addition to the CAPCOA 2021 VMT Reduction Strategies, the project would also include Project Design Features (PDFs) associated with greenhouse gas (GHG) emission reductions that could also reduce the project's VMT as detailed in Chapter 3.0 Project Description, Sections 3.6.3.d. Specifically, pedestrian network improvements would improve connectivity between the internal neighborhood to reduce reliance on automobiles (PDF-GHG-4). Additionally, the project would provide pedestrian amenities including on-site linked sidewalks and landscaped paseos providing connections to pocket parks, trails, and project frontage improvements on Dennery Road which would assist in the pedestrian experience of walking to nearby bus stops. Bicycle network improvements include construction of internal buffered Class II bike lanes along Private Street 'A' and sharrows along the

private streets leading east and west from the primary roadway, which would also provide an alternative to automobile use. Furthermore, the project would be required to implement GHG related mitigation measures as detailed in Chapter 4.5, Greenhouse Gas Emissions, Sections 4.5.3.2.d and 4.5.4.1.d. These mitigation measures include **GHG-CV-1/GHG-SD-1**, **GHG-CV-2/ GHG-SD-2**, and **GHG-CV-3/GHG-SD-3**, which would require subsidized transit passes, implementation of a commuter trip reduction program, and providing bicycles to residents, respectively. While the transportation PDFs and GHG mitigation measures would serve to further reduce the project VMT per capita, it would not reduce project VMT to below the significance threshold.

c. Significance of Impacts

Even with the application of project design features for transportation and GHG emissions, in addition to GHG mitigation measures, project VMT impacts would not be reduced below the 85th percentile mean VMT per capita. Impacts would be significant.

d. Mitigation Measures

Mitigation measures for GHG emissions detailed in Chapter 4.5 (Sections 4.5.3.2.d and 4.5.4.1.d) would support VMT reductions (see **GHG-CV-1/GHG-SD-1**), implementing a commute trip reduction program (**GHG-CV-2/GHG-SD-2**), and providing bicycles to residents (**GHG-CV-3/GHG-SD-3**).

Other feasible mitigation measures were explored including application of the City of San Diego's Mobility Choices Ordinance (see Section 4.9.2.4.e). Considering the project trips would be distributed to City of San Diego roadways, payment of the City of San Diego Active Transportation In Lieu Fee would be a feasible method of further reducing impacts. The project would implement **TRA-CV-1** as follows:

TRA-CV-1: Prior to issuance of the first building permit, the Owner/Permittee shall pay the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101 as mitigation to the greatest extent feasible. The Owner/Permittee shall provide evidence to the City of Chula Vista that the fee has been paid.

e. Significance After Mitigation

Even with implementation of project design features, GHG mitigation measures and **TRA-CV-1**, impacts related to VMT would be significant and unavoidable. Implementation of **TRA-CV-1** would be used to fund VMT reducing infrastructure projects throughout the City of San Diego. Although impacts would be significant after implementation of mitigation, this conclusion would be consistent with the Findings and Statement of Overriding Considerations that were adopted with the Complete Communities: Housing Solutions and Mobility Choices PEIR, which evaluated implementation of the City of San Diego's fee program for VMT impacts. Although the project site is not currently located within the City of San Diego, participation in the City of San Diego fee program would ensure all feasible mitigation is applied supporting implementation of appropriate City of San Diego improvements that are intended to facilitate VMT reductions.

4.9.4.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question related to VMT:

- Would the project result in VMT exceeding thresholds identified in the City of San Diego Transportation Study Manual?

The City of San Diego's CEQA Significance Determination Thresholds (2022) states the TSM should be used to determine the significance of a project, plan, or policy's transportation impacts. As detailed in the TSM (City of San Diego 2022), the threshold with respect to residential projects is that project impacts to the transportation system would be significant if project VMT per capita exceeds 15 percent below the regional mean VMT per capita.

b. Impact Analysis

The City of San Diego TSM recommends VMT reductions through reducing the number of automobile trips or by reducing the distance that people drive. This may be achieved through implementation of a TDM program. TDM measures from the CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA 2021) were reviewed for project applicability. The following VMT reduction strategy was applied:

- T-4: Integrate Affordable and Below Market Rate Housing.

Twenty-two (22) affordable units are proposed (11 low-income and 11 moderate-income). Therefore, this measure is applicable for the 11 low-income units. Application of this strategy resulted in a reduction of approximately 1.4 percent of the project's total VMT per capita, or 90.6 percent of the regional mean VMT per capita, which is above the City of San Diego's threshold of 85 percent of the regional average VMT per capita.

Similar to the discussion provided in Section 4.9.4.1.b, even with the application of project design features and GHG related mitigation measures supporting VMT reductions, project VMT per capita would exceed the City of San Diego significance threshold.

While not currently located in the City of San Diego, the project site is surrounded by City of San Diego land located in Mobility Zone 4. Therefore, upon annexation, the project site would be considered part of Mobility Zone 4. In Annexation Scenario 2a, grading and building permits would be issued in the City of San Diego and the requirements of the Mobility Choices Ordinance, including payment of the City of San Diego In Lieu Fee, would be required through implementation of SDMC Section 143.1101, et seq., which applies prior to issuance of a building permit. The Active Transportation In Lieu Fee would be used to fund VMT reducing infrastructure projects citywide.

c. Significance of Impacts

Even with the application of CAPCOA reduction measures, and GHG related PDFs, impacts would be significant.

d. Mitigation Measures

The following mitigation measure would be implemented by the project to the extent feasible:

TRA-SD-1: Prior to issuance of the first building permit, the Owner/Permittee shall pay the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101, satisfactory to the City of San Diego Engineer. The Owner/Permittee shall provide evidence to the City of San Diego that the fee has been paid.

e. Significance of Impacts after Mitigation

Notwithstanding implementation of mitigation measure **TRA-SD-1** under the Annexation Scenario 2a, VMT Impacts would remain significant and unavoidable. This conclusion would be consistent with the Findings and Statement of Overriding Considerations that were adopted with the Complete Communities: Housing Solutions and Mobility Choices PEIR, which evaluated implementation of the City of San Diego's fee program for VMT.

4.9.5 Issue 3: Hazards due to a Design Feature

4.9.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to hazards due to a design feature in Chula Vista:

- Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

b. Impact Analysis

The proposed project's circulation system is designed to interconnect with the existing adjacent public street system. The project's internal roadway network would consist of internal private drives, sidewalks, and trail connections. The internal pedestrian pathway and sidewalks would be compliant with the Americans with Disabilities Act. The project does not include any project elements that could potentially create a traffic hazard for motor vehicles, bicycles, or pedestrians due to a proposed, non-standard design feature.

The access point to the project site would not create a hazard for vehicles or people entering or exiting the site as access would be right in and right out only, retaining the existing median and

transportation flow along Dennery Road. Additionally, as a residential project that would not change the existing roadway network, the project would not result in a hazardous roadway design or unsafe roadway configuration; place incompatible uses on existing roadways; or create or place curves, slopes, or walls that impede adequate sight distance on a roadway.

As part of the City of San Diego's Systemic Safety The Data-Driven Path to Vision Zero (San Diego, 2019), to increase the visibility of traffic signals and reduce vehicles from proceeding through red lights, upgraded signal heads with backplates with retroreflective borders would be installed by the project at all intersection approaches to reduce hazards.

Therefore, the project would not significantly increase hazards due to design features or incompatible uses.

c. Significance of Impacts

The project does not include any design elements that would increase road hazards. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.9.5.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following question related to hazards due to a design feature:

- 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)?

The City of San Diego's CEQA Significance Determination Thresholds (2022) states the TSM should be used to determine the significance of a project, plan, or policy's transportation impacts.

b. Impact Analysis

The analysis of hazards related to design features would be the same as the analysis in Section 4.9.5.1.b. In addition, the proposed transportation facility improvements would be completed consistent with the City of San Diego Street Design Manual (2017), which requires roadways be designed to be safe for all users. As detailed therein, the project would not significantly increase hazards due to design features or incompatible uses.

c. Significance of Impacts

The project does not include any design elements that would increase road hazards. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.9.6 Issue 4: Emergency Access

4.9.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to emergency access in Chula Vista:

- Would the project result in inadequate emergency access?

b. Impact Analysis

Access to and from the project site would be provided via Dennery Road, located southeast of the project site. Internal circulation would consist of a series of private streets. Private Street A would be accessed from Dennery Road with right-in/right-out movements only. Secondary emergency only access would be provided via a 20-foot-wide emergency access road located off-site. The roadway would be constructed within an existing manufactured slope in the northeastern portion of the project area and would have a 15 percent maximum grade (see Figure 3-3). The emergency access road would enable emergency-only travel to the east through the adjacent residential community in the City of San Diego. The emergency access road would be a concrete roadway and would have a swing gate with a knox key switch at each end to prohibit public entry but allow access for emergency personnel. All proposed roads have been designed or planned to meet both City of Chula Vista and City of San Diego standards. Additionally, the project has been reviewed by the San Diego Fire-Rescue and the San Diego Police Department (the primary emergency responders in either scenario) as part of the City of San Diego review process for PTS#647766 and PRJ#1076302, to ensure compliance with applicable safety standards and emergency access and circulation needs.

The project has prepared a Fire Protection Plan (Appendix I) and Wildfire Evacuation Plan (Appendix J) prepared by Dudek, which address fire safety and all aspects of evacuation planning, including emergency access. As detailed in the Fire Protection Plan, and summarized in Section 4.6 of this EIR, the project provides access roads meeting code requirements for widths, dead end lengths, and secondary access. There would be acceptable access throughout the site and evacuations would not be expected to interfere with fire response. Additionally, the Evacuation Plan evaluates the adequacy of emergency access in the event of evacuation and concludes that there would be adequate facilities and capacity to accommodate evacuation (see Section 4.6.5.1.b).

c. Significance of Impacts

The project includes emergency access that would meet all City of Chula Vista and City of San Diego road standards and would be consistent with the requirements of the Fire Protection and

Evacuation Plans (see Appendices I and J, respectively). Therefore, the project would not result in inadequate emergency access. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.9.6.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue question related to emergency access:

- Would the project result in inadequate emergency access?

The City of San Diego's CEQA Significance Determination Thresholds (2022) states the TSM should be used to determine the significance of a project, plan, or policy's transportation impacts.

b. Impact Analysis

The analysis of emergency access would be the same under both Annexation and the No Annexation Scenarios. As described above, all proposed emergency access roadways have been designed or planned to meet the City of San Diego standards and adequate emergency access would be provided. See Section 4.9.6.1. In addition, emergency access is addressed further in Sections 4.6.5.1.b as well as Appendix J. Refer to Section 4.6.5.1.b for further details.

c. Significance of Impacts

The project includes emergency access that would meet all City of San Diego road standards and would be consistent with the requirements of the projects' Fire Protection and Evacuation Plans (see Appendices I and J, respectively). Therefore, the project would not result in inadequate emergency access. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.10 Tribal Cultural Resources

This section analyzes the potential for the project to result in impacts to tribal cultural resources. The analysis for tribal cultural resources is based in part on the California Historic Resources Information System digital database search and consultation with California Native American tribes traditionally and culturally affiliated with the Nakano Project (project) area who requested consultation pursuant to Public Resources Code Section 21080.3.1. The impact analysis also relies, in part, on the content and conclusions of the Historical Resources Inventory and Evaluation Report prepared by Dudek (see Appendix K-1) and the Addendum to Historical Resources Inventory and Evaluation Report prepared by RECON Environmental, Inc. (see Appendix K-2). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.10.1 Existing Conditions

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources. Native Americans have occupied the project site and vicinity for thousands of years. Per State Assembly Bill (AB) joint Resolution No. 60 in 2001, the Kumeyaay Nation has occupied the southern California and Baja California region, including the project area. Their ancestors' occupation is detailed through the prehistoric cultural periods detailed in the cultural setting in Section 4.7.1.1. The records search results documented the types of prehistoric resources in the project vicinity and the pedestrian survey recorded three prehistoric resources within the project area. As noted in Section 4.7.1.1, the results of the Native American Heritage Commission's search of their sacred lands files were negative.

In accordance with AB 52 and Senate Bill 18, the City of Chula Vista invited local tribes to consult government-to-government on the proposed project. Tribal consultation letters were sent by certified mail on May 6, 2022, to 20 persons representing 13 tribes based on the list provided by the Native American Heritage Commission (Appendix K-3). Four tribes responded. The Viejas Band of Kumeyaay Indians, the Campo Band of Kumeyaay Indians, the Jamul Indian Village, and the San Pasqual Band of Diegueño Mission Indians requested consultation. Due to the area history and identification of three prehistoric resources within the project area concern regarding the potential for tribal cultural resources was expressed. Refer to Section 4.7.1.1.d for a summary of the resources identified on-site. Consultation with the Viejas Band concluded on May 17, 2022, through email coordination. Consultation with the Campo Band concluded on June 9, 2022, via a virtual meeting. Consultation with the Jamul Indian Village concluded on August 31, 2022, via a virtual meeting. Consultation with the San Pasqual band concluded on September 8, 2022, via a virtual meeting.

4.10.2 Regulatory Framework

Federal, state, City of Chula Vista, and City of San Diego regulations that apply to the analysis of tribal cultural resources are described in Chapter 4.7, Historical Resources. Public Resources Code Section 21074 specifically defines and addresses tribal cultural resources in the context of the California Environmental Quality Act (CEQA), detailed below.

4.10.2.1 Public Resources Code Section 21074

A significant impact on a tribal cultural resource is considered a significant environmental impact, requiring mitigation measures. Public Resources Code Section 21074 defines tribal cultural resources as follows:

a. "Tribal cultural resources" are either of the following:
    1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
        a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
        b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
    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 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.

b. A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

c. A historical resource described in Section 21084.1, a unique archaeological 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 in subdivision (a).

4.10.3 Issue 1: Tribal Cultural Resources

4.10.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related tribal cultural resources:

- Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

  a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

  b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

b. Impact Analysis

The results of consultation in accordance with AB 52 and SB18 did not identify any tribal cultural resources within the project site; however, concerns were expressed by the four consulting tribes that there is a potential for buried tribal cultural resources. All four tribes contacted during consultation requested cultural monitoring during ground disturbance activities. The Campo Band requested that a Campo tribal monitor be present during ground disturbance and provide input on their preferred treatment of artifacts that may be uncovered during grading. The Jamul Indian Village also requested that any recovered artifacts be placed at the Desert Museum and to be included on the mailing list of the Draft Environmental Impact Report public review noticing. The San Pasqual Band requested that a representative from the tribe serve as the monitor during construction.

c. Significance of Impacts

The area is considered sensitive for potential tribal cultural resources (buried cultural resources and/or subsurface deposits). Therefore, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Impacts would be considered significant.

d. Mitigation Measures

Implementation of mitigation measure **HIST-CV-1** within the project site and remedial grading area within the City of Chula Vista as detailed in Section 4.7.3.1.d, requires Native American monitoring during ground disturbance activities consistent with the results of tribal consultation.

Within the off-site improvement areas within the City of San Diego including the primary access road and trenching within Dennery Road, implementation **HIST-SD-1**, detailed in Section 4.7.3.2.d would be required.

e. Significance of Impacts after Mitigation

The project applicant would implement mitigation measure **HIST-CV-1** within the project site and off-site remedial grading areas within Chula Vista. **HIST-SD-1** would be implemented within the off-site improvement areas within the City of San Diego. These measures would require Native American monitoring during ground disturbance. Implementation of the mitigation measures outlined in Section 4.7.3.1.d and 4.7.3.2.d would ensure appropriate treatment in the event of discovery of tribal cultural resources, reducing potential impacts related to tribal cultural resources to less than significant.

4.10.3.2 Annexation Scenario 2a

a. Threshold of Significance

Based on the City of San Diego's use of CEQA Guidelines Appendix G, impacts related to tribal cultural resources would be significant if a project would 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 California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

    b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

b. Impact Analysis

The City of Chula Vista, as lead agency under CEQA, conducted tribal consultation as detailed in Section 4.10.1 and 4.10.3.1.b. Under the Annexation Scenario 2b, the City of San Diego would rely on this environmental Impact Report and its mitigation measures; therefore, no further tribal

consultation would be conducted by the City of San Diego. The results of the City of Chula Vista consultation with Native American tribes in accordance with AB 52 and Senate Bill 18 did not identify any tribal cultural resources within the project site; however, concerns were expressed by the four consulting tribes that there is a potential for buried tribal cultural resources.

c. Significance of Impacts

The area is considered sensitive for potential tribal cultural resources (buried cultural resources and/or subsurface deposits). Therefore, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation. Impacts would be considered significant.

d. Mitigation Measures

Consistent with the requests of the tribes during consultation and to ensure the protection of tribal cultural resources, **HIST-SD-1** would be required to reduce potential impacts to tribal cultural resources. Implementation of mitigation measure **HIST-SD-1** as detailed in Section 4.7.3.2,d, requires Native American monitoring during ground disturbance activities. Refer to Section 4.7.3.2.d for additional details.

e. Significance of Impacts after Mitigation

The project would implement mitigation measure **HIST-SD-1**, which would require Native American monitoring during ground disturbance. Implementation of the mitigation measure outlined in Section 4.7.3.2.d would ensure appropriate treatment in the event of discovery of tribal cultural resources, reducing potential impacts related to tribal cultural resources to less than significant.

4.11 Aesthetics

This section analyzes the visual aspects of the Nakano Project (project) including potential effects on scenic resources and visual character. Information presented in this section is based on site photographs, applicable policies and development regulations of each agency, and a review of the project's consistency with policies and regulations relevant to the protection of visual resources. As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.11.1 Existing Conditions

4.11.1.1 Existing Visual Landscape

The project site is located east of Interstate 805 (I-805), northwest of the 450 block of Dennery Road, and south of the Otay River in the City of Chula Vista. As illustrated in Figure 2-4, land uses surrounding the project site include a mixture of residential, commercial/medical, and open space. The project site is vacant except for former agricultural building foundations located in the central area of the site. Most of the site is flat, supporting disturbed habitat and non-native grasslands. There is an unimproved drainage containing some native vegetation located along the eastern boundary of the project site that conveys stormwater runoff from the Kaiser Permanente Otay Mesa Medical Offices to the south through the site to the Otay River. Several dirt trails extend through the project site from the southeastern corner near Dennery Road to the north towards the Otay Valley Regional Park (OVRP). A San Diego Gas and Electric (SDG&E) 69-kilovolt overhead power line is located along the southern boundary. An existing dirt access road leads from Dennery Road providing SDG&E access to the existing utility lines. An SDG&E above-ground power line also extends along the eastern boundary. Refer to Photographs 1 through 4 (in Chapter 2 of this EIR) for views of the project site and surrounding area.

As shown Photographs 1 through 4 (in Chapter 2), the project site lies at a lower elevation than adjacent areas to the west, south and east. Land to the immediate west slopes upward approximately 25 feet to I-805, approximately 50 feet to the residential development to the east, and approximately 60 feet to the medical offices to the south.

4.11.1.2 Scenic Views

Public views of the site are limited to I-805 and Dennery Road. Views from I-805 travel lanes are provided along an approximately 1,000-foot-long stretch of the freeway adjacent to the western project site boundary. These views, however, are partially obscured by existing eucalyptus trees (*Eucalyptus* spp.) that are planted along the freeway on a slope that descends approximately 25 feet

down to the project site. The combination of the duration of the view, the eucalyptus trees and the slope result in brief, intermittent views into the site from I-805.

Project access would be taken from Dennery Road. Views into the project site from Dennery Road are limited to an approximate 500-foot segment of the roadway where it passes by the southeast corner of the site. Views are brief and partially blocked due to both street trees within the landscaped parkways and median along Dennery Road, in addition to the lower elevation of the project site in relation to Dennery Road. Neither the Otay Mesa Community Plan (OMCP) nor the Chula Vista General Plan have designated any viewpoints with views of the project site, nor has either jurisdiction designated any view corridors or scenic routes within or adjacent to the project site.

The segment of Main Street between I-805 and Heritage Road within the City of Chula Vista is identified as a scenic roadway in the City of Chula Vista General Plan. This roadway is located approximately 2,000 feet to the north across the Otay River and provides southerly views of the Otay River. Views of the project site from this roadway are not available from this roadway segment due to intervening structures, topography, and landscaping.

The project site is located within the OVRP Concept Plan (County of San Diego et al. 2016) boundaries. The OVRP Concept Plan is divided into segments. The project site is located within the segment which extends from I-805 to Heritage Road, which is predominantly planned for open space/preserve and trails (see Figure 2-7). The OVRP Concept Plan identifies the project site as Open Space/Preserve with additional Open Space/Preserve lands adjacent to the northwest within the concept plan boundary. Informal trails that cross the northern segment of the project site and extend north-south along the western project boundary have views in the project site as well as the Otay River. Additionally, there is an existing trail north of RiverEdge Terrace with views into the project site as well as the Otay River. The existing views from the trails within the OVRP and RiversEdge Terrace toward the river are scenic but the views to the south (development areas) into the City of San Diego are not. Existing views toward the Nakano site are not scenic due to it being a historic disturbed agricultural site with no scenic resources.

4.11.1.3 Visual Character

The project site is located within the City of Chula Vista; however, the project site is within the viewsheds of areas within the City of San Diego communities of Otay Mesa and Otay Mesa-Nestor. The southern portion of the City of Chula Vista (generally located north of Otay River) is characterized by a mixture of uses, including community shopping centers, car dealerships, light industrial/business parks, single- and multi-family residential and open space. While the project site is currently in the City of Chula Vista, it is more closely related to the City of San Diego due to the site's separation from the City of Chula Vista by the Otay River. Residential development in the City of San Diego, Otay Mesa Community Plan area is located to the immediate east and southeast and consists of newer existing and developing suburban residential neighborhoods. Community shopping centers and medical offices also occur adjacent to I-805. The area west of I-805 within the Otay Mesa-Nestor community is urbanized and mostly consists of older residential neighborhoods and some commercial retail uses and open space. See Figure 4.11-1 for a broad view of surrounding land uses as reported by the San Diego Association of Governments generalized land use data.

4.11.2 Regulatory Framework

4.11.2.1 State

a. California Scenic Highway Program

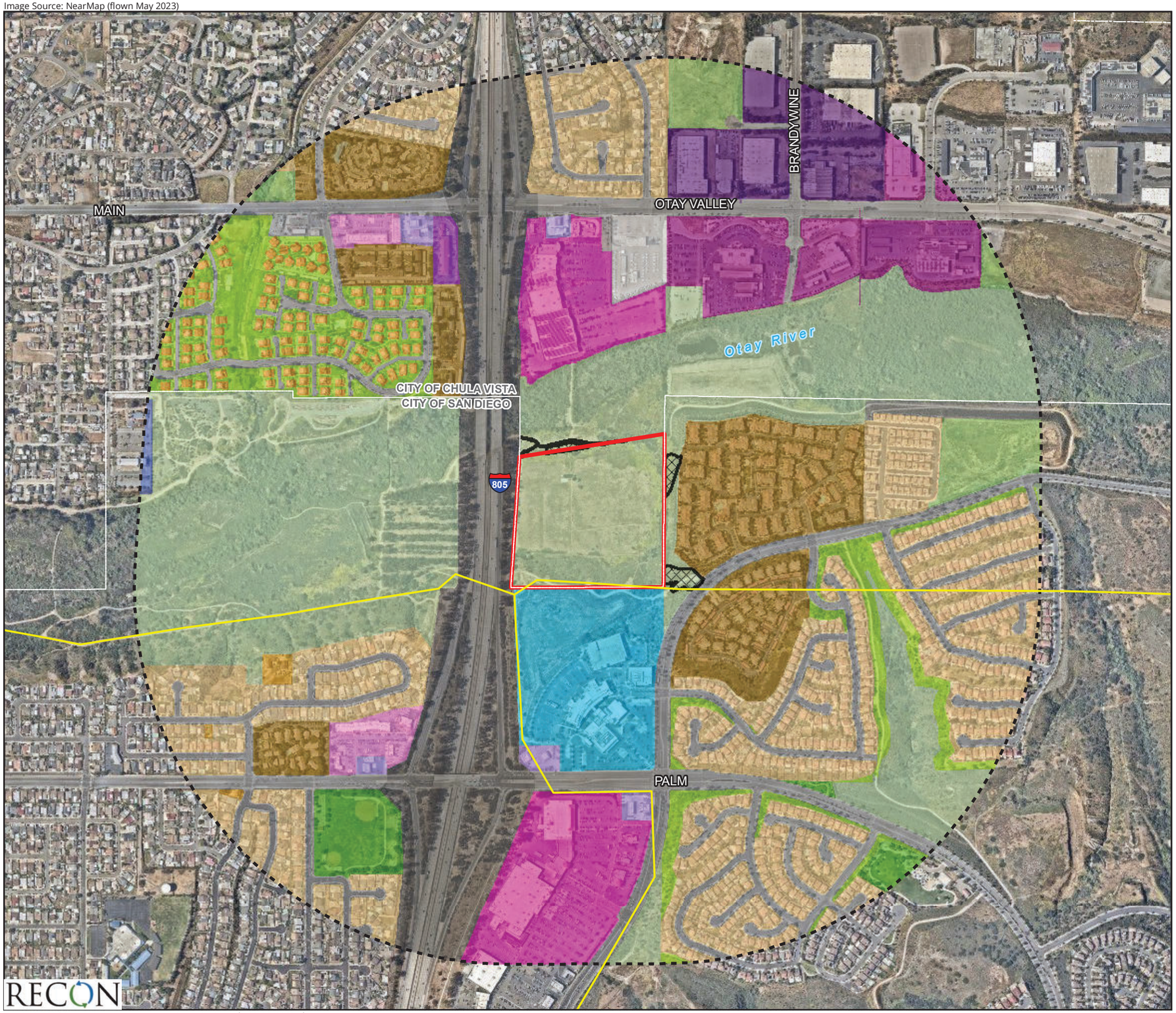
The California Scenic Highway Program was created in 1963 with the intent "to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment." The state laws that govern the Scenic Highway Program are Sections 260 through 263 of the Streets and Highways Code. A highway may be designated scenic based on the natural landscape visible by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the views of the highway. The Scenic Highway Program includes both officially designated scenic highways and highways that are eligible for designation. It is the responsibility of local jurisdictions to apply for scenic highway approval, which requires the adoption of a Corridor Protection Program (California Department of Transportation 2023). In addition, once a scenic highway is designated, the local jurisdiction is responsible for regulating development within the scenic highway corridor. The project site is not within a viewshed of a designated or eligible state scenic highway.

4.11.2.2 Regional

a. Otay Valley Regional Park Concept Plan

The project site is located within the OVRP Concept Plan boundaries as part of the Paseo Ranchero Segment (I-805 to Heritage Road) (see Chapter 2.0, Figure 2-7). The project site is designated as Open Space with a trail alignment planned along its northern boundary. A trail staging area is identified to the north of the project site, south of the Otay River. The OVRP Concept Plan includes a policy to encourage private development of viewpoint and overlook areas to the OVRP.

Image Source: NearMap (flown May 2023)



- Project Site
- Off-site Improvements
- SDG&E 69kV Overhead Power Line
- 1/2-mile Radius

Land Use

- Park - Active
- Open Space / Undeveloped Land
- Landscape Open Space
- Vacant and Undeveloped Land
- Single Family Detached
- Single Family Multiple-Units
- Multi-Family Residential
- Hotel/Motel (Low-Rise)
- Neighborhood Shopping Center
- Community Shopping Center
- Automobile Dealership
- Service Station
- Industrial Park
- Hospital - General
- Religious Facility
- Road Right of Way
- Arterial Commercial
- Freeway
- Other Transportation

0 Feet 700

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FIGURE 4.11-1
Visual Character

4.11.2.3 Local Regulations - City of Chula Vista

a. City of Chula Vista General Plan

The Land Use and Transportation (LUT) Element of the City of Chula Vista General Plan contains objectives and policies to preserve and enhance aesthetic resources. The following objective and policies found in the Environmental Element are relevant to the project:

Objective LUT 3: Direct the urban design and form of new development and redevelopment in a manner that blends with and enhances Chula Vista's character and qualities, both physical and social.

Objective LUT 6: Ensure adjacent land uses are compatible with one another.

> **Policy LUT 6.1:** Ensure, through adherence to design guidelines and zoning standards, that the design review process guarantees excellence in design and that new construction and alterations to existing buildings are compatible with the best character elements of the area.
>
> **Policy LUT 6.2:** Require that proposed development plans and projects consider and minimize project impacts upon surrounding neighborhoods.
>
> **Policy LUT 6.3:** Require that the design of new residential, commercial, or public developments is sensitive to the character of existing neighborhoods through consideration of access, compatible building design and massing, and building height transitions, while maintaining the goals and values set forth in the General Plan.
>
> **Policy LUT 6.5:** Require, through sensitive and attractive design, that neighborhood retail centers and commercial service buildings are compatible with the surrounding neighborhood.

Objective LUT 8: Strengthen and sustain Chula Vista's image as a unique place by maintaining, enhancing, and creating physical features that distinguish Chula Vista's neighborhoods, communities, and public and recreational spaces, and enhance its image as a pedestrian-oriented and livable community.

> **Policy LUT 8.3:** Ensure that buildings are appropriate to their context and designed to be compatible with surrounding uses and enhance the desired character of their district.

Objective LUT 11: Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

> **Policy LUT 11.2:** Promote and place a high priority on quality architecture, landscape, and site design to enhance the image of Chula Vista, and create a vital and attractive environment for businesses, residents, and visitors.

Policy LUT 11.3: The City shall, through the development of regulations and guidelines, ensure that good project landscape and site design creates places that are well-planned; attractive; efficient; safe; and pedestrian-friendly.

Policy LUT 11.4: Actively promote architectural and design excellence in buildings, open space, and urban design.

Policy LUT 11.5: Require a design review process for all public and private discretionary projects.

Objective LUT 13: Preserve scenic resources in Chula Vista, maintain the City's open space network, and promote beautification of the City.

Policy LUT 13.4: Any discretionary projects proposed adjacent to scenic routes, with the exception of individual single-family dwellings, shall be subject to design review to ensure that the design of the development proposal will enhance the scenic quality of the route. Review should include site design, architectural design, height, landscaping, signage, and utilities. Development adjacent to designated scenic routes should be designed to:

- Create substantial open areas adjacent to scenic routes through clustering development;
- Create a pleasing streetscape through landscaping and varied building setbacks; and
- Coordinate signage, graphics and/or signage requirements, and standards.

Objective LUT 49.12: Establish standards for transitions in building height that respond to public view corridors and proximity to single-family areas.

Objective LUT 69: Create and maintain unique, stable, and well-designed communities that are master planned to guide development activities.

Objective LUT 75: Preserve and protect Otay Ranch's significant natural resources and open space lands with environmentally sensitive development.

b. City of Chula Vista Municipal Code – Light and Glare Regulations

Chula Vista Municipal Code (CVMC) Chapter 17.28 provides reasonable restrictions and limitations upon the use of lighting in or near the residential zones of the City of Chula Vista to prevent lighting from creating a nuisance to residents within said residential zones. The code requires light shielding on commercial and industrial lighting near residences; prohibits residential lighting that spills over to adjacent properties during nighttime hours; and requires multi-family residential, commercial, and industrial developments to submit lighting plans to the City of Chula Vista. Lighting from any use which is unshielded or so directed as to focus the beams directly upon adjacent residential property is prohibited at all times.

CVMC Section 19.66.100 is part of the City of Chula Vista performance standards. Specifically, the performance standard for glare under CVMC Section 19.66.100 prohibits direct and sky-reflected glare, whether from floodlights or from high-temperature processes (such as combustion or welding), that is visible at the lot line of the use producing the glare.

c. City of Chula Vista Greenbelt Master Plan

The City of Chula Vista Greenbelt System is composed of natural and park-like elements, and functions as a collection of open space segments or areas around the City of Chula Vista that are linked by existing and proposed trails. The goals and policies included in the Greenbelt Master Plan focus on the City of Chula Vista establishing a greenbelt system that includes connected open space, public trail access, and recreational opportunities. Design standards for parks and trails are also included in the plan. The project site is identified as part of the Greenbelt Network.

4.11.2.4 Local Regulations - City of San Diego

a. City of San Diego General Plan

The **Urban Design (UD) Element** of the General Plan (City of San Diego 2008) establishes goals and policies for the pattern and scale of development and the character of the built environment. The following policies found in the UD Element are relevant to the project:

Policy UD-A.2: Use open space and landscape to define and link communities.

Policy UD-A.3: Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.

- Policy UD-A.3(l): Protect views from public roadways and parklands to natural canyons, resource areas, and scenic vistas.
- Policy UD-A.3(n): Provide public pedestrian, bicycle, and equestrian access paths to scenic view points, parklands, and where consistent with resource protection, in natural resource open space areas.

Policy UD-A.5: Design buildings that contribute to a positive neighborhood character and relate to neighborhood and community context.

Policy UD-A-6: Create street frontages with architectural and landscape interest to provide visual appeal to the streetscape and enhance the pedestrian experience.

Policy UD-A.8: Landscape materials and design should enhance structures, create and define public and private spaces, and provide shade, aesthetic appeal, and environmental benefits.

Policy UD-A.13: Provide lighting from a variety of sources at appropriate intensities and qualities for safety.

Policy UD-B.1: Recognize that the quality of a neighborhood is linked to the overall quality of the built environment. Projects should not be viewed singularly, but viewed as part of the larger neighborhood or community plan area in which they are located for design continuity and compatibility.

Policy UD-B.2: Achieve a mix of housing types within single developments.

Policy UD-B.3: Design subdivisions to respect the existing lot pattern established within neighborhoods to maintain community character.

Policy UD-B.4: Create street frontages with architectural and landscape interest for both pedestrians and neighboring residents.

Policy UD-B.5: Design or retrofit streets to improve walkability, strengthen connectivity, and enhance community identity.

Policy UD-B.8: Provide usable open space for play, recreation, and social or cultural activities in multifamily as well as single-family projects.

b. Otay Mesa Community Plan

Under the Annexation Scenarios, the project would become part of the OMCP and would be subject to visual policies contained in the OMCP. Specifically, the project site would be located within the Northwest District of the OMCP. OMCP Figure 4-1 identifies gateways and view corridor opportunities (City of San Diego 2014). As detailed in the OMCP, the nearest gateway to the project site is at Palm Avenue and Dennery Road. Additionally, a view corridor is identified east of the project site along Dennery Road, with another view corridor identified east of the project site near the Otay River. The UD Element of the OMCP includes policy guidelines for the development of streetscapes, parks, and public spaces. Relevant policies include the following:

Policy 4.3-1: Employ sensitive design techniques when developing adjacent to Otay Mesa's natural canyon and open space systems.

a. Relate development to the topography and natural features when grading to retain the character of the landform.

b. Implement contour grading and bank undulation to avoid extreme slope faces.

c. Maintain first floor setbacks and step-back additional stories along the public right-of way to enhance scenic opportunities.

Policy 4.3-2: Provide public space, parks, and scenic overlooks at the end of streets and adjacent to open space areas to take full advantage of scenic opportunities.

a. Provide for public view opportunities when streets end due to open space areas or abrupt changes in topography.

b. Avoid locating housing and other structures at the end of streets.

Policy 4.3-5: Use visual details such as architectural style, color and material schemes, and façade treatments to convey neighborhood identity.

Policy 4.3-7: Create visual and physical linkages within villages, neighborhoods, and project site areas through a unified landscape theme.

c. City of San Diego Municipal Code – Lighting Regulations

The following provisions of the San Diego Municipal Code (SDMC) would be applicable to the project under Annexation Scenario 2a:

- Section 142.0740 of the SDMC establishes the requirement for the installation of outdoor lighting fixtures in a manner that minimizes negative impacts from light pollution including light trespass, glare, and urban sky glow to preserve enjoyment of the night sky. In addition to the lighting standards applicable to each zone, SDMC Section 142.0730 regulates glare and provides the following:
    - A maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light reflectivity factor greater than 30 percent.
    - Reflective building materials shall not be permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space.

4.11.3 Issue 1: Scenic Vistas/Scenic Views

4.11.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to scenic vistas in the City of Chula Vista:

- Would the project have a substantial adverse effect on a scenic vista?

b. Impact Analysis

As shown in Chapter 2, Photographs 1 through 4, the project site is vacant except for former agricultural building foundations located in the central area of the project site. The project site is designated open space and located within the City of Chula Vista's Greenbelt Master Plan; however, the Greenbelt Master Plan does not identify any designated public viewpoints, view corridors, or scenic routes on-site or in the project vicinity.

Although no officially designated scenic resources are identified in City of Chula Vista planning documents, the Otay River Valley is referenced as a valued scenic vista and open space resource in the City of Chula Vista General Plan LUT Element. Brief views of the Otay River Valley are available from the portion of Dennery Road that passes by the site; however, due to the topography of the project site in relation to Dennery Road, in addition to the buffer between the project site and the Otay River, the project would not block any view of the Otay River from Dennery Road. Additionally, the project would be subject to development regulations contained in the Specific Plan under the No Annexation Scenario and Annexation Scenario 2b. The Nakano Specific Plan (NSP) development

regulations would limit maximum building height to 30 feet and maximum floor area ratio to 1.5, to ensure the bulk and height of buildings are compatible with surrounding views. Given that the project site lies approximately 25 feet below I-805 and proposed grading would not substantially change the grade on-site, overall site massing would be largely screened from surrounding views.

c. Significance of Impacts

The project site is not located within any designated scenic roadway or vista; however, it is located within the viewshed of the Otay River Valley. Due to intervening topography and existing landscaping along I-805, the project would not alter views of the Otay River Valley from motorists along I-805 or Dennery Road. Therefore, impacts associated with the project's effect on a scenic vista would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.3.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to scenic vistas/views:

- Would the project result in a substantial obstruction of any vista or scenic public viewing area as identified in the community plan?

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022), impacts related to scenic vistas/views would be significant based on the following:

> Projects that would block public views from designated open space areas, roads, or parks or to significant visual landmarks or scenic vistas (Pacific Ocean, Downtown skyline, mountains, canyons, waterways) may result in a significant impact. To meet or exceed this significance threshold, one or more of the following conditions must apply:
>
> a) The project would substantially block a view through a designated public view corridor as shown in an adopted community plan, the General Plan, or the Local Coastal Program. Minor view blockages would not be considered to meet or exceed this condition. In order to determine whether this condition has been met, consider the level of effort required by the viewer to retain the view;
>
> b) The project would cause substantial view blockage from a public viewing area of a public resource (such as the ocean) that is considered significant by the applicable community plan. Unless the project is moderate to large in scale, condition "c" would typically have to be met for view blockage to be considered substantial;

c) The project exceeds the allowed height or bulk regulations, and this excess results in a substantial view blockage from a public viewing area;

d) The project would have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view blockage. (Cumulative effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level). View blockage would be considered "extensive" when the overall scenic quality of a visual resource is changed; for example, from an essentially natural view to a largely manufactured appearance.

Views from private property are not protected by CEQA or the City of San Diego. Thresholds are addressed within Chapter 7.0 Cumulative Impacts, Section 7.2.1.1.

b. Impact Analysis

As detailed in Section 4.11.3.1.b, the project would not result in impacts to scenic vistas or views, public views or create a view blockage based on the elevation of the site in relation to the surrounding areas and the proposed development regulations that would limit building height to 30 feet maximum. In Annexation Scenario 2a, the City of San Diego's development regulations would be applied through adoption of an uncodified ordinance that would limit building heights and massing in the same manner as described in Section 4.11.3.1.b. Given that the project site lies approximately 25 feet below I-805 and proposed grading would not substantially change the grade on-site, overall site massing would be largely screened from surrounding views. As discussed under Section 4.11.3.1.b, views into the project site from I-805 and Dennery Road are mostly blocked due to topography and existing eucalyptus trees bordering I-805.

OMCP Figure 4-1 identifies gateways and view corridor opportunities; however, none are located within the viewshed of the project site. While there are no OMCP designated gateways or view corridors identified within the viewshed of the project site, the Otay River Valley is generally considered a view resource. With trails planned along the Otay River as part of the OVRP and an existing trail located north of RiverEdge Terrace, trail users along the river would have view opportunities of the project site along the trail segment located just north of the project site. As the project would develop an existing vacant site with residential uses, the visual environment as viewed from the OVRP trail network north of the site would change; however, no adverse change would occur to the natural resources that are considered scenic resources present along the Otay River. The views of residential development would be similar to the existing residential views from the trail corridor located east of the project site.

The project would be consistent with City of San Diego General Plan policies including UD-A.3, by ensuring that development adjacent to natural features (the Otay River) is sensitive to and complements the natural environment. The project would provide views from the project site toward the river from publicly accessible parks and would include a public trail connection to provide access to the trail network. The project would not substantially block any public views.

Under Annexation Scenario 2a, City of San Diego design guidelines would be applied to ensure structures would be developed with a compatible height and bulk to avoid view blockage.

Requirements for height variations and architectural elements would break up massing and scale. The Design Guidelines also serve to create a community visually consistent with surrounding residential neighborhoods.

The project would not cause substantial view blockage from a public viewing area. Additionally, the regulation of height and bulk through City of San Diego base zone regulations and Design Guidelines would ensure regulation compliance.

c. Significance of Impacts

The project site is not located within any designated scenic roadway or vista; however, it would be visible from a public trail within the OVRP. The project would not result in any adverse change to views of the Otay River for trail users and would not block view of the Otay River from any surrounding viewpoints. Due to intervening topography and existing landscaping along I-805, the project would not alter views of the Otay River from motorists along I-805 or Dennery Road. Therefore, impacts associated with the project's effect on a scenic vista would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.4 Issue 2: Scenic Resources

4.11.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to scenic resources in the City of Chula Vista:

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

b. Impact Analysis

The segment of Main Street, between I-805 and Heritage Road, is identified as a scenic roadway in the Chula Vista General Plan due to the views of the Otay River Valley. However, this segment of Main Street is located approximately 2,000 feet to the north of the project site, north of the Otay River, offering no views of the project site. Therefore, the project would not change views from the segment of Main Street identified as scenic in the City of Chula Vista General Plan.

The project site is not located within a designated state scenic highway, nor are there mature trees, rock outcroppings, or historic buildings on-site; however, the project is located adjacent to the Otay River Valley, which is a scenic resource. The project would not damage any portion Otay River Valley as no impacts are proposed to land within or adjacent to the river. The project would formalize

access to the OVRP trail system through the project site and would provide trail improvements that would enhance public access to trails adjacent to the Otay River.

Although it is not a designated scenic road, views into the project site from I-805 are limited due to topography and existing eucalyptus trees bordering I-805. The project would not affect the existing tree line along I-805, as these are located within the California Department of Transportation right-of-way.

Compliance with the development regulations contained in the Specific Plan would ensure that on-site structures would be compatible in bulk and scale with the surrounding residential area, ensuring compatibility with the visual environment and not detracting from views along the river. Therefore, the project would not substantially damage scenic resources.

Regarding impacts to scenic resources including changes to the existing landform within the off-site areas within the City of San Diego, refer to Section 4.11.4.2.b for a discussion of distinctive trees and landform changes in the context of the City of San Diego's Significance Determination Thresholds (City of San Diego 2022). As discussed in that section, no distinctive or landmark trees would be removed within the off-site improvement areas in the City of San Diego. Additionally, site grading for the access roads is located within an existing disturbed area subject to existing landform disturbances.

c. Significance of Impacts

The project site is not located within any designated scenic roadway or vista; however, it is located within the viewshed of the Otay River, which is considered a scenic resource. The project would not alter visibility of, or any physical aspect related to, the Otay River. Development regulations relating to height and bulk would ensure the project would not alter views toward the Otay River and would not detract from the scenic resource of the Otay River Valley. Therefore, impacts to scenic resources resulting from site development would be less than significant.

Impacts to scenic resources within the off-site areas within the City of San Diego would be less than significant in the context of the City of San Diego's Significance Determination Thresholds (City of San Diego 2022). No distinctive or landmark trees would be removed within the off-site improvement areas in the City of San Diego and adverse impacts related to landform alteration in the off-site improvement areas would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.4.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following issue questions to provide guidance in determining potential significance of impacts related to scenic resources:

- Would the project result in the loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan?
- Would the project result in substantial change in the existing landform?

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022), to have a significant impact related to alternation of the natural landform, typically the following conditions must apply:

a. The project would alter more than 2,000 cubic yards of earth per graded acre by either excavation or fill. Grading of a smaller amount may still be considered significant in highly scenic or environmentally sensitive areas. Excavation for garages and basements are typically not held to this threshold. In addition, one or more of the following conditions (1-4) must apply to meet or exceed this significance threshold.

    1) The project would disturb steep hillsides in excess of the encroachment allowances of the Environmentally Sensitive Lands regulations (Land Development Code [LDC] Chapter 14, Article 3, Division 1). In evaluating this issue, environmental staff should consult with permit staff.

    2) The project would create manufactured slopes higher than ten feet or steeper than 2:1 (50 percent).

    3) The project would result in a change in elevation of steep hillsides as defined by the SDMC Section 113.0103 from existing grade to proposed grade of more than five feet by either excavation or fill, unless the area over which excavation or fill would exceed five feet is only at isolated points on the site. (A continuous elevation change of five feet may be noticeable in relation to surrounding areas. In addition, such a change may require retaining walls and other features to stabilize slopes, potentially resulting in a manufactured appearance.)

    4) The project design includes mass terracing of natural slopes with cut or fill slopes in order to construct flat-pad structures.

b. However, the above conditions may not be considered significant if one or more of the following apply:

    1) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed landforms will very closely imitate the existing on-site landform and/or

the undisturbed, pre-existing surrounding neighborhood landforms. This may be achieved through "naturalized" variable slopes.

2) The grading plans clearly demonstrate, with both spot elevations and contours, that the proposed slopes follow the natural existing landform and at no point vary substantially from the natural landform elevations.

3) The proposed excavation or fill is necessary to permit installation of alternative design features such as step-down or detached buildings, non-typical roadway or parking lot designs, and alternative retaining wall designs which reduce the project's overall grading requirements.

b. Impact Analysis

Distinctive or Landmark Trees

No distinctive or landmark trees were identified within the project area and there are no distinctive or landmark trees designated in the project area or in the OMCP. The project site does not support any significant stands of mature trees on-site. Therefore, implementation of the project and development of the project site would not result in the loss of any distinctive or landmark trees. No impact related to a loss of any distinctive or landmark tree(s) or stand of mature trees as identified in the OMCP would occur.

Landform Alteration

The existing project site is generally flat where the development is proposed; however, steep slopes exist in the southern portion of the site and within the off-site improvement areas where access to Dennery Road and emergency access would be taken. The project would disturb approximately 2.76 acres of steep hillsides or 10.6 percent of the steep hillsides which is within the encroachment allowance specified in the City of San Diego's Environmentally Sensitive Lands regulations (LDC Chapter 14, Article 3, Division 1). Encroachment into the existing steep hillsides would not alter the existing visual quality of the project site. The majority of the steep slopes would remain, and the project would be constructed at a lower elevation compared to the steep slopes. Therefore, the project would retain the existing landform as seen from existing trails crossing the project site or located adjacent to the project site. None of the graded slopes would be visible from Dennery Road due to the elevation of the road in relation to the slope areas. Development of the project would require grading of approximately 21.18 acres within an impact footprint of 23.37 acres for both on- and off-site areas as detailed on Figure 3-12. Cut volumes would total approximately 110,400 cubic yards located in the southern portion of the site. Approximately 133,000 cubic yards of fill would be required within the northern portion of the site and associated with the primary and secondary access roads. The maximum height of fill slopes is 21 feet and the maximum height of cut slopes is 19 feet, exceeding the 10-foot slope threshold (see Figure 3-12). Therefore, pursuant to the City of San Diego threshold, the project could result in a significant impact to scenic resources due to the potential to substantially change the existing landform. The City of San Diego thresholds indicate these conditions may not be considered significant if additional design measures are undertaken. The project includes additional design measures to retain the naturalized slopes and follow the natural landform, as discussed below.

The proposed grading would closely mimic the existing landforms. With the bulk of the development area being focused within the flat portion of the site, some of the natural slope at the southern end of the site would remain undisturbed. Where the project would grade into the southern slope, the proposed manufactured slope would closely imitate the existing on-site landform. While the proposed access roadway would include more cut into the hillside, the landform already includes existing dirt access roadway within this southern area of the site that visually presents a similar hillside cut. As detailed in Figure 3-12, the proposed manufactured slope at the southern end of the project site includes natural contours, rounding to follow the existing topography. After grading is complete the slope would be revegetated and would visually blend with the remaining natural slope.

The proposed fill at the southern portion of the site and in the off-site improvement area for primary site access to Dennery Road is necessary to allow for project access to Dennery Road which sits at a higher elevation than the project site. To accommodate required roadway design requirements, a retaining wall is proposed along the main project access (Private Drive A) to retain the adjacent slope and minimize additional grading. A concrete masonry block wall would run a length of 419 feet with a maximum height of 20 feet as detailed on Figure 3-2. To screen the wall, landscaping is proposed that would include a climbing vine to screen the wall from view. Additionally, street trees and parkway landscaping would soften the appearance of the wall.

Additionally, the edges of the development would include landscaped slopes that buffer the development from surrounding developments and open space areas to further reduce any perceived change in on-site landforms. Therefore, notwithstanding proposed grading quantities, the project includes design features to ensure project grading slopes follow the natural existing landform and is consistent with surrounding development.

Proposed grading for the project's secondary access road would be located within an existing manufactured slope. Grades would closely follow the existing slope, with a flat 20-foot-wide emergency access road accommodated in the slope. Grading within this slope area would include placement of fill but would follow existing contours and not change the overall grades substantially.

c. Significance of Impacts

The project would not result in the loss of any distinctive or landmark trees; therefore, no impact related to a loss of any distinctive or landmark tree(s) or stand of mature trees as identified in the OMCP would occur.

The project would not result in grading within steep slopes in excess of the allowances in the City of San Diego's Environmentally Sensitive Lands regulations. However, site grading would require manufactured slopes in excess of 10 feet. Proposed manufactured slopes are designed to follow existing landforms and retaining walls are incorporated to minimize grading to the extent feasible. Proposed slope locations generally follow the existing contours and topography of the project site. Therefore, per the City of San Diego significance thresholds, the project would not result in substantial alteration to the existing landforms and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.5 Issue 3: Visual Character

4.11.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to visual character in the City of Chula Vista:

- In nonurbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point).

b. Impact Analysis

The project site is currently vacant, surrounded to the west and southwest by residential development, commercial/medical facility to the south, I-805 freeway to the east, and the Otay River/open space to the north. As discussed in Section 4.11.3.1 and 4.11.3.2, views through the project site include the Otay River and other open space areas within the OVRP; however, project development would not substantially impede views to the OVRP due to the elevation of the site in relation to surrounding areas. Application of the NSP design guidelines would ensure the project site would be consistent with the existing visual character to the east within the adjacent City of San Diego Ocean View Hills community. The project would be visible by trail users within the OVRP; however, the project would improve access to the OVRP by providing public trail connections through the site and public trail improvements within the OVRP, in the parcel north of the project site. The visual character of the project site would change from a vacant site to a residential development; however, it incorporates public parks and recreational access to the OVRP, which complements the planned character of the OVRP. Additionally, the project would adhere to the proposed Specific Plan development regulations and architectural design guidelines to limit height and bulk of on-site structures. The architectural guidelines address building design, roofs, walls and fences, color, and trash enclosures. Landscape design guidelines include criteria pertaining to streetscapes, community entries, lighting, open space, manufactured slopes, parks, walls and fences, irrigation, and plant materials. Adherence to specific design criteria and compliance with required height and bulk guidelines would ensure that the design of residential buildings would be consistent with existing landscaping and architectural styles of buildings in the project area.

The project includes construction of several on-site mini parks that provide views toward the Otay River Valley in addition to public trail access. Incorporation of these project design features ensures the project would be consistent with the OVRP in addition to increasing pedestrian access and connectivity to the OVRP.

Regarding changes to visual character or quality related to the proposed site grading within the City of San Diego, the grading plan requires creation of manufactured slopes to accommodate the development and the project's proposed access roads. However, the grading design follows the existing natural gradient as much as possible and retaining walls are incorporated to minimize grading. All graded slopes would be permanently revegetated consistent with the project's Landscape Plan. Manufactured slopes would be planted to control erosion, provide privacy (screening), and blend in with the existing planting along the adjacent roadway. Retaining walls would be screened with climbing vines and street trees.

Overall, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would be designed to fit the visual character of the site and its surroundings, while enhancing opportunities and access to the OVRP. Application of the NSP design guidelines would ensure the visual character of the area would not be degraded and views would not be blocked. Impacts related to visual character would be less than significant.

c. Significance of Impacts

The project would not degrade the existing visual quality of the area, including views of the Otay River and OVRP. Additionally, through compliance with the Specific Plan development regulations, landscape and grading plans, and architectural design guidelines, the project would fit the pattern and character of the surrounding land uses. Impacts relating to visual character would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.5.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to visual character, or more specifically as specified in the City of San Diego thresholds of significance, neighborhood character/architecture and development features:

- Would the project result in the creation of a negative aesthetic site or project?
- Would the project result in project bulk, scale, materials, or style which would be incompatible with surrounding development?
- Would the project result in substantial alteration to the existing planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area? Note: for substantial alteration to occur, new development would have to be of a size, scale, or design that would markedly contrast with the character of the surrounding area.

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022), impacts related to neighborhood character/architecture and development features would be significant should the project meet any of the following thresholds.

Neighborhood Character/Architecture

A project that would severely contrast with the surrounding neighborhood character would have a significant impact. To meet or exceed this threshold, one or more of the following conditions must apply:

a) The project exceeds the allowable height or bulk regulations and the height and bulk of the existing patterns of development in the vicinity of the project by a substantial margin.

b) The project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme (e.g., Gaslamp Quarter, Old Town).

c) The project would result in the physical loss, isolation or degradation of a community identification symbol or landmark (e.g., a stand of trees, coastal bluff, historic landmark) which is identified in the City of San Diego General Plan, applicable community plan, or local coastal program.

d) The project is located in a highly visible area (e.g., on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive height, bulk, signage, or architectural projections.

e) The project would have a cumulative effect by opening up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multi-family). As with views, cumulative neighborhood character effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level. Analysts should also evaluate the potential for a project to initiate a cumulative effect by building structures that substantially differ from the character of the vicinity through height, bulk, scale, type of use, etc., when it is reasonably foreseeable that other such changes in neighborhood character will follow.

Threshold e) above is addressed in Chapter 7.0, Cumulative Impacts, Section 7.2.11.

Development Features

A project that would have a negative visual appearance would have a significant impact. To meet or exceed this significance threshold, one or more of the following conditions must apply:

a) The project would create a disorganized appearance and would substantially conflict with City of San Diego codes (e.g., a sign plan which proposes extensive signage beyond the City's sign ordinance allowance).

b) The project significantly conflicts with the height, bulk, or coverage regulations of the zone and does not provide architectural interest (e.g., a tilt-up concrete building with no offsets or varying window treatment).

c) The project includes crib, retaining or noise walls greater than six feet in height and 50 feet in length with minimal landscape screening or berming where the walls would be visible to the public.

d) The project is large and would result in an exceeding monotonous visual environment (e.g., a large subdivision in which all the units are virtually identical).

e) The project includes a shoreline protection device in a scenic, high public use area, unless the adjacent bluff areas are similarly protected.

These conditions may become more significant for projects which are highly visible from designated open spaces, roads, parks, or significant visual landmarks. The significance threshold may be lower for such projects. Refer to the project's applicable community plan and the UD Element of the City of San Diego's Progress Guide and General Plan for more information on visual quality.

b. Impact Analysis

The general discussion of impacts to visual character under Section 4.11.5.1.b would be similar to the discussion of impacts under Annexation Scenario 2a, except for the addition of City of San Diego specific threshold analyses, which differ from the City of Chula Vista.

Neighborhood Character/Architecture

Height and Bulk/Architectural Interest

The project has been designed to be consistent with surrounding land uses. Development regulations for the project would be as defined in the SDMC regulations for the RM-1-1 with two deviations related to the side yard setback and retaining wall heights. Adherence to the development regulations and project specific design features as detailed in an uncodified ordinance, it would be ensured the apparent bulk of buildings is minimized through height variants, architectural elements, and color palettes which serve to break up massing, scale, and structure height. Compliance with the applicable regulations of the zone would also serve to create a community visually consistent with surrounding residential neighborhoods. Through compliance with the City of San Diego base zone regulations, and the uncodified ordinance, the project would be consistent with applicable bulk and height regulations.

Degradation of a Landmark

There are no designated community identification symbols or landmarks associated with the project site. Review of Figure 4-1 of OMCP determined there are no officially designated gateways or signs that would be visible from the project site. The closest designated gateway is located at the intersection of Dennery Road and Topside Lane, which is approximately 0.7 mile east of the project site behind a segment of Dennery Road that bends southward. Therefore, the project site would not be visible from this gateway. The project site does support views of the Otay River, which would be maintained and enhanced through trail access and overlook areas. The project would not result in the physical loss, isolation, or degradation of a community identification symbol or landmark that is identified in the City of San Diego General Plan, applicable community plan, or local coastal program.

Project Visibility

The project is not located in a high visibility area due to its elevation in relation to surrounding land uses. The project site elevation is set lower than I-805 and Dennery Road, making it difficult to view the site from surrounding roadways. The project would include several pocket parks and trail connections to the OVRP, as shown in Figure 3-6. These improvements would provide connection to the OVRP trail located north of the project site. Trail users would have views of the site. After development, the site would be visually similar to the adjacent RiverEdge development. Considering the site location, the project would not alter views from the trails toward the Otay River.

Development of the project site would not strongly contrast with the surrounding area or natural topography through excessive height, bulk, or architectural projections. Development of the project site would occur consistent with the applicable regulations of the zone and the uncodified ordinance, and would be consistent with the overall character of the area as it would be a similar type of residential development as the project immediately adjacent to the east. As discussed in Section 4.11.4.2, grading would follow existing natural topography wherever feasible and would include slope plantings and retaining wall screening with vegetation to ensure compatibility with the site topography and overall neighborhood character. The project would be compatible with the surrounding land uses, existing topography of the site, and would blend with adjacent residential developments. Therefore, the project would complement and not strongly contrast with the natural topography and surrounding land uses.

Development Features

Disorganized Appearance/Conflict with Codes

As proposed, future development within the project site would be guided by the RM-1-1 base zone in addition to development regulations that would be adopted by ordinance by the City of San Diego. The project specific ordinance would authorize deviations from the City of San Diego Land Development Code as follows:

- Allow a 10-foot side yard setback where up to 50 percent of the length of the building envelope on one side of the premises may observe the minimum 5-foot side setback, provided the remaining percentage of the building envelope length observe at least the

standard side setback of 5 feet or 10 percent of the lot width (100 ft), whichever is greater pursuant to SDMC Section 131.0443(d)(2)(A), Table 131-04G.

- Allow retaining wall heights up to 24 feet where the maximum allowed is 12 feet pursuant to SDMC Section 142.0340(e).

The side yard setback deviation would facilitate construction of the various product types within the project site to achieve the desired density but would not result in a disorganized appearance. Deviations are allowed subject to City of San Diego regulations and therefore would not represent a conflict with the SDMC. The project includes differentiating building types including detached condominiums, duplexes, and townhomes resulting in diverse development and densities throughout the project. The project would also include recreational amenities including parks and trail connections. Common open space is provided consistent with the RM-1-1 zone (see SDMC Section 131.0456) and the site-specific ordinance.

Conflicts with Height, Bulk, or Coverage Regulation

The project would be consistent with the height, bulk, and coverage regulations of the RM-1-1 zone. The project would be consistent with height, bulk, and coverage as the existing City of San Diego residential developments to the east within Ocean View Hills community.

Through compliance with the site-specific ordinance and applicable SDMC regulations, the project would not result in the creation of a negative aesthetic site or project.

Crib, Retaining, or Noise Walls

The project includes a variety of walls and fencing throughout the development. Two of the proposed walls would exceed six feet in height and 50 feet in length and retaining wall heights up to 24 feet would require a deviation pursuant to SDMC Section 142.0340(e). However, as discussed below, proposed walls would not result in a significant impact because of either their lack of visibility or proposed landscape screening.

As detailed in Figure 3-11, a retaining wall is proposed in the southeast corner of the project site that would have a maximum of 23.6 feet of exposed wall height. The wall would be stepped with approximately 30 to 85 feet of exposed wall length at any point. Although this wall would exceed the height and length indicated in the City of San Diego threshold; the wall would not be visible from any public viewing area. This wall would be located just east of residential Lot 14 in the southeast portion of the project site and would integrate into the surrounding manufactured slopes and minimize the need for additional grading into steep slopes. Additionally, the stepped design of the wall would result in a wall design that does not appear monotonous or massive.

A second retaining wall located along the main project access road (Private Street A) would exceed the City of San Diego thresholds for length and width. A concrete masonry block retaining wall is proposed along the north side of Private Drive A to retain the adjacent slope. This wall would run a length of 419 feet with a maximum height of 20 feet. Refer to Figure 3-2 for a cross-section of Private Drive A. This wall would be visible to motorists along the roadway; however, the wall would be screened by both street trees and parkway plantings in addition to vining plants that would be

planted to climb and screen the wall. A cross-section of the wall showing proposed plantings and climbing vines is shown in Figure 3-2.

Monotonous Visual Environment

The project is a not an expansive development that would result in an exceedingly monotonous visual environment (e.g., a large subdivision in which all the units are virtually identical). As detailed in previous analysis, the project site is set at a lower elevation than surrounding roadways, which would minimize visibility of the site from surrounding roadways. While the project would be similar in scope and scale as the adjacent residential development to the east, the project includes a variety of residential product types with architectural variability and interest. Changes in elevation break up the visual monotony of the site in relation to the surrounding area. Implementation of zone regulations and the uncodified ordinance under Annexation Scenario 2a would ensure variation in building siting do to required setbacks, open space requirements, and access. Therefore, the project would not result in a monotonous visual environment.

Shoreline Protection

The project is not located near the shoreline and does not propose any shoreline protection devices; therefore, development features would not apply.

c. Significance of Impacts

Implementation of the project would not severely contrast with the surrounding neighborhood character, would not result in the loss of any community identification symbol, would not be highly visible, and would not have a negative visual appearance. The development would be consistent with adjacent residential development and would be designed consistent with the project's base zoning and uncodified ordinance that would ensure compatibility with height, scale, and bulk of buildings. Therefore, the project would not create a negative aesthetic and impacts associated with neighborhood character, architecture, and development features would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.6 Issue 4: Light or Glare

4.11.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to light and glare in the City of Chula Vista:

- Would the project cause a substantial light or glare which would adversely affect daytime or nighttime views in the area?

b. Impact Analysis

Existing light sources in the vicinity of the project site include nighttime lighting in the form of interior and exterior security lighting and parking, architectural highlighting, and landscape lighting associated with the adjacent residential developments and medical facility located south of the project site. In addition, automobile headlights, streetlights, and stoplights along the proximate roadway network contribute to ambient nighttime lighting levels at the project site. Development of the project site would contribute additional sources of light typical of a residential project. Construction activities would be limited to the times specified in the CVMC, which are 7:00 a.m.–10:00 p.m., Monday–Friday, and 8:00 a.m.–10:00 p.m., Saturday and Sunday. No substantial light sources are proposed during construction or operation of the project that could adversely affect day or nighttime views.

Furthermore, consistent with the CVMC Section 17.28.040, a lighting plan would be required for all proposed site lighting to demonstrate compliance with City of Chula Vista lighting regulations. The lighting plan would ensure all proposed site lighting is shielded so that no beams are focused directly upon adjacent residential property. Residential areas, parking areas, pedestrian walkways, landscaping, and architectural features would be illuminated and accented with lighting for enhanced security and safety. All lighting would be consistent with CVMC lighting standards.

c. Significance of Impacts

The project would include outdoor lighting typical of residential developments that would be shielded downward. No substantial light sources are proposed that could adversely affect day or nighttime views. Impacts from lighting and glare would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.11.6.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to light and glare:

- Would the project cause a substantial light or glare which would adversely affect daytime or nighttime views in the area?

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022), impacts related to light and glare would be significant based on the following:

> To meet or exceed this significance threshold for projects that would emit or reflect a significant amount of light and glare, one or more of the following must apply:
>
> a. The project would be moderate to large in scale, more than 50 percent of any single elevation of a building's exterior is built with a material with a light reflectivity greater than 30 percent (see LDC Section 142.07330(a)), and the project is adjacent to a major public roadway or public area.
>
> b. The project would shed substantial light onto adjacent, light-sensitive property or land use, or would emit a substantial amount of ambient light into the nighttime sky. Uses considered sensitive to nighttime light include, but are not limited to, residential, some commercial and industrial uses, and natural areas.

b. Impact Analysis

Lighting

The project site is located in an urbanized area that contains existing sources of light associated with development and vehicles along Dennery Road in addition to light from vehicles traveling along I-805. Development of the project would introduce lighting to a site that is currently vacant and does have any existing source of light. New lighting at the project site would include lighting at proposed parks, residential amenity areas, internal walkways, and at the entry monument signage. In addition, the project would introduce interior and exterior lighting within proposed residential units and lighting associated with proposed on-site roads.

All lighting proposed would be constructed in compliance with the standards contained in the City of San Diego's Outdoor Lighting Regulations (SDMC Section 142.0740), which requires that all outdoor light fixtures shall be installed in a manner that minimizes negative impacts from light pollution, including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Specifically, the SDMC requires the installation of "acceptable" lighting fixtures that are fully shielding and with the exception of "period" style fixtures, directed downward. New sources of lighting including exterior mounted building lights, security lighting, landscaping, and accent lighting, shall be operated with control systems in place to ensure unnecessary lighting is not left on throughout the night. In addition, due to the project site's proximity to open space that may support sensitive biological resources (Otay River Valley to the north), SDMC Section 142.0740(c)(6) requires exterior lighting to be limited to low-level lights that are shielded. Therefore, exterior lighting would be directed away from adjoining properties and would be low wattage so as to not unnecessarily illuminate off-site areas. Compliance with the SDMC would minimize and restrict project-related nighttime light pollution and light trespass onto adjacent properties.

Glare

The use of reflective building materials and finishes, as well as reflective lighting structures and metallic surfaces would be minimized to the extent feasible to impede the creation of project-generated glare. The proposed residential structures would have façades of natural earth tone colors and materials that are harmonious with adjacent materials. The Design Guidelines that would be adopted by the City of San Diego under Annexation Scenario 2a addresses materials for the building exterior, as follows:

- Implement a cohesive color palette that utilizes natural earth tone colors that complement existing architecture, vegetation, and open space;
- Consistently apply materials that are harmonious with adjacent materials;
- Avoid fluorescent or neon colors; and,
- The colors and styles of housing siding should be consistent with the requirements of this section that recommend using “natural earth tone colors” and “materials that are harmonious with adjacent materials.”

All lighting proposed would be constructed in compliance with the standards contained in the City of San Diego’s Outdoor Lighting Regulations which includes measures to minimize the negative impacts of glare. Implementation of SDMC regulations in addition to proposed Design Guidelines would ensure the project does not create a substantial new source of glare that would adversely affect daytime or nighttime views in the area.

c. Significance of Impacts

Through compliance with the SDMC and Design Guidelines to be adopted by the City of San Diego under Annexation Scenario 2a, the project would not introduce substantial sources of day or nighttime lighting. Additionally, the project does not incorporate any features that would be characterized as creating a substantial new source of glare that would adversely affect daytime or nighttime views in the area. Therefore, impacts associated with light and glare would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.12 Hydrology and Water Quality

This section analyzes potential impacts that could occur as a result of changes in hydrological conditions on the Nakano Project (project) site. Specifically, this section evaluates the potential for impacts associated with alterations to drainage patterns and runoff flow volumes/rates, as well as potential flood hazards and changes to water quality. The impact analysis is based on the City of Chula Vista Priority Development Project Storm Water Quality Management Plan (SWQMP) prepared by Project Design Consultants (Appendix N) which includes the Infiltration Feasibility Condition Letter as Attachment 1D, a Preliminary Hydromodification Management Study as Attachment 2, and a Preliminary Drainage Report as Attachment 5. Additionally, this section references documentation from the Federal Emergency Management Agency (FEMA) regarding approval of a Letter of Map Amendment (LOMA) (see Appendix O). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego in both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.12.1 Existing Conditions

4.12.1.1 Physical Conditions

The project site is currently vacant and was historically used for agricultural purposes with former agricultural building foundations located in the central area of the site. The majority of the site is flat and consists of disturbed habitat and non-native grasslands. Elevations within the project site range from 90 feet above mean sea level (AMSL) in the northern portion of the site to 180 feet AMSL in the southern portion of the site. There is an unimproved drainage containing some native vegetation located along the eastern boundary of the project site that conveys stormwater runoff from the Kaiser Permanente Otay Mesa medical offices to the south through the site to the Otay River. Several dirt trails extend through the project site from the southeastern corner near Dennery Road to the north towards the Otay Valley River Park.

4.12.1.2 Existing Hydrology and Water Quality

The project site lies within the Otay Hydrologic Unit (Otay HU) 910, within the San Diego Bay watershed. The Otay HU encompasses over 98,500 acres and has three major hydrologic areas: Coronado (910.1), Otay Valley (910.2) and Dulzura (910.3). Major waterbodies within Otay HU include Upper and Lower Otay Reservoir, Otay River, and San Diego Bay. The Otay HU is listed on the Clean Water Act (CWA) Section 303(d) list of impaired water bodies due to coliform bacteria, with other areas of concern including trace metals and other toxic constituents. Per the Phase I Environmental Site Assessment reports completed for the project site, there were the identification of pesticides and total petroleum hydrocarbons in soils within the project site and off-site remedial grading area (Davies property) (see Section 4.6 and Appendices H-1 and H-2). Additional potential sources of on-

site pollutants are attributed to urban runoff, agricultural runoff, resource extraction, septic systems, marinas, and boating activities (San Diego Bay Watersheds 2022).

4.12.1.3 Existing Drainage Patterns

Under the existing condition, runoff from the project site flows from south to north via sheet flows towards the Otay River. Drainage also flows through a channel located along the eastern edge of the property. The flows within the channel are primarily provided by urban runoff discharged from developments to the south and east (see Appendix D). Upstream of the site, runoff from areas including hillside and a Kaiser Permanente building flow through and along the eastern and western edges of the project site (see Appendix N).

4.12.1.4 Groundwater

As detailed in the project's Geotechnical Investigation (see Appendix E-1), no groundwater or seepage was discovered during geological site investigations. However, it is not uncommon for shallow seepage conditions to develop where none previously existed when sites are irrigated, or when infiltration is implemented. Seepage is dependent on seasonal precipitation, irrigation, land use, among other factors, and varies as a result. Groundwater elevation at the site is estimated to be between 80 and 90 feet AMSL. However, according to the Infiltration Feasibility Condition Letter (see Attachment 1D of Appendix N), the site is underlain by undocumented fill associated with previous site grading, which makes for slow infiltration rates and would therefore result in the conclusion that low rates of groundwater recharge occur on the site.

4.12.1.5 Flood Hazards

a. Flooding

As shown in Figure 4.12-1, the project site is outside the 100-year floodway; however, based on available FEMA mapping, the 100-year and 500-year floodplain associated with the Otay River abuts and enters the project site. As documented in the LOMA from FEMA (see Appendix O), the project site elevation along the northern property line is currently three feet above the highest floodplain elevation. Based on the analysis of base flood elevations at the project site, the site qualified for removal from the 100-year floodplain. A FEMA determination was provided on May 22, 2020, which determined that removal of the project site from the 100-year floodplain was approved.

b. Tsunamis and Seiches

Tsunamis consist of a series of long-period ocean waves generated by sources such as underwater earthquakes, volcanic eruptions, or slope failures. The project site lies at elevations ranging between approximately 95 and 180 feet AMSL. The project site is located approximately six miles from the Pacific Ocean and is not located downstream of any large bodies of standing water. Therefore, the risk of tsunamis or seiches associated with the project site is low.

Image Source: Nearmap (flown May 2023)



Project Site

Off-site Improvements

Area Removed from 100-Year Floodplain per FEMA Letter of Map Amendment Determination dated May 22, 2020

FEMA Flood Zone

100-Year Floodway

100-Year Floodplain

500-Year Floodplain

0 Feet 500

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FIGURE 4.12-1
FEMA Flood Zones

c. Dam Inundation

Dam inundation is flooding caused by the release of impounded water from structural failure or overtopping of a dam. As shown in Figure 4.12-2, the project is within the Dam Inundation Zone associated with the Upper and Lower Otay Dam located approximately 7.5 miles from the project site.

4.12.2 Regulatory Framework

4.12.2.1 Federal

a. Federal Emergency Management Agency

FEMA is the primary agency in charge of administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for delineating areas of flood hazards. It is then the responsibility of state and local agencies to implement the means of carrying out FEMA requirements. As discussed above, FEMA approved a LOMA to remove all portions of the 100-year floodplain from the project site (see Figure 4.12-1).

b. National Flood Insurance Act

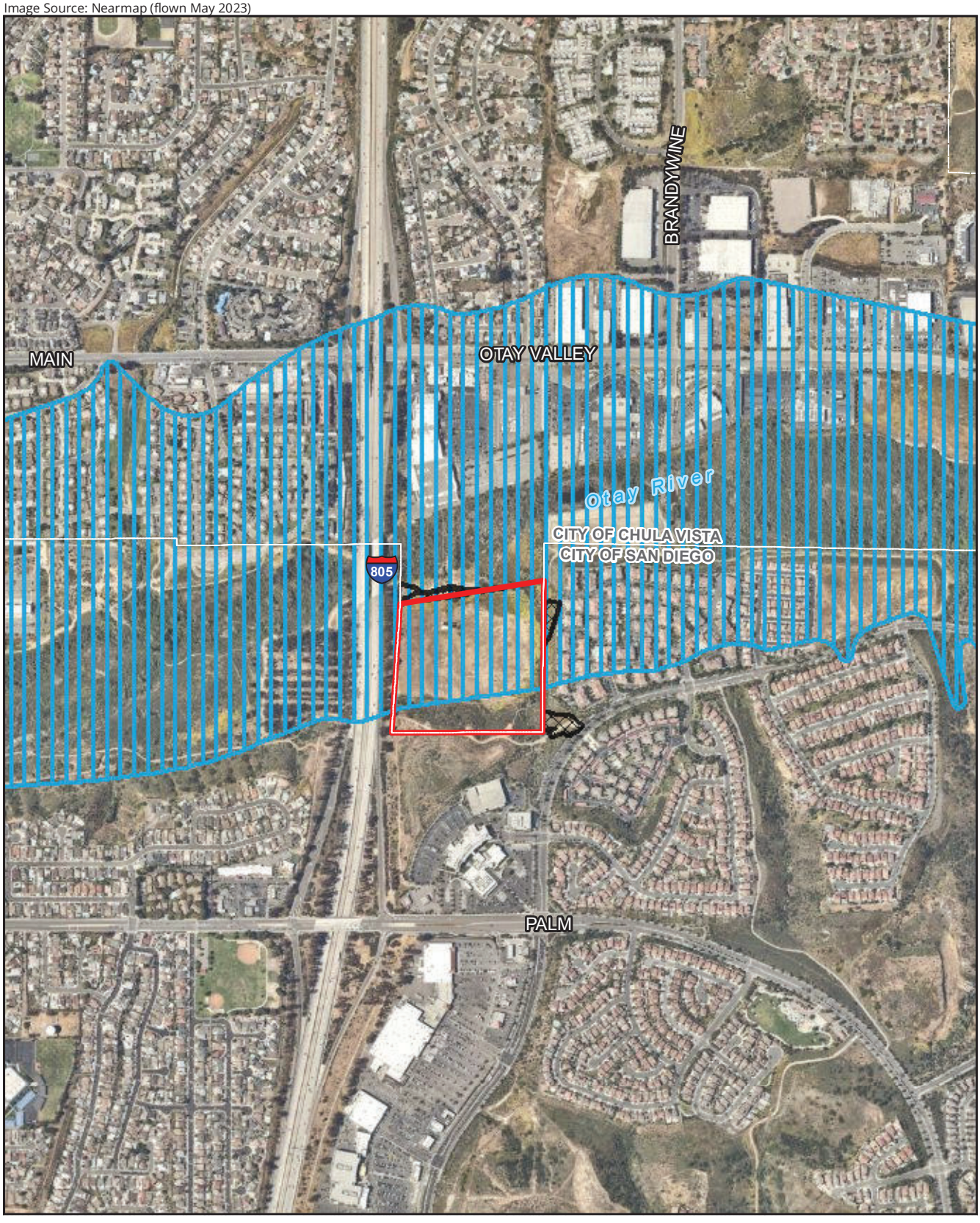
The National Flood Insurance Act (1968) established the National Flood Insurance Program, which is based on the minimal requirements for floodplain management and is designed to minimize flood damage within Special Flood Hazard Areas. FEMA administrates the National Flood Insurance Program. Special Flood Hazard Areas are defined as areas that have a one percent chance of flooding within a given year. This is also referred to as the 100-year flood. Flood Insurance Rate Maps were developed to identify areas of flood hazards within a community.

c. The Federal Clean Water Act

The federal CWA established a broad national program for protecting water quality and regulating discharges of waste and pollutants into waters of the U.S. (Title 33, U.S. Code, Section 1251 et seq.). It provides authority for establishment of water quality standards and waste discharge limits for point source discharges (such as those from industrial facilities, sewage treatment plants, and storm water). The act also prohibits discharges of pollutants without a permit or other authorization and allows states to implement provisions of the act in lieu of the U.S. Environmental Protection Agency.

Section 401 of the CWA requires certification from the state for any applicant applying for a federal permit to conduct any activity that may result in the discharge of any pollutant. This process is known as the Water Quality Certification. Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources and discharge pollutants into waters of the U.S.

Image Source: Nearmap (flown May 2023)



Project Site
Off-site Improvements
Dam Inundation

0 Feet 1,000

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FIGURE 4.12-2
Dam Inundation

In the state of California, the U.S. Environmental Protection Agency has authorized the permitting authority to implement the NPDES program. In general, the State Water Resources Control Board (SWRCB) issues two baseline general permits: one for industrial discharges and one for construction activities. Rather than setting numeric effluent limitations for storm water and urban runoff, CWA regulation calls for the implementation of best management practices (BMPs). BMPs reduce or prevent the discharge of pollutants to the Maximum Extent Practicable and aim to meet the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology standards for construction storm water. Regulations and permits have been implemented at the federal, state, and local level to form a comprehensive regulatory framework to serve and protect the quality of the nation's surface water and ground water resources.

Under Section 303(d) of the CWA, states and territories are required to develop a list of water quality limited segments for jurisdictional waters of the U.S. The waters on the list are those that do not meet water quality standards, even after point source polluters have installed the minimum required levels of pollution control technology.

As mentioned above, the CWA established the NPDES permit system that is implemented through the Regional Water Quality Control Boards (RWQCBs). This system regulates both point source discharges and non-point source discharges to surface waters of the U.S. The NPDES permit for Region 9, which includes the Cities of San Diego and Chula Vista, is the 2013 Municipal Separate Storm Sewer System (MS4) Permit (Order No. R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100). This permit requires local agencies to develop water quality plans that identify project-level water quality requirements. Projects are required to identify existing water quality conditions, potential pollutants of concern, and implement a comprehensive storm water management program to control pollutants of concern discharges to waters of the U.S.

4.12.2.2 State

a. The California Porter-Cologne Water Quality Act

The Porter–Cologne Water Quality Control Act of 1969 (Porter–Cologne Act) established the principal legal and regulatory framework for water quality control (California Water Code, Division 7, Section 13000 et seq.). The California Water Code authorizes the SWRCB to implement the provisions of the CWA. The state of California is divided into nine regions governed by the RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The Porter–Cologne Act also provides for the development and periodic review of water quality control plans that designate beneficial uses of California's major rivers and ground water basins and establish water quality objectives for those waters. Under the Porter-Cologne Act, "waters of the state" include both surface and ground water. Any entity or person proposing to discharge waste within any region of the state must file a Report of Waste Discharge with the appropriate RWQCB.

b. National Pollutant Discharge Elimination System Permits

In California, the SWRCB and its RWQCBs administer the NPDES permit program. The NPDES permits cover all construction and subsequent drainage improvements that disturb one acre or more,

industrial activities, and MS4s. Construction and industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The NPDES permit system was established in the CWA to regulate both point-source discharges (i.e., a municipal or industrial discharge at a specific location or pipe) and nonpoint-source discharges (i.e., diffused runoff of water from adjacent land uses) to surface waters of the U.S. For point-source discharges, each NPDES permit contains limits on allowable concentrations and mass emission of pollutants contained in the discharge. For nonpoint-source discharges, the NPDES program establishes a comprehensive water quality program to manage urban stormwater and minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive stormwater management program. The reduction of pollutants in urban stormwater discharge to the maximum extent practicable through the use of structural and nonstructural BMPs is one of the primary objectives of the water quality regulations for MS4s. BMPs typically used to manage runoff water quality include controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating biofiltration and peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing educational programs.

4.12.2.3 Regional

a. Water Quality Improvement Plan

The San Diego RWQCB develops and enforces water quality objectives and implements plans to protect the area's waters. There are ten watershed water quality improvement plans in the San Diego Region including the Carlsbad, Los Peñasquitos, Mission Bay, San Diego Bay, San Diego River, San Dieguito River, San Luis Rey River, Santa Margarita River, South Orange County, and Tijuana River (San Diego RWQCB 2023). These plans include descriptions of the highest priority pollutants or conditions in a specific watershed, goals, and strategies to address those pollutants or conditions, and time schedules associated with those goals and strategies.

The San Diego Bay Water Quality Improvement Plan (WQIP) (San Diego Regional Water Quality Control Board 2016) represents the MS4 requirement for the San Diego Bay Watershed Management Area pursuant to Order No. R9-2013-0001, as amended by Order Nos. R9 2015-0001 and R9-2015-0100. The San Diego Bay watershed includes the Otay Hydrologic Subarea where the project site is located. Agencies involved in the development of the San Diego Bay WQIP include the Cities of Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, and San Diego; the County of San Diego; the San Diego County Regional Airport Authority; and the San Diego Unified Port District. The San Diego Bay WQIP was developed and identified goals, strategies, and schedules to improve water quality throughout the watershed. It identifies priority conditions which require focused improvement plans. The additional purpose of the WQIP is to guide local Jurisdictional Runoff Management Programs (JRMP) towards achieving improved water quality. The Priority Conditions identified for the San Diego Bay Watershed, relevant to the project site are summarized in Table 4.12-1.

Table 4.12-1
Watershed Management Area/Hydrologic Unit 910 (Otay)
Summary of Highest Priority Conditions

Condition	Pollutant	Geographic Extent	Responsible Parties
Swimmable Waters (Beaches)	Bacteria	Hydrologic Area 910.1	City of Coronado Port of San Diego
Physical Aesthetics	Trash	Hydrologic Area 910.2	City of Chula Vista City of Imperial Beach Port of San Diego

SOURCE: Water Quality Improvement Plan (San Diego Regional Water Quality Control Board 2023) Table 2.1.

The WQIP finds physical aesthetics impairment due to trash is a Focused Priority Condition in the Otay River Hydrologic Area (910.2) and notes the City of Chula Vista as a responsible party. The responsible party's approach to improving the physical aesthetics within the Focused Priority Condition is to identify targeted areas within their jurisdictions and implement strategies focused primarily on trash. The WQIP strategies identified for the City of Chula Vista to address this condition includes plans to revise its current facilities-based inspection program to focus on trash pollutant-generating activities, collect additional information about trash management BMPs from businesses, and provide additional education and enforcement as needed. Inspections, including education and outreach during the inspection, are intended to aid in the reduction and elimination of trash discharges from existing development by assisting facility operators in implementing appropriate trash BMPs. The City of Chula Vista's Sustainable Business Program (formerly known as CLEAN Business Program), with 200 businesses already certified, is one example of an education effort to encourage environmental stewardship by reducing trash pollution and improving a business's water and energy conservation (San Diego RWQCB 2023).

b. San Diego Basin Plan

San Diego Basin Plan (Basin Plan), adopted by the San Diego RWQCB, sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, the Basin Plan is designed to accomplish the following: designate beneficial uses for surface water and groundwater; set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; describe implementation programs to protect the beneficial uses of all waters within the region; and describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan. The Basin Plan incorporates by reference all applicable SWRCB and San Diego RWQCB plans and policies.

c. Municipal Stormwater Permit

The cities of San Diego and Chula Vista currently operate under the NPDES Municipal Stormwater Permit issued on January 24, 2007 (R9-2013-0001, as amended by R9-2015-0001 and R9-2015-0100), which requires that stormwater BMPs be incorporated into the permanent design of public and private development projects. The regionwide NPDES permit (commonly referred to as the Regional

MS4 Permit) sets the framework for responsible agencies to implement a collaborative watershed-based approach to restore and maintain the health of surface waters. The Regional MS4 Permit required development of WQIPs that will allow watershed stakeholders to prioritize and address pollutants through an appropriate suite of BMPs in each watershed.

d. Construction General Permit

The 2022 Construction General Permit (CGP) reissuance (NPDES No. CAS000002) became effective on September 1, 2023, and would expire August 31, 2028. This CGP regulates discharges to waters of the United States from stormwater and authorized non-stormwater associated with construction activity from sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. This CGP requires compliance with receiving water limitations based on water quality standards established in regional or statewide water quality control plans. One of the receiving water limitations requires that construction stormwater discharges and authorized non-stormwater discharges not cause or contribute to an exceedance of applicable water quality standards. The requirements of the CGP include the preparation of a Stormwater Pollution Prevention Plan (SWPPP), the implementation of discharge controls, and annual reporting requirements. The discharger shall comply with all CGP conditions and requirements. Any CGP non-compliance constitutes a violation of the CWA and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal of CGP coverage.

4.12.2.4 Local Regulations–City of Chula Vista

a. City of Chula Vista General Plan

The **Environmental Element** of the City of Chula Vista General Plan specifically addresses the improvement of water quality. The following objectives and policies found in the Environmental Element are relevant to the project:

Objective E 2: Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista.

> **Policy E 2.3:** Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm drainage system.
>
> **Policy E 2.4:** Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.
>
> **Policy E 2.5:** Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.

Objective E 15: Minimize the risk of injury and property damage associated with flood hazards.

> **Policy E 15.1:** Prohibit proposals to subdivide, grade, or develop lands that are subject to potential flood hazards, unless adequate evidence is provided that demonstrates that such proposals would not be adversely affected by potential flood hazards and that such proposals would not adversely affect surrounding properties. Require site-specific hydrological investigations for proposals within areas subject to potential flood hazards; and implement all measures deemed necessary by the City Engineer to avoid or adequately mitigate potential flood hazards.

The **Public Facilities and Services Element** of the City of Chula Vista General Plan establishes the requirement for reliable drainage facilities. The following objective and policy found in the Public Facilities and Services Element is relevant to the project:

Objective PFS 1: Ensure adequate and reliable water, sewer, and drainage service and facilities.

> **Policy PFS 1.4:** For new development, require on-site detention of storm water flows such that, where practical, existing downstream structures will not be overloaded. Slow runoff and maximize on-site infiltration of runoff.

The **Growth Management Element** of the City of Chula Vista General Plan provides integrated components that create an overall Growth Management Program (GMP). Specifically, the Growth Management Element seeks to ensure public facilities and services are available to residents and visitors of the City concurrent with development. The City's GMP establishes the basis for Threshold Standards for City facilities and services, including drainage.

The following objective and policies found in the Growth Management Element are relevant to the project:

Objective 1: Concurrent public facilities and services.

> **Policy GM 1.11:** Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with applicable Threshold Standards.

b. Jurisdictional Runoff Management Program Document

The City of Chula Vista JRMP (updated 2018) presents strategies to reduce the discharge of pollutants into the storm drain system. The strategies include requirements for development projects to use BMPs during construction and throughout operation. The JRMP interacts with other water quality provisions of City regulations to ensure consistency among documents and to strengthen enforcement and monitoring of long-term BMPs (City of Chula Vista 2018).

c. Best Management Practices Design Manual

The City of Chula Vista's BMP Design Manual (BMPDM), updated August 2021, provides guidance for land development and public improvement projects to comply with the 2013 MS4 Permit. The BMPDM addresses on-site post-construction storm water requirements. Specific requirements include Low Impact Development BMPs, which seek to minimize impervious surface areas and

promote infiltration. Other requirements incorporate hydromodification principles by controlling runoff discharge rates and durations (City of Chula Vista 2021).

d. City of Chula Vista Municipal Code

The following provisions of the City of Chula Vista Municipal Code (CVMC) would be applicable to the project under the No Annexation Scenario and Annexation Scenario 2b:

- CVMC Section 15.04.005, also known as the Grading Ordinance, establishes minimum requirements for land development work, to provide for the issuance of permits and for the enforcement of the requirements. Specifically, CVMC Section 15.04.018 requires all land development activity to meet the requirements of this chapter, CVMC Chapter 14.20 and the City BMPDM, August 2021. Additionally, CVMC Section 15.04.270 requires requests for land development applications to include the submittal of plans showing all proposed drainage devices and facilities. Under the CVMC, all building sites are required to drain to an approved drainage facility unless otherwise approved by the City Engineer (CVMC Section 15.04.045).

- CVMC Section 14.18 provides floodplain regulations, including the identification of special flood hazard areas (CVMC Section 14.18.030) and development requirements within floodplain (CVMC Section 14.18.110 through 14.18.220).

- CVMC Section 14.20, also known as the Stormwater Ordinance, provides for the prohibition of non-storm water discharges to the storm water conveyance system, the prohibition of illegal connections to the storm water conveyance system, the requirement that all persons reduce the volume and character of pollutants related to urban activity entering the storm water conveyance system to the maximum extent practicable, and the establishment of enforcement mechanisms for violation of this chapter, including civil and criminal fines and penalties (CVMC Section 14.20.020). CVMC Section 14.20.120 provides that activities which may result in pollutants entering the storm water conveyance system shall undertake all measures, to the maximum extent practical, to reduce the risk of such discharges. BMPs and other pollution control requirements are required to eliminate or reduce pollutants entering the City's storm water conveyance system (CVMC Section 14.20.120(A)).

- CVMC Section 19.92, et seq. (Public Facilities Financing Plans, Air Quality Improvement Plans, and Water Conservation Plans) delineates the City's Threshold Standards for City facilities and services. This section establishes compliance mechanisms and standards to ensure public facilities, infrastructure, and services will exist, or concurrently be provided, to meet the demands of infrastructure and climate protection generated by new development. CVMC Section 19.92.040 identifies the Thresholds Standards for the maintenance and improvement external facilities and services, including sewer, drainage, water, transportation, police, fire and emergency services, libraries, and parks.

4.12.2.5 Local Regulations - City of San Diego

a. City of San Diego General Plan

The **Public Facilities, Services, and Safety Element** provides the following of policies related to storm water quality:

- **Policy PF-G.1:** Ensure that all storm water conveyance systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board NPDES Permit standards.
- **Policy PF-G.2:** Install infrastructure that includes components to capture, minimize, and/or prevent pollutants in urban runoff from reaching receiving waters and potable water supplies.
- **Policy PF-G.3:** Meet and preferably exceed regulatory mandates to protect water quality in a cost-effective manner monitored through performance measures.
- **Policy PF-G.5:** Identify and implement BMPs for projects that repair, replace, extend or otherwise affect the storm water conveyance system. These projects should also include design considerations for maintenance, inspection, and, as applicable, water quality monitoring.

The **Conservation Element** provides the following policies related to minimizing runoff and related pollutant generation during and after construction activities:

- **Policy CE-E.2:** Apply water quality protection measures to land development projects early in the process- during project design, permitting, construction, and operations- in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows and the contamination of storm water runoff.
- **Policy CE-E.3:** Require contractors to comply with accepted storm water pollution prevention planning practices for all projects.

b. Otay Mesa Community Plan

The **OMCP Public Facilities, Services, and Safety Element** provides the following of policies related to storm water and water quality:

- **Policy 4.3-7b:** Utilize sustainable landscape practices, including water conservation and storm water management.
- **Policy 4.9-2d:** Ensure that all best management practices for storm water are implemented for both public and private properties.

- **Policy 4.9-5:** Integrate storm water Low Impact Development principles as discussed in Section 8.4 and BMPs early in the design process of new development, as well as any redevelopment proposals.

    a. Encourage the use of green roofs and water collection devices to capture rainwater from the building for re-use.

    b. Encourage the use of trees with project proposals to slow storm water runoff to help reduce peak flow.

    c. Minimize on-site impermeable surfaces, such as concrete and asphalt.

    d. Encourage the use of permeable pavers, porous asphalt, reinforced grass pavement (turf-crete), cobblestone block pavement, etc., to detain and infiltrate run-off on-site.

- **Policy 8.4-1:** Manage storm water using Low Impact Development principles for development proposals, and include the most current restrictions/allowances for sustainable development and environmental maintenance.

    a. Consider topography, soils and other site features that are essential when planning for Low Impact Development design.

    b. Incorporate sufficient land areas to locate storm water management facilities early in the development planning process

    c. Include Low Impact Development practices such as bioretention, porous paving, and green roofs, early in the development process to find compatibilities with other goals, such as incorporating landscaped bio-retention features that could also enhance walkability.

c. City of San Diego Municipal Code

The following provisions of the City of San Diego Municipal Code (SDMC) would be applicable to the project under the Annexation Scenario and Annexation Scenario 2b:

- SDMC Section 142.0101 (Grading Ordinance), addresses erosion control and water quality. The Grading Ordinance requires all grading work provide erosion and siltation measures to prevent pollutants from leaving project sites (SDMC Section 142.0146).

- SDMC Section 43.0301 (Stormwater Management and Discharge Control), addresses the maintenance of the water quality of receiving waters. All activities which may result in discharges to the MS4 are required to include BMPs, development of SWPPP and comply with all General Storm Water NPDES Permits (SDMC Section 43.0307).

d. City of San Diego Drainage Design Manual

The primary purpose of the City of San Diego's Drainage Design Manual (City of San Diego 2017) is to provide policies and procedures to secure standardization of drainage design throughout the City. The manual establishes design standards and design procedures for stormwater conveyance and hydrology analysis for flood management and water quality facilities. Pursuant to the Drainage Design Manual, adequate designs for each project should provide for removal of runoff from the roadway or the upstream end of any development and for carrying runoff water from the upstream side of the street to the downstream side.

e. Stormwater Standards Manual

The Stormwater Standards Manual (City of San Diego 2021) provides the requirements for controlling discharges of pollutants in stormwater associated with construction and permanent phases of development project to ensure new development project comply with federal and state permitting. Specifically, the manual provides guidance for complying with, updated on-site post-construction stormwater requirements for Standard Projects and Priority Development Projects (PDPs), and provides updated procedures for planning, preliminary design, selection, and design of permanent stormwater BMPs based on the performance standards presented in the MS4 Permit.

4.12.3 Issue 1: Water Quality

4.12.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to water quality in the City of Chula Vista:

- Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

b. Impact Analysis

Implementation of the project would result in the construction of new impervious surfaces throughout the project site, including building roofs, driveways, streets, concrete sidewalks and walkways, parking areas, and other site improvements. Presently all runoff flows across the site from south to north, and then sheet flows towards the Otay River, eventually draining to San Diego Bay, which is an impaired water body. The increase in impervious areas could lead to increased flows of storm water runoff that could negatively affect water quality in downstream waterbodies during both construction and operation of the project. The City of Chula Vista's Growth Management Element, in concert with CVMC Section 19.09 requires that all new development comply with current local, state, and federal regulations. The project has prepared a SWQMP (see Appendix N) that

identifies best management practices and site design features to ensure that release potentially polluted runoff is avoided to the greatest amount feasible during both project construction and operation.

Temporary Construction Activities

Proposed grading, excavation, and construction activities associated with the project could create an additional source of polluted runoff which could have short-term impacts on surface water quality. Construction activities would include the following: clearing and grading; excavation; stockpiling of soils and materials; and other typical construction activities. Pollutants associated with construction would degrade water quality if they were washed into surface waters. Sediment is often the most common pollutant associated with construction sites because of the associated earth-moving activities and areas of exposed soil. Hydrocarbons such as fuels, asphalt materials, oils, and hazardous materials such as paints and concrete discharged from construction sites could also result in impacts downstream. As discussed in Sections 4.6.3.1.b, pesticides in shallow soils in a former on-site pesticide storage area and total petroleum hydrocarbons (TPH) were identified in on-site soils and extending off-site into the Davies property in the location of proposed remedial grading (see Figure 4.6-4 and Appendix H-3). Absent remediation of the on-site RECs, development of the project could release pesticides and TPH into surface water runoff; however, the levels of these contaminants are below regulatory thresholds for residential land uses and their potential to impact water quality would be managed through site BMPs. Additionally, the site has the potential to contain burn ash due to the proximity of the project site grading to the Shinohara II burn site and the burn ash identified on the Davies property in 2006 (see Sections 4.6.1.2.b and 4.6.3.1.b). Release of these contaminants during grading activities could impact nearby surface water. Finally, debris and trash could be washed into existing storm drainage channels to downstream surface waters. These activities would impact off-site aquatic habitat, upland wildlife, and aesthetic land values.

Because the project proposes land disturbance greater than one acre, a SWPPP is required. The SWPPP is a requirement of the NPDES permit and CGP and would regulate construction BMPs. Specifically, project construction BMPs must comply with the requirements outlined in the CVMC and City of Chula Vista JRMP, which requires the submittal of construction BMP plans prior to project approval. The BMP plans are required to show the ability to prevent pollution discharge regardless of season. Consistent with these requirements, the project prepared a project-level PDP SWQMP identifying a preliminary list of BMPs, which would be implemented as project design features, to minimize disturbance, protect slopes, reduce erosion, and limit or prevent various pollutants from entering surface water runoff. The project's temporary construction BMPs would be installed for the duration of project construction and include the following: all on-site drainage pathways that convey concentrated flows shall be stabilized; run-on from areas outside the project site shall be diverted around work areas to the extent feasible; sediment control measures shall include fiber rolls, gravel bags, or other equally effective BMPs around the perimeter of the project; sediment tracked onto off-site paved areas shall be removed via sweeping at least daily; trash and other debris shall be placed in designated areas at least daily and disposed of in accordance with applicable requirements; materials shall be stored to avoid transport in storm water runoff; and stockpiling shall be covered when chance of rain within next 48 hours in at least 50 percent (see Appendix N).

Project Site and Off-site Improvements within the City of Chula Vista

Overall, implementation of site design, source control, and structural pollutant control measures would preclude any violations of applicable standards and discharge regulations, ensuring that the project would be consistent with the City of Chula Vista's Threshold Standards and would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality. However, absent the remediation of the on- and off-site RECs and safety measures to ensure potential burn ash encountered during construction is properly handled, development of the project could release hazardous materials into the environment, adversely affecting downstream water quality.

Off-site Improvements within the City of San Diego

Implementation of site design, source control, and structural pollutant control measures discussed in this section would generally preclude any violations of applicable standards and discharge regulations, ensuring that grading within the off-site improvement areas within the City of San Diego would not result in an adverse effect on water quality. No RECs were identified within the off-site improvement areas within the City of San Diego; however, any grading 1,000 feet of a solid waste site or on a site with a potential to contain burn ash could result in a release of contaminated soils. adversely affecting downstream water quality.

Long Term Operations

Operation of the project would have the potential to generate pollutants and storm water runoff. For example, sediment discharge due to post-construction areas left bare; nutrients from fertilizers; trash and debris deposited in drain inlets; oil and grease, by products resulting from vehicles; heavy metals; bacteria and viruses; and pesticides from landscaping. The project would comply with City of Chula Vista General Plan policies relating to protecting and improving water quality, including Policies E 2.3 through E 2.5. These policies require new development to utilize feasible methods to minimize storm water discharge. Additionally, new development would be required to implement permanent storm drain BMPs designed consistent with the City of Chula Vista's BMPDM described in Section 4.12.2.4.c. Pursuant to the project's SWQMP, the project would include the following:

- Site Design BMPs: maintenance of natural drainage pathways; conserved natural areas; minimization of impervious surfaces; minimized soil compaction; impervious area dispersion; landscaping with drought tolerant species.

- Source control BMPs: storm drain stenciling or signage; protected trash storage areas, on-site storm drain inlets, landscaping, designated refuge areas, fire sprinkler test water; and drain or wash water.

Consistent with the BMPDM, all PDP projects are required to include structural BMPs for permanent storm water pollution control. A structural BMP is a project design feature that is stationary and permanent specifically developed for the purpose of preventing or reducing stormwater discharge associated with a project. In the post construction conditions, the project site would support three Drainage Management Areas (see Section 4.12.4) that would drain to structural BMPs, identified as BMP #1, BMP #2, and BMP #3 on Figure 4.12-3. BMP #1 and #2 are lined biofiltration basins sized to maximize stormwater retention and pollutant removal. BMP #3 is a compact biofiltration BF-3 type modular wetland unit with an upstream detention vault. This BMP serves to manage water quality while also providing some peak flow detention (see Section 4.12.4). As detailed in the project's Preliminary Hydromodification Management Study (see Attachment 2 of Appendix N), the modular wetland unit would be sized to allow the capture of stormwater flow in the detention vault to detain and capture volume which is then treated before it is able to flow out.

In order to ensure ongoing operation of the project's storm water BMPs, the BMPDM requires the consideration of the source of funding for long-term maintenance of on-site BMPs. It is noted in the project's SWQMP that structural BMPs must be maintained in perpetuity and the City of Chula Vista would be required to confirm a long-term maintenance plan prior to project approval.

c. Significance of Impacts

Temporary Construction Activities

Project Site and Off-site Improvements within the City of Chula Vista

The project would implement project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water quality standards including the NPDES permit, CGP, and City of Chula Vista General Plan policies, plans and threshold standards; however, due to the RECs on-site and within the Davies property, and the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a potentially significant impact to water quality.

Off-site Improvements within the City of San Diego

As no RECs were identified within the off-site improvement areas located within the City of San Diego, impacts to water quality pertaining to pesticides and TPH contaminants would be less than significant. However, the potential to encounter burn ash within the off-site grading areas in the City of San Diego would result in a potentially significant impact to water quality.

Long Term Operations

Implementation of project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water quality standards including the NPDES permit, CGP, and City of Chula Vista General Plan policies, plans, and threshold standards would ensure adverse impacts to water quality resulting from long term operations would be less than significant.

Map Source: Project Design Consultants



DMA SUMMARY

DMA #	DMA TYPE	BMP TYPE	DRAINAGE AREA (Ac)	BMP Footprint (SF)
1	Drains to BMP	BF-1 LINED BIOFILTRATION	2.49	3608
2	Drains to BMP	BF-1 LINED BIOFILTRATION	4.01	4523
3	Drains to BMP	BF-3 COMPACT BIOFILTRATION & DETENTION VAULT	13.80	VAULT: 12736
4	SELF-MITIGATING	-	1.59	-

LEGEND

- DRAINAGE MANAGEMENT AREA #1
- DRAINAGE MANAGEMENT AREA #2
- DRAINAGE MANAGEMENT AREA #3
- DRAINAGE MANAGEMENT AREA #4
- BIOFILTRATION BASIN
- DRAINAGE FLOWPATH
- IMPERVIOUS DISPERSION (IMP TO PERV)
- DETENTION/HYDROMODIFICATION VAULT

0 Feet 80

TABULAR SUMMARY OF IMPERVIOUS DISPERSION

TOTAL IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)
13551	11151

FIGURE 4.12-3

Post Construction Drainage Design

RECON

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d. Mitigation Measures

Impacts would be less than significant related to long term operations; therefore, no mitigation is required. The following mitigation is required to address potential water quality impacts during construction activities.

Project Site and Off-site Improvements within the City of Chula Vista

To mitigate impacts associated with the accidental release of potential burn ash during ground disturbance within the project site and within the off-site components located within the City of Chula Vista under the No Annexation Scenario and Annexation Scenario 2b, mitigation measure **HAZ-CV-1** Community Health and Safety Plan, as detailed in Section 4.6.3.1.d, would be required.

Off-site Improvements within the City of San Diego

To mitigate impacts associated with potential burn ash release during ground disturbance within the off-site improvement areas located within the City of San Diego under the No Annexation Scenario and Annexation Scenario 2b, mitigation measure **HAZ-SD-1** Community Health and Safety Plan, as detailed in Section 4.6.3.2.d, would be required.

e. Significance of Impacts after Mitigation

Implementation of mitigation measure **HAZ-CV-1** requiring preparation and approval of a Community Health and Safety Plan under the oversight of the County of San Diego Local Enforcement Agency prior to ground disturbance would ensure potential release relating to burn ash would be less than significant.

City of San Diego implementation of **HAZ-SD-1** associated with grading within the off-site improvement areas within the City of San Diego would ensure potential release relating to burn ash during grading activities would be less than significant.

4.12.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to water quality:

- Would the proposal result in an increase in pollutant discharge to receiving waters during or following construction, or discharge identified pollutants to an already impaired water body?
- What short-term and long-term effects would the proposal have on local and regional water quality and what types of pre- and post-construction BMPs would be incorporated into the project to preclude impacts to local and regional water quality?

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022) compliance with applicable Water Quality Standards is assured through permit conditions provided

by the Land Development Review - Engineering Group. Adherence to the City of San Diego stormwater standards is thus considered adequate to preclude surface water quality impacts. Because the project does not involve activities that could directly affect groundwater quality (e.g., underground fuel storage tanks or septic systems), potential impacts to groundwater quality are limited to the percolation of project-related surface runoff and associated pollutants (e.g., in pervious portions of the proposed storm drain system). Accordingly, conformance with the City of San Diego stormwater standards is the applicable threshold for both surface and groundwater water resources.

b. Impact Analysis

Similar to the water quality analysis above (Section 4.12.3.1), potential project-related pollutant discharge and water quality impacts are associated with both short-term construction activities related to the project and long-term maintenance and occupation of the project site.

Temporary Construction Activities

Under Annexation Scenario 2a, construction activities could degrade water quality due to the release of pollutants as discussed above (see 4.12.3.1.b) including the possible release of pesticides and TPH as identified in on-site soils and within off-site remedial grading areas. As discussed above, the levels of pesticides and TPH contaminants are below regulatory thresholds for residential land uses. Additionally, the potential to encounter burn ash during grading activities and the possible downstream release could adversely affect water quality. The project stormwater system design would be the same as discussed in Section 4.12.3.1.b. Specifically, under the NPDES permit program, the project would prepare a SWPPP prior to ground-disturbing activities, identifying measures that would be employed during construction to avoid runoff into surface waters. Project temporary construction BMPs would typically include street sweeping, waste disposal, vehicle and equipment maintenance, designated concrete washout area, designated materials storage areas with runoff protection, minimization of hazardous materials, and proper handling and storage of hazardous materials. Typical erosion and sediment control BMPs include silt fences, fiber rolls, gravel bags, temporary desilting basins, velocity check dams, temporary ditches or swales, stormwater inlet protection, and soil stabilization measures. Implementation of construction BMPs would be consistent with the City of San Diego General Plan Policy CE-E.2 requiring water quality protection through all phases of development, including construction.

Additionally, the project would incorporate construction BMPs in accordance with the City of San Diego Stormwater Standards Manual and would be required to comply with all of the City's stormwater standards, including SDMC Sections 43.0301 to 43.0312, which prohibits non-stormwater discharges, including spills, dumping, and disposal of materials other than stormwater to the MS4, and reduces pollutants in discharges from the MS4 to receiving waters, to the maximum extent practicable, in a manner consistent with the CWA.

Notwithstanding implementation of a SWPPP and compliance with applicable water quality requirements during construction, the identification of RECs and the potential for burn ash to be encountered on-site during grading could result in an adverse effect on surface waters and water quality.

Long Term Operations

The project is located within Otay HU 910, impaired primarily for bacteria and trash. As discussed above under Section 4.12.3.1.b, operation of the project could generate pollutants and storm water runoff from sediment discharge, nutrients from fertilizers, trash and debris deposited in drain inlets, oil and grease by products resulting from vehicles, heavy metals, bacteria and viruses, and pesticides from landscaping. To reduce potential pollutant run-off during the life of the project, detention and water quality treatment BMPs are proposed.

Pursuant to City of San Diego General Plan Policy PG-G-1, the project's proposed stormwater system would be consistent with CWA and RWQCB NPDES Permit standards; site design and structural BMPs would conform to City of San Diego Stormwater Standards Manual. The City's Stormwater Standards Manual, which is the jurisdiction-specific BMP manual for the City of San Diego, addresses updated on-site post-construction stormwater requirements for standard projects and priority development projects and provides updated procedures for planning, preliminary design, selection, and design of permanent stormwater BMPs based on the performance standards presented in the MS4 Permit. As detailed in the project SWQMP and Preliminary Hydromodification Plan (see Appendix N, Attachment 2), and shown in Figure 4.12-3, the project would include two lined biofiltration basins sized to maximize stormwater retention and pollutant removal (BMPs 1 and 2), and a compact biofiltration BF-3 type modular wetland unit with an upstream detention vault (BMP 3). These BMPs would manage water quality by detaining polluted storm water runoff prior to release. All proposed BMPs on the project site would be designed per City of San Diego specifications and study recommendations. The proposed water quality BMPs are designed to ensure that retention of runoff would occur and conveyance into the stormwater system would be controlled to the existing runoff rates to prevent downstream erosion as well as on-site erosion. Additionally, the stormwater system would capture, minimize, and/or prevent pollutants in urban runoff from reaching receiving waters (City of San Diego General Plan Policy PF-G.2). The proposed water quality BMPs would require ongoing maintenance by the Homeowners' Association to ensure long-term operations would continue to provide water quality control. Project-specific site design, source control, and treatment control BMPs, Low Impact Development practices, and project design measures, consistent with General Plan policies and City design requirements, would be implemented to ensure project generated pollutants would not degrade local surface water and add to existing impairments. Therefore, runoff from the project site during project operations would not adversely affect surface waters, water quality, or discharge pollutants to an already impaired water body.

c. Significance of Impacts

Temporary Construction Activities

The project would implement project-specific site design, source control, treatment control BMPs consistent with federal, regional, and local water quality standards including the NPDES permit and, CGP, and City of San Diego General Plan policies, plans and standards; however, due to the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a significant impact to water quality.

Long Term Operations

The project would implement project-specific site design, source control, treatment control BMPs consistent with all relevant federal, regional, and local water quality standards including the NPDES permit and CGP and City of San Diego General Plan policies, SDMC, Drainage Design Manual and Stormwater Standards Manual. Water quality impacts associated with post construction operation of the project would be less than significant.

d. Mitigation Measures

Impacts would be less than significant related to long term operations; therefore, no mitigation is required.

To mitigate impacts associated with the accidental release of potential burn ash during grading and construction under Annexation Scenario 2a, implementation of mitigation measure **HAZ-SD-1** Community Health and Safety Plan, as detailed in Section 4.6.3.2.d, would be required.

e. Significance of Impacts after Mitigation

Implementation of mitigation measure **HAZ-SD-1** requiring preparation and approval of a Community Safety Plan prior to ground disturbance and under the oversight of the City of San Diego Local Enforcement Agency would ensure potential release relating to burn ash would be less than significant.

4.12.4 Issue 2: Groundwater

4.12.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to drainage patterns in the City of Chula Vista:

- Would the project substantially decrease ground water supplies or interfere substantially with ground water supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

b. Impact Analysis

The project would not impact ground water sources during construction or operations of the project. Based on the lack of shallow groundwater, it is not anticipated that groundwater would be encountered during construction activities within the project site. Additionally, because stormwater BMPs would be designed to prevent infiltration on-site, the project would not impact groundwater (see Appendix E-1 and Attachment ID of Appendix N). A private domestic water system has been

designed to serve the project's demands (see Section 4.14). No pumping or use of groundwater would occur.

c. Significance of Impacts

The San Diego Basin Plan designates beneficial uses for all surface and groundwaters in the San Diego Region. Groundwater recharge is not identified as a beneficial use for waters within the Otay Hydrologic Unit. Construction activities would not extend below the groundwater table, and no impacts to groundwater quality would result due to treatment of runoff in stormwater BMPs. Additionally, the project would connect to public water system and not utilize groundwater. Therefore, impacts to groundwater would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.12.4.2 Annexation Scenario 2a

a. Thresholds of Significance

Based on the City of San Diego's Significance Determination Thresholds (City of San Diego 2022), impacts related to groundwater would be significant if a project would:

- Result in decreased aquifer recharge**.** There may be significant impacts on hydrologic conditions and well-water supplies because the area available for aquifer recharge is reduced. When a subsurface water source fails to be recharged by rainfall, its volume will be reduced. Reduced groundwater elevation can affect landholders who are dependent on well water, vegetation, and surface water replenishment. In addition, if a project would result in extraction of water from an aquifer, impacts on hydrologic conditions would be significant if there would be a net deficit in the aquifer volume or a reduction in the local groundwater table.

b. Impact Analysis

The analysis of impacts related to groundwater under Annexation Scenario 2a would be the same as the analysis provided in Section 9.12.4.1.b. Groundwater recharge is not a beneficial use assigned to the Otay HU. Under Annexation Scenario 2a, the project would still connect to a public water system for water supply and no groundwater use is proposed. Groundwater was not encountered in boring tests or trenches explored in the project's Infiltration Study (Attachment 1D of Appendix N). Therefore, it was concluded that infiltration of stormwater would not impact groundwater. Additionally, infiltration would not be allowed via the BMPs on-site.

c. Significance of Impacts

The project would connect to public water system and not utilize groundwater. Groundwater recharge would not be adversely affected due to depth of groundwater, the existing slow rate of

infiltration on site; BMP detention design would prevent infiltration on-site per study recommendations. Therefore, impacts to groundwater would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.12.5 Issue 3: Drainage

4.12.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to drainage patterns in the City of Chula Vista:

- Would the project substantially alter the existing drainage pattern of the site or area; including through the alteration of the course of a stream or river, in a manner, which would:
    - Result in substantial erosion or siltation on – or off-site.
    - Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on – or off-site.
    - Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.
    - Impede or redirect flood flows.

b. Impact Analysis

Substantial Erosion or Siltation On- or Off-site

Project site drainage currently flows from south to north via sheet flows towards the Otay River and via an existing natural channel along the eastern edge of the property. Hydromodification is the alteration of the natural flow of water through a landscape. Failure to adjust for hydromodification in project designs could result in increased impairment of downstream waterbodies due to increased erosion and sedimentation as flows increase or drainage patterns are changed. Construction and operation of the project could result in changes to the volume and/or velocity of runoff which flows from the project site resulting in increased erosion or siltation.

Temporary Construction Activities

Project grading, excavation, and construction activities could increase the potential for erosion and siltation. As discussed above, a SWQMP was prepared for the project providing a preliminary list of BMPs as project design features to be employed during temporary construction activities. These measures are consistent with the requirements of the MS4 Permit and CGP and City of Chula Vista

storm water standards. The implementation of these features would avoid erosion and water quality impacts by minimizing site disturbance during construction.

Long Term Operations

A majority of the approximately 23.77-acre project site (approximately 21 acres) would be disturbed associated with development of the site. Additional grading within off-site improvement areas needed to provide site access, secondary access and remedial grading may also affect drainage patterns. Approximately 13 acres total would ultimately be developed with impervious surfaces, which could increase runoff and potentially result in new or the worsening of existing erosion due to increased volume and velocity of storm water runoff. In the post construction conditions, the project runoff would continue to discharge to the north via brow ditches and piped storm drains to convey the run-on. Specific proposed drainage improvements include a private storm drain system to convey drainage. The eastern run-on will enter a new reinforced concrete storm drain pipe and would take the high flows through the site to out-let in the north center outfall of the project. A low flow splitter would be constructed to maintain flow through the existing flow path. A small wall parallel to the biofiltration basin would be installed to ensure the run-on flow does not enter the project site. This area was designed to not commingle the upstream run-on and allow a portion of the channel to remain natural (see Appendix N). The proposed drainage improvements including private storm drains collecting rooftop and surface drainage is shown in Figure 4.12-3.

Pursuant to state and local regulations, including the NPDES and the City of Chula Vista BMPDM, the project includes development of a hydromodification management plan (see Attachment 2 of Appendix N). The project site was identified to contain three Drainage Management Areas that drain to BMPs. BMPs and water quality management is discussed under Section 4.12.3. In summary, the project would continue to drain to the south where the permanent BMPs (two lined biofiltration basins and a detention vault upstream of a modular wetland unit) would temporarily store the increased runoff, allowing saturation, before release and slowing increased project runoff.

The Modified Rational Method was used to determine the 100-year storm flow for the design of the storm system and the Advanced Engineering Software Rational Method Program was used to perform the hydrologic calculations. This method for calculating existing and proposed conditions peak storm flows is consistent with both the City of Chula Vista Subdivision Manual and County of San Diego Hydrology Manual (see Appendix N). Under the Rational Method, existing and proposed conditions were calculated to determine flow rates consistent with the 100-year storm event (Q100). The 100-year, 6-hour peak storm events would be the top contributing factor to the potential of substantial erosion and siltation on-site. Flood control facilities would be required to be implemented as needed to control increases in flow and velocities. Hydromodification mitigation consists of managing the "low flows" and requires some storage for the Design Capture Volume. Hydromodification management facilities can also provide additional detention for flood control of the peak flows. The detention vault would detain flows for the 100-year storm event.

As detailed in Appendix N, under post-development conditions, the permanent BMPS, including the detention vault, would allow the project to decrease runoff volumes compared to the existing condition. The proposed BMPs are placed to catch the post-developed drainage flows and are adequately sized to store anticipated runoff before the drainage outlets to the proposed private storm drains that would discharge and sheet flow north just south of the Otay River.

Conclusion

Overall, the proposed drainage design would ensure that construction and operation of the project would not alter the drainage patterns in a manner which could result in erosion or siltation, increase volume and velocity of run-off, and impeded existing drainage flows. The project would adhere to all relevant regulations, including City of Chula Vista policies intended to ensure reliable drainage facilities and reduce ill effects of storm water run-off. The project would include lined biofiltration basins and a detention vault upstream of a modular wetland unit design consistent with City of Chula Vista BMPDM relating to storm water and drainage flows and ensuring compliance with federal and state permits. Additionally, the project would be consistent with the City of Chula Vista Growth Management Element requiring that storm water flows and volumes comply with current local, state, and federal regulations. The project's drainage impacts related to increased erosion and siltation would be less than significant.

Increase the Rate of Surface Runoff in a Manner that Would Cause Flooding

As described above, the project would maintain the existing drainage pattern, and runoff volumes would be reduced compared to the existing condition. The project would not increase the rate of runoff that could cause flooding.

Exceed Storm Water System

Generally, drainage facilities including storm drains, culverts, inlets, channels, curbs, roads, or other such structures are designed to prevent flooding by collecting storm water runoff and directing flows to either the natural drainage course and/or away from urban development. The City of Chula Vista's GMP establishes the requirement for new development to be designed to ensure adequate drainage facilities (see also CVMC Section 19.92.040). If drainage facilities are not adequately designed, built, or properly maintained, new runoff could exceed the capacity of the existing storm water system. As discussed above, implementation of the project, including the development of new impervious surfaces could have the potential to alter drainages and hydrology, during construction and post-construction activities; however, with implementation of proposed stormwater and drainage facilities, runoff volumes and velocity of storm water runoff would not increase.

The City of Chula Vista strives to maintain existing public facilities to meet current and future demand, and to comply with federal, state, and local requirements (Public Facilities and Services Element Section 3.1.1). The project includes a General Plan Amendment to redesignate the project site from Open Space to Specific Plan-Residential Medium. Therefore, construction of the project has not been anticipated by the current City of Chula Vista General Plan and could result in an increase in the City's and service district's ability to schedule and construct needed improvements.

The project would be required to comply with the City of Chula Vista's General Plan policies, including GM 1.1 and PFS 1.4, which ensures that new developments do not overload existing facilities. Specifically, as previously discussed, the project would be required to minimize its storm water impacts and provide necessary on-site and off-site improvements to storm water runoff and drainage facilities. The project includes site design, source control, and structural pollutant control measures, including two lined biofiltration basins and a detention vault upstream of a modular wetland unit design consistent with City of Chula Vista BMPDM which would reduce runoff volume

and velocity. Additionally, the project has prepared a comprehensive Drainage Study (see Attachment 5 of Appendix N). After development, runoff would maintain its northern flow pattern and would be directed into the proposed BMPs which would temporarily store runoff, allowing percolation, before release, thereby slowing increased project runoff. With the proposed drainage improvements on-site, the project would not exceed the capacity of storm water drainage system capacity.

Impede or Redirect Flood Flows

As previously discussed, the project would maintain the existing northerly drainage flow and the existing drainage located along the eastern edge of the site would be retained. The drainage design has been designed to allow for continued flows through the eastern drainage. As a result, the project would not impede or redirect flows. The 100-year floodplain is located north of the project site, outside of the parcel boundaries based on FEMA approval of a LOMA (see Figure 4.12-1). Flows from the project site toward the Otay River would continue after development. While trails are proposed within the 100-year flood zone, these improvements require no changes to the existing grade and would not affect flood flow. Impacts associated with impeding or redirecting flood flows would be less than significant.

c. Significance of Impacts

Project construction and operation would not substantially alter existing drainage patterns resulting in erosion or siltation, increased rates of runoff, exceeded storm water capacity, or impedance of flood flows. The project includes construction, site design, source control, and structural pollutant control measures, including two biofiltration basins and a modular wetland unit in combination with a detention vault. Storm water runoff flows would be slowed, treated, and released to the Otay River. The project's SWQMP has demonstrated compliance with all federal, regional, and local regulations to ensure that the project complies with the MS4 Permit and provides adequate drainage facilities to support the project. Impacts related to drainage patterns would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.12.5.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following issue questions related to drainage:

- Would the project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?
- Would the project result in substantial increase in impervious surfaces and associated increased runoff?

The City of San Diego's Significance Determination Thresholds (2022) identify potentially significant impacts related to drainage if a project would:

- Result in modifications to existing drainage patterns. There may be significant impacts on downstream properties and/or environmental resources if drainage patterns are changed. Projects which, when identified in a drainage study would cause adverse impacts on downstream properties or environmental resources as a result of a change in the drainage pattern would result in a significant impact.

- Grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25 percent grade, and would drain into a sensitive water body or stream. There may be significant impacts on stream hydrology if uncontrolled runoff results in erosion and subsequent sedimentation of downstream water bodies.

b. Impact Analysis

The analysis of impacts related to drainage under Annexation Scenario 2a would be the same as the analysis provided in Section 4.12.5.1.b. The project would result in grading of more than one acre of land; construction and operation of the project could result in changes to the volume and/or velocity of runoff resulting in increased erosion or siltation and alteration of on- and off-site drainage patterns.

Consistent with the City of San Diego General Plan and SDMC, run-off during construction activities would be minimized through implementation of BMPs recommended in the project SWPPP, as requirement of the NPDES permit. As detailed above, construction BMPs would typically include street sweeping, waste disposal, vehicle and equipment maintenance, designated concrete washout area, designated materials storage areas with runoff protection, minimization of hazardous materials, and proper handling and storage of hazardous materials. Additionally, as detailed in the Preliminary Hydromodification Study (see Attachment 2 of Appendix N), the hydromodification management plan includes permanent BMPs (two lined biofiltration basins and a detention vault upstream of a modular wetland unit) would temporarily store the increased runoff, allowing saturation, before release. The design of the BMPs is consistent with the City of San Diego Drainage Design Manual (City of San Diego 2017). As detailed in Section 4.12.5.1.b, the runoff volumes and velocities exiting the site would decrease compared to the existing condition.

Under Annexation Scenario 2a, the project drainage design would be the same as discussed in Section 4.12.5.1.b. Through implementation of the comprehensive drainage plan as shown in Figure 4.12-3, runoff would be directed into the proposed BMPs which allow temporarily storage and saturation before release via proposed storm drains that would discharge via sheet flow north of the Otay River. The post-development reductions in runoff volume coupled with the project's adherence to applicable local regulations and policies as demonstrated in the project's SWQMP (see Appendix N), demonstrates the project would not result in increased flooding on- or off-site and would not modify existing drainage patterns.

c. Significance of Impacts

Project construction and operation would not substantially alter existing drainage patterns resulting in erosion or siltation, increased rates of runoff, exceeded storm water capacity, or impedance of flood flows. The project includes construction, site design, source control, and structural pollutant control measures, including two biofiltration basins and a Modular Wetland Unit in combination with a detention vault. Storm water runoff flows would be slowed, treated, and released via sheet flow just north of the Otay River. The project would adhere to all federal, regional, and local regulations, including the City of San Diego Drainage Design Manual and SDMC regulations ensure that the project complies with the MS4 Permit. Impacts related to drainage patterns would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.12.6 Issue 4: Flood Hazard

4.12.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to pollutant release in the City of Chula Vista:

- In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

b. Impact Analysis

FEMA Floodplain

The Pacific Ocean is located approximately 14 miles from the project site. Therefore, there is no potential for impacts relating to tsunamis. As shown in Figure 4.12-1, a small portion of the project site was previously mapped as being located within the 100-year floodplain; however, FEMA approval of a LOMA (see Appendix O) documented that in the existing condition the project site is not subject to inundation in a 100-year flood based on actual site elevations. The LOMA demonstrated that the existing property elevations within the project site are above the Zone AE special flood hazard area base flood elevations for the Otay River. As detailed in the LOMA, a comparison of floodplain base elevations confirmed that the lowest point on the site along the northern property line is 95.7 AMSL, three feet above the highest floodplain elevation at the northwest corner of the site of 92.7 AMSL. This comparison of the worst-case scenario of the lowest elevation on the existing property is three feet higher than the highest floodway elevation at any point on site indicating that the entire site can be removed from the special flood hazard area mapping. In response to the LOMA, FEMA issued a LOMA Determination Document, dated May 22,

2020, which certified the removal of the project site from the flood zone (see Appendix O). Therefore, the entire property was removed from the 100-year floodplain limits.

Potions of the project site are located within a 500-year floodplain; however, after project development, the elevations of the site would be raised in relation to the Otay River, bringing the site out of any area that would be subject to flooding. CVMC regulations prohibiting development of lands that are subject to potential flood hazards, unless adequate evidence is provided that demonstrates that such proposals would not be adversely affected by potential flood hazards (CVMC Section 14.18, et al.).

Minor remedial grading north of the project parcel within an area subject to flooding would be conducted to remove fill materials and ensure a stable slope. Some soils contaminated with petroleum hydrocarbons were identified within that area; however, the levels would be below regulatory thresholds for residential land uses. Although this soil contamination is part of the existing condition, it would be managed by BMPs as part of the project to avoid release of pollutants in the event of flooding.

Additionally, all development would be required to adhere to the City of Chula Vista General Plan policies including the assurance that potential flood damage would be minimized. Therefore, adherence to FEMA processes and CVMC requirements for flood safe measures, and General Plan policies would ensure that future development would not be subject to flooding and therefore, pollutants would not be released due to project inundation.

Dam Inundation

As shown in Figure 4.12-2, the project is within the Dam Inundation Zone associated with the Upper and Lower Otay Dam located approximately 7.5 miles from the project site. On-site flooding could occur because of nearby dam failure. Dams typically fail due to overtopping by reservoir water during heavy rainfall episodes, structural damage, and earthquake-related hazards. The Lower Otay Dam has a water storage capacity of 47,066.9 acre-feet. Water levels are monitored weekly (City of San Diego 2023). Inundation due to dam failure is considered unlikely because of state requirements that large dams receive seismic upgrades and routine inspections for safety. In California, the supervision, regulation, and inspection of all large dams that are not federally owned is the responsibility of the Division of Safety of Dams. They conduct periodic inspections of dams to identify deficiencies.

The MJHMP identifies dam failure risk levels based on dam inundation map data. A dam was considered a high hazard if it stores more than 1,000 acre-feet of water, is higher than 150 feet tall, has potential for downstream property damage, and potential for downstream evacuation. Ratings are set by FEMA and confirmed with site visits by engineers. Most of the dams in San Diego County are greater than 50 years old, are characterized by increased hazard potential due to downstream development, and increased risk from structural deterioration and inadequate spillway capacity.

Although the project is located within a dam inundation zone, the project would not introduce any significant source of pollutants on-site that would be released in the event of a dam failure.

c. Significance of Impacts

The project site is outside of the FEMA 100-year floodplain but is located within a dam inundation zone. While in proximity to potential inundation risk from failure of the Upper and Lower Otay Dam, through state-mandated routine inspections, the risk of dam failure is low. Further, the residential project would not introduce any significant source of pollutants on-site that would be released in the event of inundation; therefore, impacts associated with the release of pollutants as a result of inundation would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.12.6.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego's Significance Determination Thresholds (2022) identify potentially significant impacts related to drainage if a project would:

- Impose flood hazards on other properties or development, or result in substantial changes to stream flow velocities or quantities; or
- Impose flood hazards on other properties or development, or be proposed to develop wholly or partially within the 100-year floodplain identified on the FEMA maps.

b. Impact Analysis

The analysis of impacts related to pollutant release within a flood zone under Annexation Scenario 2a would be the same as the analysis provided in Section 4.12.6.1.b.

The project site is not subject to inundation in a 100-year flood based on actual site elevations (see, Section 4.12.6.1.b and Appendix O). With respect to changes in stream flow velocities or quantities, under post-development conditions, the permanent BMPs, including the detention vault, would allow the project to decrease runoff volumes compared to the existing condition. The proposed BMPs are placed to catch the existing post-developed drainage flows and are adequately sized to store anticipated runoff before the drainage outlets to the proposed private storm drains that would discharge and sheet flow north just south of the Otay River. Refer to Section 4.12.5.1.b above for additional details. Overall, the project would not result in changes in flood flows or develop within a flood area.

c. Significance of Impacts

The project site is outside of the FEMA 100-year floodplain but is located within a dam inundation zone. While in proximity to potential inundation risk from failure of the Upper and Lower Otay Dam, through state-mandated routine inspections, the risk of dam failure is low. The project would not

increase flow velocity or quantities that would affect other properties and impacts related to flooding would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.12.7 Issue 5: Conflict with Water Quality Plans

4.12.7.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to pollutant release in the City of Chula Vista:

- Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

b. Impact Analysis

The project is not located within a sustainable groundwater management plan area. Furthermore, the project would not impact the quality or quantity of groundwater recharge as detailed in Section 4.12.4, Issue 2, Groundwater. The project would comply with all relevant water quality management plans. A summary of project compliance is as follows:

- The project area is located within the San Diego Bay Watershed Management Area which is subject to management under the San Diego Bay WQIP. As detailed under Section 4.12.2.3.a, the Watershed Management Area/Otay HU has been identified for impairment due to bacteria and trash (see Table 4.12-1). WQIP strategies for improving these priority conditions include implementing plans to revise current facilities-based inspection program to focus on trash pollutant-generating activities, collect additional information about trash management BMPs from businesses, and provide additional education and enforcement as needed. The project would be consistent with the WQIP because it would remove existing issues with homeless encampments, which provide an ongoing source of trash and pollutants to the San Digo Bay watershed. Furthermore, as detailed in Section 4.12.3.1.b, the project includes a number of BMPs and water quality treatment features that would ensure the project does not contribute to bacteria and trash within the watershed.

- CWA NPDES Permit: The NPDES program establishes a comprehensive water quality program to manage urban stormwater and minimize pollution of the environment to the maximum extent practicable. As discussed above, the project prepared a SWQMP which outlines preliminary construction BMPs that would be implemented as project design features, to minimize disturbance, protect slopes, reduce erosion, and limit or prevent various pollutants from entering surface water runoff. Implementation of these BMPs would

ensure that construction activities would not result in polluted runoff from the project site consistent with the requirements of NPDES permit. A SWPPP would be prepared to finalize project-specific construction BMPs and implementation of the SWPPP would mitigate pollutant runoff during construction activities.

- City of Chula Vista General Plan: The Public Facilities, Services, and Safety Element sets out policies related to storm water quality. As detailed above, the project would comply with the City of Chula Vista General Plan policies relating to protecting and improving water quality, including Policies E 2.3 through E 2.5. These policies require new development to utilize feasible methods to minimize storm water discharge. The inclusion of the project's site-specific storm water BMPs is consistent with the objectives of the General Plan.

- JRMP: The JRMP provides presents strategies to reduce the discharge of pollutants into the storm drain system. The project's BMPs demonstrate compliance with the requirements outlined in the JRMP which requires that BMPs plans are able to prevent pollution discharge regardless of season.

- BMPDM: The BMPDM provides guidance for project compliance with the 2013 MS4 Permit. The BMPDM specifically addresses on-site post-construction storm water requirements. The proposed permanent BMPs are consistent with the BMPDM.

- CVMC: The CVMC contains regulations focused on the water quality. Specifically, BMPs and other pollution control requirements are required to eliminate or reduce pollutants entering the City of Chula Vista's storm water conveyance system (CVMC Section 14.20.120[A]). As detailed above, the project is consistent with the CVMC including the inclusion of construction and permanent BMPs.

Therefore, the project would not conflict with a water quality control plan or a sustainable groundwater management plan.

c. Significance of Impacts

The project would be consistent with all relevant water quality control plans. Impacts related to conflicts or obstruction with such plans would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.12.7.2 Annexation Scenario 2a

a. Thresholds of Significance

In the absence of specific City of San Diego Significance Determination Thresholds, this analysis relies on the CEQA Guidelines, Appendix G questions as guidance for determining the significance of impacts related to conflicts with water quality plans:

- Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

b. Impact Analysis

The project is not located within a sustainable groundwater management plan; however, the project is located within the San Diego Bay Watershed and is subject to the San Diego Bay WQIP. Refer to Section 4.12.7.1.b for a discussion of project consistency with the San Diego Bay WQIP.

c. Significance of Impacts

The project would be consistent with all relevant water quality control plans. Impacts related to conflicts or obstruction of such plans would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.13 Public Services and Facilities

This section analyzes potential impacts that could occur related to public services. Public services are those functions that serve residents on a communitywide basis including fire protection and emergency services, police protection, schools, parks, and libraries. Recreation is also included herein as the provision of adequate recreational facilities is an integral part of the public services and facilities provided by both the City of Chula Vista and the City of San Diego. The impact analysis is based on information provided in letters prepared by service providers, local service providers' websites, findings from approved planning documents, and technical reports prepared for the Nakano Project (project) including the Nakano Fire Protection Plan prepared by Dudek (Appendix I), the Nakano Public Facilities Financing Plan (PFFP) prepared by Leppert Engineering Corporation to meet requirements of the City of Chula Vista (Appendix P-1), and the Nakano Plan for Services (Appendix P-2) prepared by Leppert Engineering Corporation to address City of San Diego requirements. RECON Environmental, Inc. contacted the Chula Vista Elementary School District, the Sweetwater Union High School District, and the San Ysidro School District to determine availability of these school districts to serve the project site. School district correspondence and responses are included in Appendix Q. Correspondence from the City of San Diego, Development Services Department, Engineering Division, Water and Sewer Section indicating availability to serve the project is included as (Appendix R).

As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.13.1 Existing Conditions

4.13.1.1 City of Chula Vista

a. Fire Protection and Emergency Services

Fire protection for the City of Chula Vista is provided by the Chula Vista Fire Department (CVFD). The CVFD offers the following services: fire operations and suppression, emergency medical services, hazardous materials response, community emergency response team, rescue services, fire protection, fire inspections, public education, plan checking, and disaster preparedness. There are currently 10 fire stations throughout the City of Chula Vista. During a typical 24-hour shift, there are 34 line firefighters and two battalion chiefs on constant duty spread among the 10 fire stations. Each station has a captain, engineer, and one firefighter.

The project site is currently within the jurisdiction of the City of Chula Vista; however, San Diego Fire-Rescue Department (SDFRD) Fire Station 6 would typically provide an initial response to the project site because it offers the closest response time. CVFD Stations 9 and 5 and SDFRD Station 29

are also available to provide a secondary response, if needed. Figure 4.13-1 illustrates the station locations and Table 4.13-1 provides a summary of the locations, equipment, and staffing for the four closest fire stations.

Table 4.13-1
Closest Responding Stations Summary

Station	Location	Equipment	Staffing
SDFRD Station 6	693 Twining Avenue, San Diego, CA 92154	Engine 6	3-person Engine
CVFD Station 9	1410 Brandywine Avenue, Chula Vista, CA 91911	Engine 59	3-person Engine
SDFRD Station 29	198 West San Ysidro Boulevard, San Diego, CA 92173	Engine 29, Truck 29, Brush 29, Paramedic 29	3-person Engine
CVFD Station 5	341 Orange Avenue, Chula Vista, CA 91911	Engine 55	3-person Engine
SOURCE: Appendix I.			

According to the Growth Management Oversight Commission (GMOC) Fiscal Year (FY) 2020 Annual Report, the City of Chula Vista standards for Fire and Emergency Services, which is seven minutes in 80 percent of the cases, was met (City of Chula Vista 2021).

b. Police Protection

Police protection for the project area is provided by the Chula Vista Police Department (CVPD) from its existing police facility located at 315 Fourth Avenue in downtown Chula Vista. The CVPD has 283 sworn employees and 120 civilian employees (City of Chula Vista 2023). Staffing includes a police chief, captains, lieutenants, sergeants, agents, and officers. At least one patrol car serves each beat in the City of Chula Vista 24 hours a day. As Chula Vista continues to grow and the demand for police services increases, the CVPD regularly evaluates beat structure. In addition, the CVPD participates in regional mutual aid agreements which allow supporting agencies to aid in emergency situations. Due to the project's location in relation to City of San Diego roadways and jurisdiction, the area is primarily served by the San Diego Police Department (SDPD) due to its ability to provide the fastest response.

The CVPD average police response times are summarized in Table 4.13-2.

Map Source: Dudek

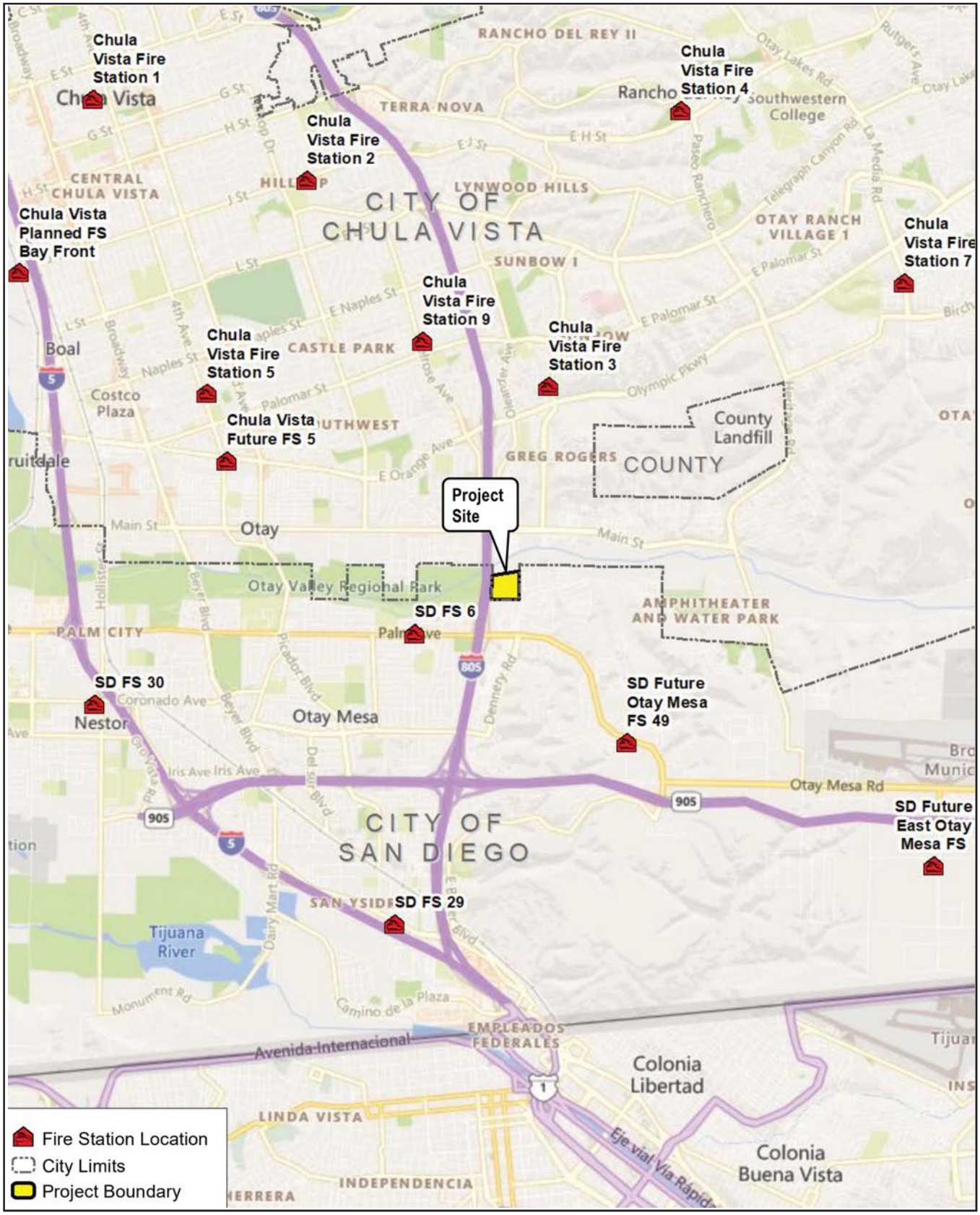


FIGURE 4.13-1
Fire Station Locations

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Table 4.13-2
Average Police Response Times (Fiscal Year 2020)

Category Time	Call Count	Response Time
Priority 1 – Emergency Calls *Life-threatening calls; felony in progress; probability of injury (crime or accident); robbery or panic alarms; urgent cover calls from officers*	471	6:14 minutes
Priority 2 – Urgent Calls *Misdemeanor in progress; possibility of injury; serious non-routine calls (domestic violence or other disturbances with potential for violence), and/or burglar alarms.*	14,943	14:47 minutes

SOURCE: City of Chula Vista 2021.

Priority 1 calls are defined as emergency calls, which include the following: life threatening calls, felony in progress, probability of injury (crime or accident), robbery or panic alarms, and/or urgent cover calls from officers. Priority 2 calls are defined as urgent calls, which include the following: misdemeanor in progress, possibility of severe injury, serious non-routine calls (domestic violence or other disturbances with potential for violence), and/or burglar alarms.

Standard police response time throughout the City of Chula Vista is to respond to 81 percent of Priority 1 emergency calls within 7 minutes 30 seconds and maintain an average response time of 6 minutes or less for Priority 1 calls. For Priority 2 urgent calls, the police units must respond to all Priority 2 calls within 12 minutes or less. As shown in Table 4.13-2, and as noted in GMOC FY 2020 Annual Report, the City of Chula Vista standard for police services was not met (City of Chula Vista 2021).

c. Parks/Recreational Facilities

The City of Chula Vista's Parks and Recreation system consists of a variety of park types which are categorized as regional (Otay Valley Regional Park [OVRP]), community, neighborhood, mini, special purpose, town square, and urban park. Additional recreation facilities include community centers, gymnasiums, aquatic centers, and a senior center. Overall building area of recreation facilities is approximately 211,000 square feet (City of Chula Vista 2018). Overall acres of City of Chula Vista parkland are 726.23 acres (City of Chula Vista 2021). City of Chula Vista parks located within one mile of the project site are located north of Otay River and include Los Niños Park and Valle Lindo Park (Figure 4.13-2).

The City of Chula Vista Parks and Recreation Master Plan (see Section 4.13.2.3(g)) sets the threshold for requiring a level of service standard of a minimum ratio of three acres of public parkland per 1,000 population (City of Chula Vista 2018). Pursuant to the GMOC FY 2020 Annual Report, the Threshold Standard for parkland has not been met, with a deficit of 101.25 acres citywide. However east of Interstate 805, there is an excess of 117.99 acres.

Image Source: NearMap (flown May 2023)



Project Boundary
Off-site Improvements
1-mile Radius
Trail

Local Park
Regional Park
Open Space
Planned Dennery Park

0 Feet 1,800

FIGURE 4.13-2
Park and Recreational Facilities

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d. Libraries

The City of Chula Vista operates three library facilities: the South Chula Vista Branch Library, Otay Ranch Branch Library, and the Civic Center Branch Library (City of Chula Vista 2005). The South Chula Vista Branch Library, located at 389 Orange Avenue, is the closest City of Chula Vista library to the project site (approximately 2.5 miles west) and consists of approximately 38,000 square feet (City of Chula Vista 2011). The Civic Center Branch Library is located at 365 F Street (approximately 7.2 miles northwest of the project site) and is the largest library facility within the City of Chula Vista, consisting of a two-story, 55,000-square-foot building. It also has a 152-seat auditorium and a 26-seat conference room and serves as a multi-use facility including storage for the Chula Vista Heritage Museum and limited exhibition space.

Pursuant to the City of Chula Vista Public Library (CVPL) Strategic Facilities Plan, the threshold standards for the provision of library facilities are 500 square feet of library space per 1,000 population. The current library space square footage is 354 gross square feet per one thousand residents, which is 146 gross square feet per one thousand residents below the threshold standard. Pursuant to the GMOC FY 2020 Annual Report, the Threshold Standard for libraries has not been met. A new full-service library is planned for eastern Chula Vista; however, even with its construction there would still be a deficit in required square feet (City of Chula Vista 2021).

4.13.1.2 City of San Diego

a. Fire Protection and Emergency Services

The SDFRD provides fire protection services throughout the City of San Diego, providing emergency medical, and rescue services from 51 stations. The SDFRD documented 158,373 total incidents for 2020, generated by a citywide (San Diego) service area total population of approximately 1,410,000 persons. The City of San Diego's per capita annual call volume is approximately 112 calls per 1,000 persons (Appendix I).

Due to the project's site separation from the City of Chula Vista by the Otay River, the project site is more accessible from the City of San Diego and the SDFRD would be the closest responder. As shown in Figure 4.13-1 and summarized Table 4.13-1, SDFRD Station 6 is the closest station and would typically be the unit selected for response to the project site (see Appendix I). As detailed under Section 4.13.1.1.a, the additional fire stations, including CVFD Stations 5 and 9 and SDFRD Station 29, would remain available to provide secondary response to the project site.

b. Police Protection

The project area is serviced by Beat 725 of the SDPD's Southern Division. The Southern Division police station is located approximately 3.2 miles southwest of the project site at 1120 27th Street, in the Otay Mesa community. Southern Division is currently staffed with 68 sworn personnel. The current patrol strength at Southern Division is 57 uniformed patrol officers. Southern Division provides police services to the following communities: Tijuana River Valley, San Ysidro, Otay Mesa, Border, Egger Highlands, Nestor, Otay Mesa West, Palm City, and Ocean Crest. The SDPD has mutual aid agreements with all other law enforcement agencies in San Diego County.

The SDPD currently uses a five-level priority dispatch system, which includes, in descending order: priority E (Emergency), One, Two, Three, and Four. The calls are prioritized by the phone dispatcher and routed to the radio operator for dispatch to the field units. The priority system is designed as a guide, allowing the phone dispatcher and the radio dispatcher discretion to raise or lower the priority as necessary based on information received. Priority E and priority one calls involve serious crimes in progress or a potential for injury. Priority two calls include vandalism, disturbances, and property crimes. Priority three calls include calls after a crime has been committed such as cold burglaries and loud music. Priority four calls include parking complaints or lost and found reports. The SDPD goals and average response times are summarized in Table 4.13-3.

Table 4.13-3
San Diego Police Department Call Priorities and Response Times

Call Priority	City of San Diego Target Response Time Goals	City of San Diego Average Response Times	Beat 725 Average Response Time (2020)
Priority E – Imminent threat to life	Within 7 minutes	6.5 minutes	8.7 minutes
Priority 1 – Serious crimes in progress	Within 14 minutes	34.6 minutes	28.9 minutes
Priority 2 – Less serious crimes with no threat to life	Within 27 minutes	133.1 minutes	71.6 minutes
Priority 3 – Minor crimes/ requests that are not urgent	Within 80 minutes	256.1 minutes	110.0 minutes
Priority 4 – Minor requests for police service	Within 90 minutes	262.4 minutes	124.7 minutes
SOURCE: Appendix P-2; Letter dated 12/12/23 from Brian Schimpf, Police Office II (SDPD Operational Support).			

The San Diego Police Department does not staff individual stations based on ratios of sworn officers per 1,000 population ratio. The goal citywide is to maintain 1.48 officers per 1,000 population ratio.

c. Parks/Recreation Facilities

The City of San Diego has over 38,930 acres of park and open space lands that offer a diverse range of recreational opportunities. The City of San Diego provides three use categories of parks and recreation for residents and visitors: population-based, resource-based, and open space. Population-based parks (commonly known as Neighborhood and Community parks), facilities and services are in close proximity to residential development and are intended to serve the daily needs of the neighborhood and community (City of San Diego 2021a). Parks within one mile of the project site within the City of San Diego include the Ocean View Hills Park, Hidden Trails Park, and Palm Ridge Park. An additional planned park, Dennery Park, would be located east of the project site with trail connectivity via the OVRP trail network.

The City of San Diego Parks and Recreation Master Plan (adopted August 2021) requires a level of service park standard of 100 Recreation Value Points per 1,000 population. This project would satisfy population-based park requirements by paying the Citywide Park Development Impact Fees (DIFs).

d. Libraries

The City of San Diego operates a central library located in downtown San Diego and 35 branch libraries in neighborhoods throughout the City. The Central Library functions as the hub of the library system, and all branches are vitally linked to it for the delivery of their services. Not only does the Central Library serve as the headquarters for the system, but it also supplements the limited collections which branch libraries can offer (City of San Diego 2023).

As shown in Figure 4.13-3, the closest libraries to the project area are the Otay Mesa-Nestor Library located at 3003 Coronado Avenue and the San Ysidro Library located at 4235 Beyer Boulevard. The Otay Mesa-Nestor Library originally opened in 1986 and was renovated and expanded to 15,000 square feet in 2006. The library features a large community room, a conference room, and computer lab. The new 15,000-square-foot San Ysidro Library was designed with input from the community and opened in 2019.

4.13.1.3 School Facilities

The project is in the Chula Vista Elementary School District (CVESD). The CVESD is a district that provides kindergarten through sixth-grade schooling to approximately 298,000 residents in the City of Chula Vista, community of Bonita, community of Sunnyside, and City of San Diego. The CVESD serves approximately 29,600 students in 49 elementary schools (CVESD 2020).

The project site is also in the Sweetwater Union High School District (SUHSD). The SUHSD operates middle schools and high schools, as well as adult and alternative schools in the cities of Chula Vista, Imperial Beach, National City, and San Diego. Both the CVESD and SUHSD reported adequate facilities to accommodate student demands through 2025 (City of Chula Vista 2021).

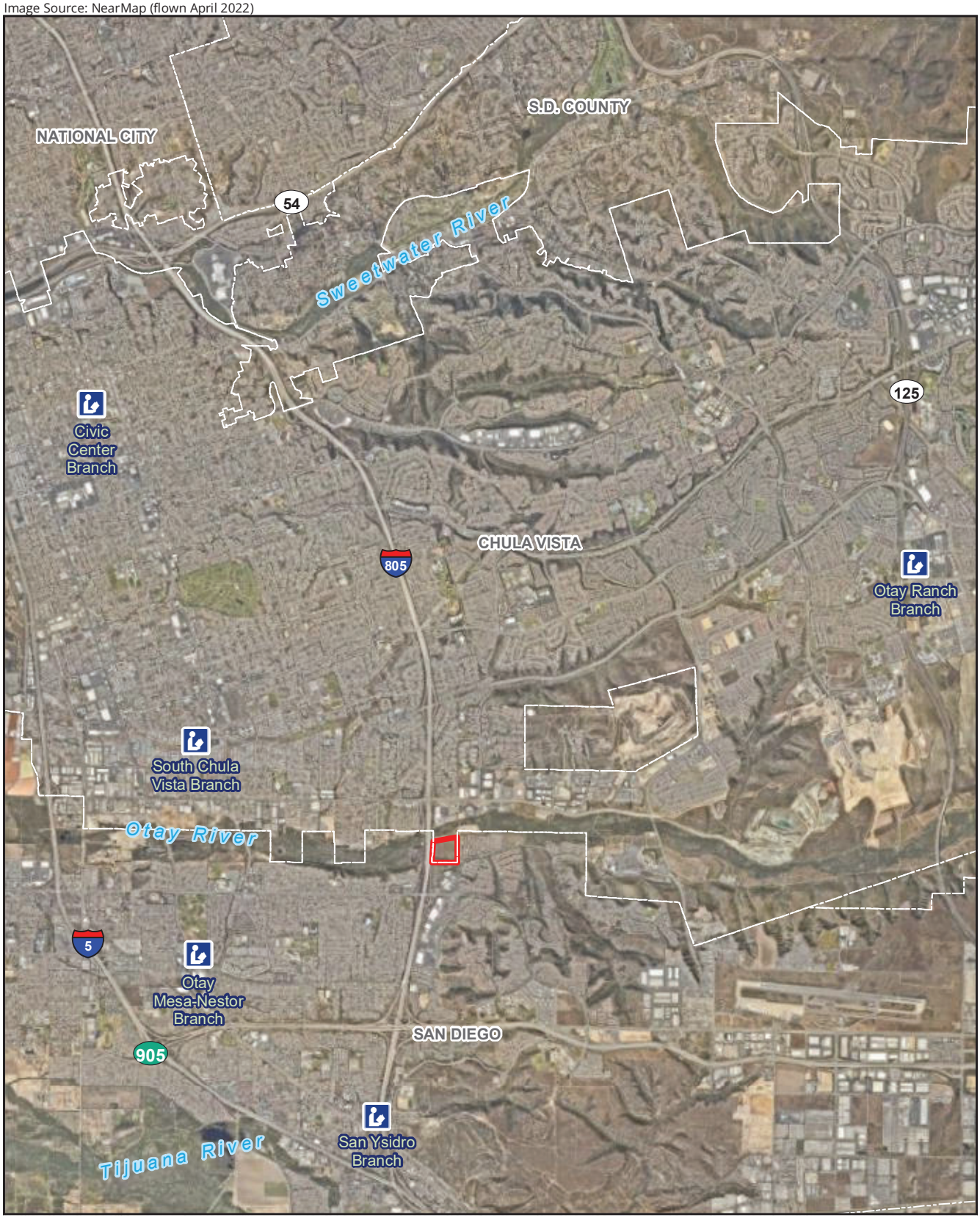
4.13.2 Regulatory Setting

4.13.2.1 Federal

a. National Fire Protection Association

The National Fire Protection Association recommends that fire departments respond to fire calls within six minutes of receiving the request for assistance 90 percent of the time. These time recommendations are based on the demands created by a structural fire. It is crucial to attempt to arrive and intervene at a fire scene prior to the fire spreading beyond the room of origin. Total structural destruction typically starts within eight to ten minutes after ignition. Response time is generally defined as one minute to receive and dispatch the call, one minute to prepare to respond to the fire station or field and four minutes (or less) travel time.

Image Source: NearMap (flown April 2022)



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FIGURE 4.13-3
Library Facilities

4.13.2.2 State

a. Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB) 50, effectively revised developer fee and mitigation procedures for school facilities. SB 50 restricts the ability of local agencies to deny project approvals on the basis that public school facilities (e.g., classrooms, auditoriums) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. School impact fees are payments to offset capital cost impacts associated with new development, which result primarily from costs of additional school facilities, equipment, and maintenance requirements. Consequently, agencies cannot require additional mitigation for any school impacts.

b. Mitigation Fee Act

The Mitigation Fee Act (California Government Code Sections 66000-66025) allows for the collection of DIFs to finance the cost of public facilities or services needed to serve (or mitigate the effects of) future development. Impact fees are a commonly used and well accepted means of mitigating the impacts (or facility needs) created by future growth. Public agencies regularly levy impact fees on new development to fund a variety of public facilities including parks.

c. Proposition 40 Park Bond Act

Proposition 40, also known as the Park Bond Act, allows for the maintenance for preservation of parks of the state's growing population by borrowing money through general obligation bonds for the development, restoration, and acquisition of state and local parks, recreation areas, and historical resources, and for land, air, and water conservation programs.

d. Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act of 1982 permits the establishment of Community Facilities Districts (CFDs), commonly referred to as "Mello-Roos." CFDs are special districts established by local governments as a means of financing public facilities, including schools, through a special tax imposed on the property within the CFD. The project site is located within existing CFDs for both CVESD and SUHSD.

e. Local Agency Formation Commission

Local Agency Formation Commissions (LAFCOs) were established in 1963 and are political subdivisions of the State of California responsible for providing regional growth management services in all 58 counties. LAFCOs' authority is currently codified under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 with principal oversight provided by the Assembly Committee on Local Government. LAFCOs comprise locally elected and appointed officials with regulatory and planning powers delegated by the Legislature to coordinate and oversee the establishment, expansion, and organization of cities, towns, and special districts as well as their

municipal service areas. LAFCOs are responsible for coordinating, directing, and overseeing logical and timely changes to local governmental boundaries, including annexation and detachment of territory, incorporation of cities, formation of special districts, and consolidation, merger, and dissolution of districts. LAFCO decisions are legislative in nature and therefore are not subject to an outside appeal process. LAFCOs also have broad powers with respect to conditioning regulatory and planning approvals so long as they do not establish any terms that directly control land uses. LAFCO actions would be required to implement annexation of the project site to the City of San Diego.

4.13.2.3 Local Regulations - City of Chula Vista

a. City of Chula Vista General Plan

The **Public Facilities and Services Element** of the City of Chula Vista General Plan identifies several policies intended to ensure adequate public services are available to serve future development. Additionally, the **Growth Management Element** provides a framework for directing new development, redevelopment, and community enhancement through a set of comprehensive goals, objectives, and policies (City of Chula Vista 2005). Policy objectives relevant to the project's provision of public services are detailed below.

Fire and Police Protection Services

Objective PFS 5: Maintain sufficient levels of fire protection and emergency medical service to protect public safety and property.

Objective PFS 6: Provide adequate fire protection services to newly developing and redeveloping areas of the City.

Objective GM 1: Concurrent public facilities and services.

Parks/Recreation

Objective PFS 15: Provide new park and recreation facilities for residents City-wide.

Objective OFS 16: Develop active and passive recreational uses within portions of the Otay Valley Regional Park located within the City of Chula Vista, in accordance with the MSCP.

Libraries

Objective PFS 11: Provide a library system of facilities and programs that meets the needs of Chula Vista residents of all ages.

Objective PFS 12: Efficiently locate and design library facilities.

Schools

Objective PFS 10: Efficiently locate and design school facilities.

b. Chula Vista Public Facilities Development Impact Fee

In August 1989, the Chula Vista City Council adopted Ordinance No. 2320 establishing a Public Facilities Development Impact Fee (PFDIF), which helps cover the cost of new or expanding public facilities within the City. The facilities are required to support future development within the City, and the fee schedule has been adopted in accordance with California Government Code Section 66000. The PFDIF amount is determined through evaluation of the need for new facilities as it relates to the level of service demanded by new development, which varies in proportion to the equivalent dwelling unit generated by a specific land use. The PFDIF addresses the project's proportional impact on capital facilities, such as structures and equipment. It does not address the impact associated with operations and maintenance for those facilities. Public funds such as property taxes, sales taxes, and fees generated by the project would be used to cover the incremental costs associated with providing services.

c. Chula Vista Municipal Code

The Chula Vista Municipal Code (CVMC) is a set of legal provisions of the Government Code adopted by the City of Chula Vista that contains many of the City's ordinances including the following related to public services:

- CVMC Section 19.80.030, Controlled Residential Growth, is intended to ensure that new development would not degrade existing public services and facilities below acceptable standards.

- CVMC Chapter 17.10, Park Lands Dedication Ordinance (PLDO), establishes requirements for parklands and public facilities, including regulations for the dedication of land and development improvements for park and recreation purposes. The PLDO requires the dedication of three acres of parkland per 1,000 people or a combination of land dedication, in-lieu fees, or park development improvements to be offered at the time of Final Map.

- CVMC Chapter 19.92 establishes compliance mechanisms and standards to ensure public facilities, infrastructure, and services will exist, or concurrently be provided, to meet the demands of infrastructure and climate protection generated by new development. Specifically, a PFFP is required to be prepared for Specific Plans, or Tentative Maps (if no Specific Plan is required).

d. City of Chula Vista Public Library Strategic Facilities Plan

The CVPL Strategic Facilities Plan plans the future of library facilities in Chula Vista. The CVPL Strategic Facilities Plan includes goals and objectives for implementing the library's vision and mission. These goals include maintaining an excellent and responsive materials collection, ensuring high quality of public library services through appropriate planning processes, ensuring that library programs and services are accessible to the broadest range of potential users, and increasing the visibility and community awareness of the library, its services, programs, and funding needs.

e. City of Chula Vista Greenbelt Master Plan

The City of Chula Vista Greenbelt Master Plan provides guidance and continuity for planning open space and constructing and maintaining the Greenbelt Trail. The Greenbelt Master Plan addresses existing and potential trail locations, trail and staging area development standards, maintenance responsibilities and a system of trails and open space that serve as a unifying element in linking other trails within the central areas of the City. The future OVRP, running parallel to the Otay River, is located just north of the project site.

f. City of Chula Parks and Recreation Master Plan

The City of Chula Vista Parks and Recreation Master Plan, updated and adopted by City Council on August 7, 2018, describes a comprehensive parks and recreation system that serves the community at large through the delivery of a variety of park sites containing a variety of recreational experiences. The Master Plan contains goals and policies that serve as a blueprint for creating a quality park system. The document establishes goals for the creation of a comprehensive parks and recreation system that meet the needs of the public by effectively distributing park types and associated recreation facilities and programs throughout the City.

4.13.2.4 City of San Diego Regulations

a. City of San Diego General Plan

Public Facilities, Services, and Safety Element

The **Public Facilities, Services, and Safety Element** of the General Plan (City of San Diego 2023) provides policies for financing, prioritization, developer, and City funding responsibilities for public facilities throughout the City of San Diego. General Plan policies relevant to the project are listed below.

Evaluation of Growth, Facilities, and Services

- **Policy PF-C.1**: Guide the annual programming of capital projects to optimize the appropriation of resources and to implement the General Plan.
    a. Ensure the annual CIP is coordinated and developed in a timely manner to allow for required consistency and prioritization reviews.

Fire Protection Services

- **Policy PF-D.1**: Locate, staff, and equip fire stations to meet established response times as follows:

    a. 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 minutes company turnout time and 5-minute drive time in the most populated areas.

b. 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.

- **Policy PF-D.5**: Maintain service levels to meet the demands of continued growth and development, tourism, and other events requiring fire-rescue services.

    a. Provide additional response units, and related capital improvements as necessary, whenever the yearly emergency incident volume of a single unit providing coverage for an area increases to the extent that availability of that unit for additional emergency responses and/or non-emergency training and maintenance activities is compromised. An excess of 2,500 responses annually requires analysis to determine the need for additional services or facilities.

- **Policy PF-D.6**: Provide public safety related facilities and services to assure that adequate levels of service are provided to existing and future development.

Police Protection

- **Policy PF-E.1:** Provide a sufficient level of police services to all areas of the City by enforcing the law, investigating crimes, and working with the community to prevent crime.

- **Policy PF-E.2:** 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 seven 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.

Library Services

The **Public Facilities, Services, and Safety Element** includes the following goals with respect to library facilities:

- A library system that contributes to the quality of life through quality library collections, technologically improved services, and welcoming environments.

- A library system that is responsive to the specialized needs and desires of individual communities.

Strategic planning related to the City of San Diego library services is underway with the development of a new master plan (see Section 4.13.2.4.e).

Recreation Element

The **Recreation Element** of the City's General Plan (City of San Diego 2021a) provides guidance to preserve, protect, acquire, develop, operate, maintain, and enhance public recreation opportunities and facilities throughout the City of San Diego. General Plan policies relevant to the project are listed.

- **Policy RE-A.10**: Encourage private development to include recreation facilities, such as children's play areas, rooftop parks and courts, useable public plazas, and mini-parks.
- **Policy RE-D.6**: Provide safe and convenient bicycle, pedestrian, and micro-mobility linkages to, and within, park and recreation facilities and open space areas.
    a. Provide pedestrian and bicycle paths between recreation facilities and residential development.
    b. Designate pedestrian and bicycle corridors, and equestrian corridors where appropriate, that link residential neighborhoods with park and recreation facilities, trails, and open spaces and active commercial areas.

b. Otay Mesa Community Plan

The **Public Facilities, Services and Safety Element** of the Otay Mesa Community Plan (City of San Diego 2014) addresses the public facilities and services needed to serve the existing population and new growth anticipated for Otay Mesa. Otay Mesa Community Plan policies that would be relevant to the project are listed below.

- **Policy 6.1-1:** Maintain fire and police service levels to meet the demands of continued growth and development in Otay Mesa.
    a. Monitor how development affects average fire and police response time goals and facilities' needs.
    b. Continue to coordinate with the Police and Fire-Rescue Departments to collocate the third fire station with the police facilities in Otay Mesa.
- **Policy 6.1-2:** Locate, staff, and equip the Otay Mesa fire stations to meet established response times.
    a. Provide a minimum 10,500-square-foot Fire Station #49.
- **Policy 6.2-1:** Continue to coordinate with the development community to provide reasonable and adequate facilities in conjunction with future development.
- **Policy 6.6-2:** Provide operational park facilities when new residential development occurs.
- **Policy 6.6-3:** Coordinate planning efforts with the San Ysidro Unified School District and the Sweetwater Union High School District.

a. Ensure that adequate public facilities and infrastructure are in place, and compliance with maximum school enrollments are achieved, consistent with demand.

- **Policy 6.6-4:** Provide a library within the community planning area that meets community needs, and that would adapt to technological changes, enhance library services, and expand access to digital information and the internet.

c. San Diego Municipal Code

Per San Diego Municipal Code Section 142.0640, the City requires payment of DIFs to collect a share of the cost of capital improvements needed to offset the impacts of new development. DIFs are based on community-specific DIF plans, which set community-level priorities for infrastructure improvements and ensure that new development pays a share of public facilities costs through the payment of DIFs.

d. City of San Diego Parks Master Plan

Adopted in August 2021, the Parks Master Plan provides policies, actions, and partnerships for planning parks, recreation facilities, and programs that reflect the City of San Diego's General Plan vision. The Parks Master Plan established a new park standard that applies to how population-based parks are planned, acquired, created, and managed. The new Recreational Value-Based Park Standard (Value Standard) establishes a point value to represent recreational opportunities within population-based parks. The recreational point value established is 100 points per 1,000 people. This Value Standard acknowledges the amenities and features within a space with scoring reflective of recreation amenities, space for programmed activity, connectivity to transit, and other factors. The score also accounts for the ability of larger regional parks, natural areas, and trails to meet some of the local recreational needs of nearby communities without being overly reliant on these assets (City of San Diego 2021b).

e. City of San Diego Public Library Master Plan (Framework)

The San Diego Public Library and Library Foundation SD are developing a new master plan to provide a long-range vision and strategy for San Diego Public Library facility, technology, and program investments. The Final Master Plan Framework was published in November 2021. The framework provides a vision and guiding principles for the future development and improvement of the City of San Diego's library network. The framework document finds that a branch library space planning target of 0.35 to 0.45 square feet per capita would provide the needed expanded capacity.

f. Otay Mesa Community Plan Public Facilities Financing Plan

The current Otay Mesa PFFP and Facilities Benefit Assessment, Fiscal Year 2014, was adopted by the City Council and approved by the Mayor on April 29, 2014, then amended by the City Council and approved by the Mayor on July 16, 2015. The Otay Mesa PFFP implements the Otay Mesa Community Plan as it identifies the public facilities needed to comply with City of San Diego General Plan standards and the Otay Mesa Community Plan. The PFPP includes a description of public facilities with funding sources, and a schedule of proposed facilities benefit assessments (FBA). The

dollar amount of the assessment is based upon the cost of each public facility equitably distributed over a designated area of benefit in the community planning area. Fees are paid on the actual development when permits are issued.

4.13.3 Issue 1: Public Services

4.13.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Thresholds of Significance

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to public services in the City of Chula Vista:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
    - Fire protection?
    - Police protection?
    - Schools?
    - Parks?
    - Other public facilities?

b. Impact Analysis

Fire Protection and Emergency Services

Response Time

The City of Chula Vista maintains a minimum standard for responding to calls within seven minutes in 80 percent of the cases. As stated above, according to the GMOC FY 2020 Annual Report, the City of Chula Vista achieved its response time goals. To further evaluate the emergency response availability at local fire facilities, Tables 4.13-4 and 4.13-5 present results of two emergency response time analyses conducted for the project and its relationship to the four closest stations. As shown, SDFRD Station 6 is the closest station and under mutual aid agreements, would respond to the site. Table 4.13-4 shows travel times were calculated applying the distance at speed limit formula (T=(D/S) * 60, where T=time, D=distance in miles, and S=speed in MPH). Table 4.13-5 shows the nationally recognized Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula (T=0.65 + 1.7 D, where T= time and D = distance) for comparison. The ISO response travel time formula discounts speed for intersections, vehicle deceleration, and acceleration, and does not include turnout time.

Table 4.13-4
Project Emergency Response Analysis using Speed Limit Formula

Station	Travel Distance to Project Entrance	Travel Time to Project Entrance[1]	Maximum Travel Distance[2]	Maximum Travel Time	Total Response Time[3]
SDFRD Station 6	1.0 mile	1 minutes 43 seconds	1.4 miles	2 minutes 24 seconds	4 minutes 24 seconds
CVFD Station 9	2.6 miles	4 minutes 28 seconds	3.0 miles	5 minutes 8 seconds	7 minutes 8 seconds
SDFRD Station 29	3.2 miles	5 minutes 29 seconds	3.6 miles	6 minutes 10 seconds	8 minutes 10 seconds
CVFD Station 5	3.5 miles	6 minutes 00 seconds	3.9 miles	6 minutes 41 seconds	8 minutes 41 seconds

[1]Assumes travel distance and time to the Project entrance off Dennery Road from fire station, and application of the distance at speed limit formula (T=(D/S) * 60, where T=time, D=distance in miles, and S=speed in MPH), a 35 mph travel speed, and does not include turnout time.
[2]Assumes travel distance and time to the furthest point within the Project site from fire station, and application of the distance at speed limit formula (T=(D/S) * 60, where T=time, D=distance in miles, and S=speed in MPH), a 35-mph travel speed, and does not include turnout time.
[3]Emergency response time target thresholds include travel time to furthest point within the Project site from fire station, and application of the distance at speed limit formula (T=(D/S) * 60, where T=time, D=distance in miles, and S=speed in MPH) a 35 mph travel speed along with dispatch and turnout time, which can add an additional two minutes to travel time.
SOURCE: Appendix I.

Table 4.13-5
Project Emergency Response Analysis using ISO Formula

Station	Travel Distance to Project Entrance	Travel Time to Project Entrance[1]	Maximum Travel Distance[2]	Maximum Travel Time	Total Response Time[3]
SDFRD Station 6	1.0 mile	2 minutes 21 seconds	1.4 miles	3 minutes 2 seconds	5 minutes 2 seconds
CVFD Station 9	2.6 miles	5 minutes 4 seconds	3.0 miles	5 minutes 45 seconds	7 minutes 45 seconds
SDFRD Station 29	3.2 miles	6 minutes 5 seconds	3.6 miles	6 minutes 46 seconds	8 minutes 46 seconds
CVFD Station 5	3.5 miles	6 minutes 36 seconds	3.9 miles	7 minutes 17 seconds	9 minutes 17 seconds

[1]Assumes travel distance and time to the Project entrance off Dennery Road from fire station, and application of the ISO formula, T=0.65+1.7(Distance), a 35 mph travel speed, and does not include turnout time.
[2]Assumes travel distance and time to the furthest point within the project site from fire station, and application of the ISO formula, T=0.65+1.7(Distance), a 35 mph travel speed, and does not include turnout time.
[3]Emergency response time target thresholds include travel time to furthest point within the Project site from fire station, and application of the ISO formula, T=0.65+1.7(Distance), a 35 mph travel speed along with dispatch and turnout time, which can add an additional two minutes to travel time.
SOURCE: Appendix I.

As shown under either response time formula, SDFRD Station 6 would be able to meet the City of Chula Vista Threshold Standard for fire response time and no new facility would be required.

Demand for Service

Emergency call volumes related to typical projects, such as new residential developments, can be reliably estimated based on the historical per-capita call volume from a particular fire jurisdiction. In 2020, SDFRD Station 6, the primary responding station for the project, responded to a total of 2,252 incidents with an approximate call volume of six calls a day in 2021 (see Appendix I). The project assumes the construction of up to 221 dwelling units which would result in an estimated 749 new residents, based on San Diego Association of Governments estimates of 3.39 average persons per household. Using the City of San Diego Fire Department's estimated per capita call volume of 0.112 (112 annual calls per 1,000 population), the project's estimated 749 residents would generate up to 84 additional calls per year (seven calls per month). The addition of approximately 84 calls per year to SDFRD Station 6's 2,252 call volume would slightly raise overall call volume but is not anticipated to impact the existing fire station to a point that they cannot meet the demand (see Appendix I).

While the project's demand for services would not warrant construction of new fire stations, it is noted that the City of San Diego's adopted Public Facilities Financing Plan (City of San Diego 2015) for the City of San Diego Otay Mesa Community Plan identifies a new fire station, Fire Station Number 49, to be built in Otay Mesa. This new station, identified in Project Number F-2 of the Otay Mesa Public Facilities Financing Plan, would relocate existing Fire Station Number 6 to a site on the south side of Ocean View Hills Parkway, just east of the intersection of Playa del Sol Parkway. This new station, together with its rolling stock, equipment, and furnishings, is to be fully funded by the Otay Mesa FBA/DIF which is imposed on all new development in the City of San Diego in the Otay Mesa Community Plan. This new station will be located approximately the same distance from the subject property as existing Station Number 6. FBA/DIF fees would generally not apply to development within the City of Chula Vista; however, due to all services for the project site coming from San Diego, a tax sharing agreement would be implemented as part of the LAFCO discretionary actions under the No Annexation Scenario (refer to discretionary actions listed in Section 3.5.1). Similarly, under Annexation Scenario 2b, fees would be paid to the City of Chula Vista as part of the building plan process; however, a fee sharing agreement between the City of San Diego and the City of Chula Vista would be needed to allocate fees to the serving agency. No construction of fire facilities is planned as part of this project. Any physical impacts associated with construction of planned fire facilities would be addressed under a standalone environmental document. As the project site is served by adequate fire facilities able to meet response time standards, no new or altered fire facilities would be warranted and no associated physical impacts related to the construction of such facilities would occur.

Police Protection

City of Chula Vista minimum standards for police protection is a response to 81 percent of Priority 1 emergency calls within 7 minutes 30 seconds and maintain an average response time of six minutes or less for Priority 1 calls and within 12 minutes or less for Priority 2 calls. According to the GMOC FY 2020 Annual Report, the Threshold Standard for police services was not met (City of Chula Vista 2021).

As the project would result in additional land use development and increased need for service calls, it could contribute to increased demand for police protection services. Due to the project's location, even under the No Annexation Scenario, the project site would be primarily served by the San Diego Police Department. Both the City of Chula Vista and City of San Diego failed to meet their standards for police response.

As detailed in Appendix P-1, the City of San Diego's PFFP for Otay Mesa identifies a new police substation planned as Project Number PO-2. The FY 2014 version of the Otay Mesa PFFP projected that this police station would be constructed in FY 2044/45 and would include a 20,000-square-foot police substation. Although police response is not currently meeting standards, the project does not include the construction of any police facilities. In the Annexation Scenarios, the City of San Diego would provide police services to the project site. In the No Annexation Scenario, the City of San Diego police facilities are nearest to the project and would be the first to respond under existing mutual aid agreements. Construction of any future police facility would require a separate environmental review and compliance with applicable regulations to address potential environmental impacts related to the construction and operation of new police stations. As the project proposes no new or altered police facilities, no physical impacts related to the construction of such facilities would occur.

Parks/Recreational Facilities

The City of Chula Vista specifically requires three acres of public parkland, with appropriate facilities, provided per 1,000 residents for new development, citywide. This requirement is consistent with the City's PLDO detailed in Section 4.13.2.3.c. Per the City's PLDO, the project is required to dedicate parkland or pay for the parkland deficit through DIFs.

In the No Annexation Scenario and Annexation Scenario 2b, the project would comply with the CVMC requirements for parkland. As the project proposes 61 single-family detached units and 154 multi-family attached units, the parkland obligations equate to 1 acre per 95 units for single-family and 1 acre per 128 units per multi-family units. Therefore, 61/95 = 0.64 acre and 154/128 = 1.20 acres, for a total of 1.84 parkland obligation for the project. Per the City of Chula Vista's PLDO, the project is required to dedicate parkland or pay for the parkland deficit through DIFs.

The project includes on-site private common open space amenity areas including two pocket parks and a monument entry pocket park. The project would also provide paseos, which are enhanced pedestrian pathways providing residents additional green space incorporating large trees, shrubs, bench seating, and exercise stations. Refer to Chapter 3.0, Project Description, Section 3.4.4, for details on proposed recreational amenities. These private common open space amenity areas would be landscaped with seating, walkways, and other amenities. The project would also construct improvements to the public OVRP trail system (see Figure 3-6) including trail signage and an OVRP trail kiosk. All physical impacts associated with both private and public recreational amenities have been evaluated throughout this EIR. Construction of additional recreational amenities off-site is not required as part of the project. Therefore, no physical impacts related to the construction of park facilities would occur.

Libraries

The City of Chula Vista specifically requires 500 gross square feet of library space, adequately equipped, and staffed, per 1,000 residents. According to the 2019 GMOC Annual Report, the current service ratio for FY 2019 was 350 square feet for every 1,000 residents. Therefore, the City of Chula Vista does not currently meet the standard for libraries. According to the CVPL Strategic Vision Plan, approximately 60,000 square feet of additional library space in the City of Chula Vista would meet the needs of the buildout population.

As described in Section 4.13.1.1.d and 4.13.1.2.d above, the nearest libraries are located within the City of San Diego due to the project's location in relation to the City of San Diego's Otay Mesa community. In the No Annexation Scenario and Annexation Scenario 2b, the City of Chula Vista would issue all grading and development permits; therefore, facility benefit and/or DIFs to fund City of San Diego facilities would not apply. In these scenarios, the City of San Diego and Chula Vista would negotiate a fee sharing agreement to ensure that any impact fees paid to Chula Vista would be allocated to the agency providing the relevant service. In the case of library services, the City of San Diego would provide the closest library facilities to the project site.

Regardless of the facility funding arrangement, the project does not include the construction of any library facilities. At the time a new library is proposed, it would require a separate environmental review and compliance with regulations to address potential environmental impacts related to the construction and operation of the library. The project would not result in any physical impacts associated with construction of library facilities.

School Facilities

RECON Environmental, Inc. contacted the CVESD, the SUHSD, and the San Ysidro School District to determine availability of these districts to serve the project site. Responses were received from the CVESD and the SUHSD (see Appendix Q). Based on development of up to 221 residential units, the CVESD estimates approximately 58 new students would be generated which could be served by the CVESD as capacity is available at the Juarez-Lincoln Elementary School (grades K–6) located 0.8 mile southwest of the project site.

Additionally, correspondence received from the SUHSD indicated that students would mostly likely be placed at Montgomery Middle School for grades 7 and 8 and at Montgomery High School for grades 9 through 12. Montgomery Middle School is located 1.4 miles southwest of the project site and Montgomery High School is located 1.7 miles west of the project site (see Appendix Q). The SUHSD indicated that in the event of overcrowding or other unforeseen circumstances at these schools, placement at an alternative school site could be required. As the project would be accommodated by existing area school facilities and would contribute school district fees to off-set the project's demand for school facilities, no adverse impact associated with the construction of school facilities would occur.

c. Significance of Impacts

No physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed. All physical impacts associated with on-site parks

are addressed throughout this EIR. Therefore, the project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.13.3.2 Annexation Scenario 2a

a. Thresholds of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to the physical effects of constructing and/or altering public services, including the development of parks and recreational resources:

- Would the project have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

    - Police protection
    - Parks or other recreational facilities
    - Fire/Life Safety protection
    - Maintenance of public facilities, including roads
    - Libraries
    - Schools

    If so, the focus of the analysis should be on the physical impacts of constructing the public service facilities.

The City of San Diego's CEQA Significance Determination Thresholds (2022) provides guidance for determining the potential significance of a project's impacts related to construction of public service facilities as follows:

- Does the project conflict with the community plan in terms of the number, size, and location of public service facilities?

- If so, are there direct impacts from construction of proposed new public service facilities needed to serve the project?

Police and Fire-Rescue Services

For police and fire-rescue services, the following should also be considered and referred to the Police and/or Fire-Rescue Departments if the project exceeds the threshold of 75 dwelling units or 100,000 square feet of non-residential construction.

- Is the project located in a brush fire hazard area, hillside, or an area with inadequate fire hydrant services or street access?
- Does the project involve the use, manufacture or storage of toxic, readily-combustible, or otherwise hazardous materials?
- Would the project's location provide for adequate SDFD access as determined by Fire and Life Safety staff to be in conformance with the California Fire Code and Fire and Hazard Prevention Services Policy A-00-1?
- Would the project substantially affect Police or Fire-Rescue response times (i.e., increase the existing response times in the project area)

Police and/or Fire Departments will review the project to determine whether it would substantially affect these issue areas as well as following response times:

- Police: Priority 1 call goal by neighborhood from current budget
- Fire-Rescue: 5 minutes from the time the alarm is received to arrival of the first engine at the scene of the incident (1 minute chute + 4 minute travel) and 9 minute response time (1 minute chute + 8 minute travel) for initial full alarm assignment (3 engines and 1 truck)

Large and small developers are required to fund construction of new facilities' DIFs and FBAs as conditions of project approvals to address capital costs of police and fire-rescue services.

Schools

Larger residential projects should include information provided by the appropriate school districts about the existing conditions and capacities but should conclude that the impacts are mitigated through the implementation of SB 50.

Libraries

Branch libraries should serve a resident population of 30,000 and may be established when a service area, which is expected to grow to 30,000 residents within 20 years of library construction, has a minimum population of 18,000 to 20,000. Branches should be located in areas of intense human activity, with a 2.0-mile maximum service area, where trips can be combined with other daily trips.

The City of San Diego is also part of a countywide cooperative relationship known as the Serra Cooperative Library System. This system allows residents of the City of San Diego and San Diego County to use the facilities of public libraries.

The Environmental Setting section of environmental documents for medium to large residential projects should identify the location of the nearest branch libraries and the distance of each from the project site. For those projects located on or near the limits of the City of San Diego, the Serra Cooperative Library facilities should also be identified. The provision of adequate libraries is a planning and facilities issue, and project applicants are required to make fair share contributions to the public facilities.

Parks and Recreational Resources

The City of San Diego 's General Plan provides the following guidelines for population-based parks:

- Neighborhood parks and facilities should serve a resident population of between 3,500 and 5,000 within an approximately half-mile radius. The facility should be five (5) acres in size when located next to an elementary school and 10 acres when the facility must stand alone.

- Community parks and recreation centers should serve a resident population of between 18,000 and 25,000 within an approximately 1½-mile radius. The facility should be 13 acres in size when located adjacent to a junior high school and 20 acres when the facility must stand alone.

Parks serve one or more communities and include features to serve larger populations. Neighborhood and Mini Parks typically serve a neighborhood or a population within approximately a half-mile radius. Pocket Parks, Plazas, and Linear Parks are typically less than one acre in size. Regional Parks serve local and regional residents and visitors. They are located at the site of distinctive scenic, natural, historical, or cultural features; or provide habitat and resource protection. Developed amenities should not impair the distinctive features or resources. Development for recreation use is typically controlled by a master plan.

b. Impact Analysis

Fire Protection and Emergency Services

Response Time

As previously discussed, SDFRD Station 6 is the closest station to the project site and would provide first response. Fire and emergency services response time analyzed in Section 4.13.3.1.b would likewise be applicable under the Annexation Scenario. SDFRD Station 6 could reach the project site within 4 minutes 24 seconds under the Speed Limit Formula (see Table 4.13-4) and within 5 minutes 2 seconds using the ISO Formula (see Table 4.13-5).

The City of San Diego General Plan establishes standards for response times for emergency services and fire suppression. Under either response time formula, SDFRD Station 6 would be able to meet the City of San Diego threshold response standard and no new facility would be required.

Demand for Service

Because under either the No Annexation or Annexation Scenarios, the SDFRD would provide primary fire and emergency services, the demand for service analysis in Section 4.13.4.1.b would apply. As stated therein, the demand for services associated with project build-out, approximately 84 calls per year, would not affect the ability of SDFRD Station 6 to serve the project within response times. Additionally, the project would meet City of San Diego fire department standards with respect to fire hydrants, water flow, and fire access. The residential buildings and infrastructure proposed as part of the project would be consistent with all applicable fire codes and building standards. The project does not include manufacture or storage of toxic, readily-combustible, or otherwise hazardous materials (see Section 4.6.3.1.b) and would also conform to the brush management regulations in accordance with San Diego Municipal Code Section 142.0412 (see Section 4.6.6.2.b). As detailed in Appendix P-2, existing fire facilities would be adequate to serve the project site. Notwithstanding the current adequacy of facilities, a new fire station 49 is proposed by the City of San Diego for the Otay Mesa area that would provide additional fire response once constructed. Facility financing fees would be required prior to issuance of building permits to fund the project's fair share toward fire facilities including the new SDFRD Station 49. Overall, the project would not trigger the requirement for the construction of new fire facilities or the alteration of existing facilities. As the project does not propose construction of new fire facilities no physical impacts associated with the construction of such facilities would occur.

Police Protection

The project site would be served by SDPD. As shown in Table 4.13-3, response time targets are not being met within Beat 725. The current staffing ratio for police officers to population is 1.34 officers per 1,000 residents based on 2014 estimate residential population of 1,311,882. The department goal is to have 1.45 officers per 1,000 residents. The ratio is calculated using the department total to take into account the support and investigative positions within the department. This ratio does not include the significant population increase resulting from employees who commute to work in the community or those visiting (see Appendix P-2).

The project would result in additional residents and new housing that would require an increase in police services within Beat 725. Although the project would result in an increase in population of the service area, the majority of response times are already exceeding response times goals. There are no current plans for additional police sub-stations in the immediate area; however, a new police substation is included in the Otay Mesa PFFP Project Number PO-2, which is a 20,000-square-foot police substation. The project would be required to pay facility finance fees to fund its fair share of police services commensurate with project demand. Fees would be used to finance police facilities including the new police substation (see Appendix P-2). As the future police stations are proposed, they would require a separate environmental review and compliance with regulations to address potential environmental impacts related to the construction and operation of new police stations. While the project would contribute fair share funding to police facilities, the project does not include construction of any police facilities. Therefore, the project would not result in any physical impacts related to the construction of police facilities.

Parks/Recreational Facilities

As detailed in Section 4.13.3.2.a, the City of San Diego has identified citywide park standards for resource-based parks, community-based parks, and recreation centers. While these standards are still used to guide communitywide park development, the City recently adopted a new Parks Master Plan in 2021 that uses a point system to plan for future parks. Consistency with the Parks Master Plan is evaluated based on a Value Standard analysis which determines the adequacy of parkland based on a point value system of 100 points per 1,000 people.

In order for park improvements constructed on-site to receive population-based park credit, they must meet the requirements listed in San Diego Municipal Code Section 142.0640(b)(9)(A-F) as follows:

A. The park shall be designed and constructed in accordance with the General Development Plan approved in accordance with Council Policy 600-33 COMMUNITY NOTIFICATION AND INPUT FOR CITY-WIDE PARK DEVELOPMENT PROJECTS, which requires community input, recommendation for approval from the Community Recreation Group and final approval by the City of San Diego Park & Recreation Board.

B. The park shall be designed and constructed in accordance with the City's Park Development Standard Terms and Conditions and the Consultant's Guide to Park Design and Development to the satisfaction of the Parks and Recreation Director.

C. The park shall be publicly accessible in perpetuity with a Recreation Easement recorded over all park improvements.

D. A maintenance agreement to maintain the park shall be recorded.

E. A performance bone and payment bond shall be provided for the design and construction of the park improvements.

F. A fee in the amount of 10 percent of the total DIF related to parks that would have otherwise been required shall be paid to fund park and recreation improvements in the City.

The project includes several privately funded park improvements that would be open to the public; however, they are not intended to satisfy the development's population-based park requirements. Specifically, the project intends to satisfy park impacts by paying the required Citywide Park DIFs. Proposed Park improvements include mini parks, including an overlook park, and pocket parks. Additionally, trail improvements including trail signage and an OVRP trail kiosk are proposed. Recreational areas would be landscaped with seating, walkways, and other amenities. In addition to parks, the project would provide paseos, which are enhanced pedestrian pathways providing residents additional green space incorporating large trees, shrubs, bench seating, and exercise stations.

In addition to parks, the project would provide paseos, which are enhanced pedestrian pathways providing residents additional green space incorporating large trees, shrubs, bench seating, and exercise stations. Refer to Chapter 3.0, Project Description, Section 3.4.4, for details on proposed recreational amenities.

All proposed parks included as part of the project are evaluated throughout this EIR. No other parks are proposed that would result in physical impacts.

Libraries

The closest library to the project site is the City of San Diego's Otay Mesa-Nestor branch. As detailed in Appendix P-2, almost $2,000,000 in FBA funds from Otay Mesa have already been expended to expand this library facility. In addition, the Otay Mesa PFFP has identified a new library project, Project No. L-2, which calls for a new branch library for Otay Mesa. This project will be funded entirely by facility financing fees collected from new residential development. Therefore, the project would contribute its fair share of the cost of library improvements. At the time future library facilities are proposed, they would require a separate environmental review and compliance with regulations to address potential environmental impacts. The project would not result in any physical impacts associated with construction of library facilities as no libraries are proposed as part of the project. Therefore, no physical impacts associated with construction of libraries would result from the project.

School Facilities

As discussed in Section 4.13.3.1.b, both the CVESD and SUHSD have indicated adequate ability to serve the student population that would be generated by the project (see Appendix Q). As the project would be accommodated by existing area school facilities and would contribute school district fees to off-set the project's demand for school facilities, no adverse impact associated with the construction of school facilities would occur.

c. Significance of Impacts

No physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed. All physical impacts associated with on-site parks are addressed throughout this EIR. Therefore, the project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries and impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

4.14 Utilities and Service Systems

This section analyzes potential impacts that could occur related to utility and service systems. Utility services include water, wastewater, solid waste, storm water drainage, power, and communication systems. The impact analysis is based on information provided by the service providers, local service providers websites, findings from approved planning documents, and technical reports including the following documents and technical reports prepared for the Nakano Project (project): City of San Diego, Development Services Department, Engineering Division, Water and Sewer Section letter indicating availability to serve the project (Appendix R), Sewer Study for the Nakano Project prepared by Dexter Wilson Engineering, Inc. (Appendix S); Water System Analysis for the Nakano Project prepared by Dexter Wilson Engineering, Inc. (Appendix T); and the Nakano Waste Management Plan (WMP) prepared by RECON Environmental, Inc. for the City of San Diego (Appendix U).

As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario. Off-site improvement areas would remain in their respective jurisdictions under both scenarios.

4.14.1 Existing Conditions

4.14.1.1 Water

a. Water Systems

The project site is located within the City of Chula Vista and is currently located within the service boundaries of the Otay Water District (OWD); however, the project site does not have direct access to OWD pipelines. The closest OWD water supply systems are located north of Otay River. The nearest existing public water line in the vicinity of the project is a 12-inch-diameter City of San Diego water line in Dennery Road. The existing water system lines are shown in Chapter 3.0 Project Description, Figure 3-13.

b. Water Supply

This section focuses on water supply relative to the City of San Diego as there are no existing OWD facilities that could provide water service the project site.

Potable Water

The City of San Diego's Public Utilities Department (PUD) provides potable water services throughout the City of San Diego. Specifically, the PUD maintains over 404 square miles of service lines and

delivers a current average of 175,000 acre-feet per year (AFY) to 1.39 million people (City of San Diego 2021a).

The City of San Diego water system has three water treatment plants; nine reservoirs; and two water reclamation plants serving recycled water customers. To meet the majority of the water demands in the City, local runoff from rainfall is captured in the City's reservoirs, wastewater is recycled for non-potable water demands at the City's water reclamation plants, and imported water is purchased from the San Diego County Water Authority (SDCWA). SDCWA's water supplies include desalinated seawater, water transfers from the Imperial Irrigation District and imported water purchased and delivered through the Metropolitan Water District system to San Diego County via the SDCWA aqueducts. Most of the City's imported water purchased from SDCWA is stored in several of the City's reservoirs and treated at the City's water treatment facilities.

Recycled Water

Recycled water is wastewater that has undergone additional treatment (tertiary) to make it suitable for a range of beneficial uses. The City of San Diego also has a separate recycled water system that currently extends approximately 99 miles; however, no recycled water systems are available on or adjacent to the project site. The City of San Diego's two water reclamation plants currently provide recycled water to meet non-potable (not for drinking) water demands. In 2020, the City provided 8,195 AFY of non-potable recycled water within the City (City of San Diego 2021a). OWD has a recycled water easement running along the easterly property line for the 30-inch recycled water pipeline. The purpose is to convey recycled water from the City of San Diego's South Bay Water Reclamation Plant to OWD tanks. Since this is a transmission main, OWD may not want small connections to provide recycled water service to the project area. Additionally, once the project is annexed out of the sphere of influence, OWD wouldn't be able to provide any service that isn't subject to an out-of-agency agreement. A detachment from OWD means no service now or in the future.

4.14.1.2 Wastewater Systems

Similar to water services, this section focuses on City of San Diego wastewater systems as there are no existing sewer facilities from the City of Chula Vista that provide wastewater service the site.

The City of San Diego PUD provides wastewater collection, treatment, and disposal services to the San Diego region through its metropolitan sewerage system. Collectively, the wastewater collection and treatment system are known as the Metro System. The Metro System serves an estimated population of 2.2 million from 16 cities and districts within the greater San Diego area, which generates approximately 180 million gallons per day (gpd) of wastewater. The City of San Diego collects and treats approximately 180 million gpd of wastewater that is generated within a 450-square-mile area made up of the City of San Diego boundaries, as well as the jurisdictions of other agencies that form the Metro Wastewater Joint Powers Authority (JPA). The City of Chula Vista and OWD are JPA member agencies. Both are wastewater generators and OWD is also a wholesale recycled water customer (City of San Diego 2021a).

Planned improvements will increase wastewater treatment capacity to serve an estimated population of 2.9 million through the year 2050. Projections estimate nearly 340 million gallons of wastewater will be generated each day by that year (Metro Wastewater JPA 2023).

Wastewater is treated at three treatments plants, all within City of San Diego limits: North City Water Reclamation Plant, South Bay Water Reclamation Plant, and Point Loma Wastewater Treatment Plant (PLWTP). Recycled water is produced at both North City Water Reclamation Plant and South Bay Water Reclamation Plant. The South Bay Water Reclamation Plan primarily serves the City of San Diego's Otay Mesa and San Ysidro communities as well as Chula Vista and the County of San Diego's East Otay Mesa community. Two additional water recycling facilities are located outside the Metro System: (1) the Ralph W. Chapman Water Recycling Facility in Otay; and (2) the Padre Dam Water Recycling Facility in the Padre Dam Municipal Water District. These plants reduce wastewater flows that would have historically been conveyed to the Metro Wastewater System for treatment at PLWTP. Both facilities send treated solids into the Metro System for further treatment at PLWTP. After wastewater is treated, it is then distributed within PUD's own service area as recycled water and sold as such to local water agencies.

Existing public sewer facilities located on the project site include the City of San Diego Otay Valley Trunk Sewer facilities, which consist of a primary 27-inch-diameter gravity line that runs along the northern portion of the project site and a secondary 18-inch diameter gravity line, which runs along the western edge of the project stie. These lines converge and connect within the northern portion of the project site (see Figure 3-14). The City of San Diego Otay Valley Trunk 27-inch sewer crosses the Otay River and intercepts additional City of Chula Vista sewer flow before being conveyed into the South Metro Sewer Interceptor System. The City of Chula Vista and OWD, along with other JPA member agencies, are allocated a portion of the Otay Valley truck sewer capacity, referred to as their flow share.

The project would include a condition of approval (on the Tentative Map) requiring the City of Chula Vista to receive a letter from the City of San Diego approving the relocation of its 27-inch trunk sewer and connection of the proposed development to the pipe, as shown in Figure 3-13. The letter would also state additional City of San Diego requirements imposed to the project on this issue.

Since the project is proposing to connect to the City of San Diego's 27-inch Otay Valley Trunk Sewer and to relocate a portion of the pipe, the Applicant must get written approval by the City of San Diego for the design and ensure required processes (inspections, constructions, etc.). All requirements, including but not limited to the payment of fees and construction costs related to the connection to the City of San Diego's sewer main are the responsibility of the Applicant.

If it is determined that a sewage metering station is needed for the project, the Applicant shall pay when due all direct and incidental costs for the installation and maintenance of the sewage metering station at the proposed connection to the City of San Diego's sewer main. If it is determined that the municipalities need to enter into an agreement for providing sewer service to the development, the agreement shall be executed before the approval of improvement plans for the project.

4.14.1.3 Solid Waste

In the City of Chula Vista, the City Public Works Department and Environmental Services Division oversees waste management for residences and businesses. The current solid waste and recycling service provider for the City of Chula Vista is Republic Services.

Solid waste services for the area south of the Otay River, south and east of the project site, are currently provided by the City of San Diego. In the City of San Diego, refuse collection for residents located on dedicated public streets is provided by the City of San Diego Environmental Services Department (ESD). Refuse collection for City of San Diego residents on private streets is contracted through private haulers that are franchised by the City of San Diego.

There are three major disposal facilities within the City of San Diego region and several material recovery facilities that sort segregated and comingled recyclable materials for shipping to processing centers. The three disposal facilities are the City-operated Miramar Landfill, and the privately-operated Sycamore and Otay landfills. Allied Waste Industries owns and operates landfills at Otay (off Otay Valley Road in Chula Vista) and at Sycamore Canyon (north of State Route 52 near Mast Boulevard). Miramar Landfill is operated by the City on land owned by the U.S Navy. All landfills within the City of San Diego region are approaching capacity and are due to close within the next 3 to 20 years.

4.14.1.4 Electrical Power and Natural Gas

A San Diego Gas and Electric (SDG&E) 69-kilovolt power line is located along the project site's southern boundary. An existing dirt access road from Dennery Road provides SDG&E access to the existing on-site utility lines. An SDG&E above-ground power line also extends along the project site's eastern boundary. SDG&E is a regulated public utility that provides energy service to 3.7 million people through 1.4 million electric meters and 905,000 natural gas meters in San Diego County and southern Orange County, within a service area of 4,100 square miles (SDG&E 2023). Forecasting future energy consumption demand is performed on a continual basis by SDG&E, including the need for installation of transmission and distribution lines. In situations where projects with large power loads are planned, other loads in the project vicinity are considered in conjunction with the planned project, and electrical substations are upgraded as needed.

4.14.2 Regulatory Framework

4.14.2.1 Federal Regulations

a. Water Supply/Services Safe Drinking Water Act

The Safe Drinking Water Act grants the U.S. EPA the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards: (1) the National Primary Drinking Water Regulations; and (2) the National Secondary Drinking Water Regulations. The National Primary Drinking Water

Regulations are legally enforceable standards that apply to public water systems. These standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. The National Secondary Drinking Water Regulations are non-mandatory guidelines for certain substances that do not present a risk to public health.

4.14.2.2 State Regulations

a. Water Supply/Services

Safe Drinking Water Act

The State Safe Drinking Water Act (California Health and Safety Code Sections 116270 et seq.) builds on and strengthens the federal Safe Drinking Water Act. The act authorizes the California Department of Public Health to protect the public from contaminants in drinking water by establishing maximum contaminant levels that are at least as stringent as those developed by the U.S. EPA under the federal act.

California Drinking Water Standards

State drinking water standards are based on federal standards and are listed in Title 22 of the California Code of Regulations. The California Department of Health Services administers the state drinking water standards.

California Water Code

The California Water Code contains provisions that control almost every consideration of water and its use. Division 6 of the Water Code controls conservation, development, and utilization of state water resources. Division 7 addresses water quality protection and management.

Urban Water Management Planning Act

The Urban Water Management Planning (UWMP) Act requires that water suppliers providing water for municipal purposes either directly or indirectly to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, prepare and submit a UWMP. UWMPs are required to support the water suppliers' long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. UWMPs must assess the reliability of water sources over a 20-year planning horizon during normal, single-dry, and multiple-dry years, describe management measures and water shortage contingency plans, report progress toward meeting conservation goals and targeted reduction in per-capita urban water consumption, and discuss the uses and planned uses of recycled water.

California Water Plan

The California Water Plan, most recently updated in 2018, is the state's strategic plan for sustainably managing and developing water resources for current and future generations. Required by the California Water Code Section 10005(a), it presents the status and trends of California's

water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The most current plan, Update 2018, provides recommended actions, funding scenarios, and an investment strategy to bolster efforts by water and resource managers, planners, and decision makers to overcome California's water resource challenges. It focuses on the commitment to sustainable, equitable, long-term water resource management. The plan is updated every five years, with the next update scheduled for 2023. Update 2023 will promote climate resilience across regions and water sectors with a statewide vision and goals for watershed planning, resource management strategies, and performance tracking tools. The Update 2023 is not adopted and not discussed further herein.

b. Solid Waste/Recycling

California Integrated Waste Management Act

Assembly Bill (AB) 939, the Integrated Waste Management Act, as modified in 2010 by Senate Bill (SB) 1016, mandated that all local governments reduce disposal waste in landfills from generators within their borders by 50 percent by the year 2000. Later legislation mandates the 50 percent diversion requirement be achieved every year. The California Department of Resources Recycling and Recovery (CalRecycle) oversees and aids local governments as they develop and implement plans to meet the mandates of the Integrated Waste Management Act and subsequent legislation.

Solid Waste Diversion- AB 341

AB 341, approved October 2011, sets a policy goal of 75 percent waste diversion by the year 2020. This bill also created a mandatory commercial recycling requirement that would hold local jurisdictions responsible for implementing and complying with the 75 percent diversion rate through outreach and monitoring programs.

Mandatory Organics Recycling–AB 1826

The mandatory Commercial Organic Waste Recycling Law (AB 1826) became effective on January 1, 2016, and requires businesses and multi-family complexes (with five or more units) that generate specified amounts of organic waste (compost) to arrange for organics collection services. This includes schools, hospitals, stores, restaurants, for-profit or nonprofit organizations, as well as multi-family dwellings with five or more units.

Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions–SB 1383

In September 2016, Governor Brown signed into law SB 1383 (Lara, Chapter 395, Statutes of 2016), establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants in various sectors of California's economy. The new law codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy, established pursuant to SB 605 (Lara, Chapter 523, Statutes of 2014), to achieve reductions in the statewide emissions of short-lived climate pollutants. Actions to reduce short-lived climate pollutants are

essential to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment.

As it pertains to CalRecycle, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

4.14.2.3 Regional Regulations

a. Local Agency Formation Commission (LAFCO)

The San Diego Local Agency Formation Commission (LAFCO) is a regulatory agency with countywide jurisdiction. It provides assistance to local agencies in coordinating, directing, and overseeing logical changes to local government jurisdictional boundaries, including annexations, sphere of influence updates/adoption, municipal service reviews, and other actions. An annexation is the inclusion of new territory in a city or special district. A sphere of influence is a plan for the probable physical boundaries and service area of a local government agency as determined by the San Diego LAFCO. Spheres of influence are characterized as planning tools used to provide guidance for individual proposals involving jurisdictional changes and are intended to encourage efficient provision of organized community services and prevent duplication of service delivery. Territory must be within a city or district's sphere of influence to be annexed.

As a condition to annexation, the property is required to be pre-zoned for annexation or provide evidence that the existing development entitlements are vested or already built out and are consistent with the applicable agency's General Plan. Municipal service reviews are studies that must be conducted to determine the adequacy of governmental services being provided in the region or sub-region. The service review studies are to be conducted before or in conjunction with updating an agency's sphere of influence. Developing and updating spheres of influence and performing service reviews for each city and special district within the County of San Diego is a priority for the San Diego LAFCO.

The project site is currently within the City of Chula Vista jurisdiction and within the OWD boundaries and sphere of influence. Due to the Otay River separating the site from the City of Chula Vista, jurisdictional lands and the inefficiency of service provision and/or lack of availability of services from the City of Chula Vista and OWD, LAFCO actions are anticipated in all scenarios, as detailed in the Project Description Section 3.5.

b. Water Supply/Services

San Diego County Water Authority Urban Water Management Plan (2020)

The SDCWA is the regional wholesale provider of imported water that supplements local water supplies for 24 retail water purveyors in San Diego County, including the City of San Diego. The California Water Code requires coordination in preparation of UWMPs with any wholesale water

providers or other agencies that share common infrastructure for the delivery of water, wastewater, and recycled water services. The 2020 UWMP serves as the long-term planning document that will help to ensure a reliable water supply for the region. The population within the SDCWA's service area was approximately 3.3 million people in 2020 and is projected to increase to roughly 3.8 million people by 2045. The County of San Diego is expected to develop an additional 130,000 acres between 2020 and 2050, with the majority (125,000 acres) of development dedicated to residential land uses. In 2020, total water demand in the service area was 463,128 acre-feet, of which 92 percent was for municipal and industrial use and 8 percent was for agricultural use.

The SDCWA's mission is to provide a safe and reliable supply of water to its member agencies. The 2020 UWMP identifies a diverse mix of water resources planned to be developed over the next 25 years to ensure that the region has enough water to meet its needs, including during drought periods. Components of the UWMP include baseline demand forecasts, demand management and water use efficiency, water supply assessment, water management planning, supply reliability analysis, and water shortage and drought planning.

4.14.2.4 Local Regulations–City of Chula Vista

a. Water Supply/Services

Chula Vista General Plan

The **Public Facilities and Services Element** of the City of Chula Vista General Plan specifically addresses the objectives and policies for utility services including water, sewer, drainage, power, and telecommunications services and are outlined below:

Objective PFS 1: Ensure adequate and reliable water, sewer, and drainage service and facilities.

Objective PFS 2: Increase efficiencies in water use, wastewater generation and its reuse, and handling of storm water runoff throughout the City through use of alternative technologies.

The **Growth Management Element** seeks to ensure public facilities and services are available to residents and visitors of the City of Chula Vista concurrent with development.

Objective GM 1: Concurrent public facilities and services.

> **Policy GM 1.11:** Establish the authority to withhold discretionary approvals and subsequent building permits from projects demonstrated to be out of compliance with applicable Threshold Standards.

Chula Vista Municipal Code

Chula Vista Municipal Code (CVMC) Section 19.80.030 ensures that new development would not degrade existing public services and facilities below acceptable standards for fire and other public services. The preparation of a Public Facilities Finance Plan is required by the City of Chula Vista to demonstrate that development is consistent with the overall goals and policies of the City of Chula Vista General Plan and would not degrade public services consistent with CVMC Section 19.80.030.

CVMC Chapter 19.92 establishes compliance mechanisms and standards to ensure public facilities, infrastructure, and services will exist, or concurrently be provided, to meet the demands of infrastructure and climate protection generated by new development. All applicable projects are required to ensure that adequate supplies of potable and recycled water are available to the City of Chula Vista (CVMC Section 19.92.040(B)). To demonstrate adequate water supply is available to serve new development the City of Chula Vista requires submittal of a service availability letter from the appropriate water district (CVMC Section 19.92.040(B)(3)).

City of Chula Vista Landscape Manual and Landscape Water Conservation Ordinance

The City of Chula Vista's Landscape Manual includes requirements and standards for landscape areas throughout the City and identifies the need for water conservation practices to be implemented in the form of xeriscape landscaping and drought-tolerant plant materials. CVMC Chapter 20.12, known as the Landscape Water Conservation Ordinance, requires new construction and rehabilitated landscapes to conform to applicable landscape design plans to ensure smart water use in terms of plantings, irrigation, conservation, and other landscape-related matters.

b. Wastewater

City of Chula Vista General Plan

The **Public Facilities and Services Element** of the City of Chula Vista General Plan identifies the following objective and associated policy related to wastewater services in the City of Chula Vista.

Objective PFS 4: Provide long-term wastewater treatment capacity to meet the needs of existing and new development in Chula Vista.

> **Policy PFS 4.1**: Continually monitor wastewater flows and anticipate future wastewater increases that may result from changes in adopted land use patterns.

City of Chula Vista Wastewater Master Plan

The City of Chula Vista Wastewater Master Plan (2014) provides a comprehensive review and evaluation of the City's existing wastewater collection system based on future growth projections through year 2050. The Wastewater Master Plan is also intended to identify facility improvements necessary to support the City's growth.

c. Solid Waste/Recycling

City of Chula Vista General Plan

The **Public Facilities and Services Element** of the City of Chula Vista General Plan addresses the efficient disposal of solid waste.

Goal I–Waste Management: Efficient, economical, environmentally-sound waste collection, management, and disposal; Maximum diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.

Policy PF-I.2: Maximize waste reduction and diversion.

Policy PF-I.3: Provide environmentally sound waste disposal facilities and alternatives.

Policy PF-I.3.f: Cooperate on a regional basis with local governments, state agencies, and private solid waste companies to find the best practicable, environmentally safe, and equitable solutions to solid and hazardous waste management.

Policy PF-I.5: Plan for sufficient waste handling and disposal capacity to meet existing and future needs. Evaluate existing waste disposal facilities for potential expansion of sites for new disposal facilities.

Policy PF-G.1: Ensure that all storm water conveyance systems, structures, and maintenance practices are consistent with federal Clean Water Act and California Regional Water Quality Control Board National Pollutant Discharge Elimination System Permit standards.

Policy PF-G.4: Develop and employ a strategic plan for the City's watersheds to foster a comprehensive approach to storm water infrastructure improvements.

Objective PFS 25: Efficiently handle solid waste disposal throughout the city.

Policy PFS 25.1: Plan for adequate systems and facilities to manage the City's solid waste generation, treatment, and disposal.

Policy PFS 25.3: Participate in interjurisdictional efforts to maintain available landfill capacity in San Diego County.

The **Environmental Element** of the City of Chula Vista General Plan promotes solid waste reduction strategies though recycling and waste reduction incentives. Specifically, the following objective would be relevant to the project.

Objective E 8: Minimize the amount of solid waste generated within the General Plan area that requires landfill disposal.

City of Chula Vista Construction and Demolition Debris Recycling Ordinance

The Construction and Demolition Debris Recycling (C&DD) Ordinance requires construction and demolition projects to divert their debris from landfill disposal. One hundred percent of inert material (concrete, rock, and landscape debris, etc.) and a minimum of 50 percent of all other materials (carpets, drywall, cabinets, etc.) shall be recycled and/or reused for certain projects. The C&DD Ordinance is designed as a means of achieving compliance with the California Green Building Standards Code.

4.14.2.5 Local Regulations – City of San Diego

a. General

City of San Diego General Plan

The **Public Facilities, Services and Safety Element** (City of San Diego 2023a) includes goals and policies related to the overall provision of adequate public infrastructure throughout the City of San Diego.

> **Policy PF-B.4:** Recommend development proposals to fully address impacts to public facilities and services.
>
> a. Identify the demand for public facilities and services resulting from new development.
>
> b. Identify specific improvements and financing which would be provided the project, including but not limited to sewer, water, storm drain, solid waste, fire, police, libraries, parks, open space, and transportation projects.
>
> c. Subject projects to exactions that are reasonably related and in rough proportionality to the impacts resulting from the proposed development.
>
> d. Provide public facilities and services to assure that current levels of service are maintained or improved by new development within a reasonable time period.

b. Water Supply/Services

City of San Diego General Plan

The **Public Facilities, Services and Safety Element** (City of San Diego 2023a) includes goals and policies related to providing a safe, reliable, and cost-effective water supply for the City of San Diego, and ensuring a water supply infrastructure that provides for the efficient and sustainable distribution of water.

Goal H - Water Infrastructure: A safe, reliable, and cost-effective water supply for San Diego; Water supply infrastructure that provides for the efficient and sustainable distribution of water.

> **Policy PF-H.1.e:** Continue to develop the recycled water customer base, and expand the distribution system to meet current and future demands.
>
> **Policy PF-H.2:** Provide and maintain essential water storage, treatment, supply facilities and infrastructure to serve existing and future development.

Urban Water Management Plan

The City of San Diego's UWMP 2020 (City of San Diego 2021a) update guides the integration of any subsequent water resources studies, facilities master planning, and various regulatory reporting and

assessment activities at the City of San Diego, regional, and state levels beyond a basic profiling of the City of San Diego's water system. The UWMP 2020 Update is focused on the following implementation goals: develop credible and balanced 20-year projection of water demand; update and improve the water demand forecast in the previous UWMP; adopt and integrate a Water Shortage Contingency Plan (WSCP); and utilize and build on City of San Diego Sustainability Department's Climate Action Plan (CAP).

The WSCP provides guidance and actions in the event of a declared water emergency or enactment of more stringent restrictions on water use. The WSCP details six potential levels of water shortage and the specific actions the City of San Diego would take to reduce water use and increase supplies to address the water shortage.

Comprehensive Policy for a Sustainable Water Supply in San Diego

Policy CP-400-15, adopted by the City of San Diego City Council, has the following goals related to the project:

- Support and encourage low-water use plumbing, landscaping, and irrigation materials in public and private development.
- Support economically sound activities that reduce the City's reliance on imported sources of water and increase local supplies.

Climate Action Plan

In 2022, the City of San Diego adopted a CAP (City of San Diego 2022a) Update that sets a goal of achieving net zero greenhouse gas emissions by 2035 with updated strategies, measures, and actions (City of San Diego 2022a). As part of the City's zero waste to landfill goals, programs supporting compost and mulch industries and use would support water conservation in landscaping. Additionally urban greening policies support use of low water trees. Strategy 5, Resilient Infrastructure and Healthy Ecosystems targets reduced dependence on imported water with a goal of increasing local supplies including water generated from the City of San Diego's Pure Water program. Additional CAP implementation measures that support water conservation include expanding awareness of the city's rainwater harvesting rebates and grass replacement rebate programs.

City of San Diego Water Facility Design Guidelines (2021)

The purpose of the City of San Diego Water Facility Design Guidelines (City of San Diego 2021b) guidelines is to identify general planning, predesign, and design details and approaches to be used for the City of San Diego's water infrastructure. The criterion identified throughout the guidelines provide minimum design requirements to ensure adequate fire and residential water pressure to meet expected demands. A summary of the City of San Diego Water Department design criteria is presented below in Table 4.14-1.

Table 4.14-1 City of San Diego Water Department Water System Design Criteria	
Criteria	Design Requirement
Single-Family Residential (up to 4-plex) Fire Flow	1,500 gpm
Condominiums and Apartments Residential Fire Flow	3,000 gpm
Minimum Static Pressure	65 psi
Maximum Static Pressure	120 psi
Maximum Pressure Drop – Domestic Pressure	25 psi
Minimum Pressure – Domestic Pressure	40 psi
Minimum Pressure – Max Day plus Fire	20 psi
Maximum Pipeline Velocity (Fire Flow)	15 fps
Maximum Pipeline Velocity (Normal Operating Conditions)	5 fps
gpm= gallons per minute; psi=pounds per square inch; fps=feet per second SOURCE: Appendix T (Table 1).	

c. Wastewater

City of San Diego General Plan

The **Public Facilities, Services and Safety Element** (City of San Diego 2023a) includes goals and policies related to the environmentally sound collection, treatment, re-use, disposal, and monitoring of wastewater.

Policy PF-F.5: Construct and maintain facilities to accommodate regional growth projections that are consistent with sustainable development policies.

Policy PF-F.6: Coordinate land use planning and wastewater infrastructure planning to provide for future development and maintain adequate service levels.

d. Solid Waste/Recycling

City of San Diego General Plan

The **Public Facilities, Services and Safety Element** (City of San Diego 2023a) includes goals and policies related to the efficient, economical, environmentally-sound waste collection, management, and disposal. The City also encourages maximum diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.

Policy PF-I.1: Provide efficient and effective waste collection services.

Policy PF-I.2: Maximize waste reduction and diversion.

Policy PF-I.5: Plan for sufficient waste handling and disposal capacity to meet existing and future needs. Evaluate existing waste disposal facilities for potential expansion of sites for new disposal facilities.

Climate Action Plan

Related to solid waste, the CAP strategy, Circular Economy & Clean Communities, expands on current zero waste goals, maintains gas capture measures, and supports efforts to increase composting and prevent food waste in response to California State SB 1383 (City of San Diego 2022a). The City of San Diego CAP 2030 goal is to achieve 82 percent waste diversion, 85 percent landfill gas capture and 99 percent methane capture. By 2035, the target increases to 90 percent waste diversion, 90 percent landfill gas capture, and maintains the 99 percent methane capture goal.

Zero Waste Plan

The City's Zero Waste Plan (City of San Diego 2015) lays out strategies to divert 75 percent of all trash by 2020, 90 percent diversion by 2035, and a goal of zero waste by 2040 by identifying potential diversion strategies for future action.

City of San Diego Recycling Ordinance

The City of San Diego Recycling Ordinance (San Diego Municipal Code [SDMC] Section 66.0701, et seq.) requires on-site recyclable collection for all single-family residences; City-serviced multi-family residences; and privately serviced businesses, commercial/institutional facilities, apartments, condominiums, and special events requiring a City permit. The ordinance requires recycling of plastic and glass bottles and jars, paper, newspaper, metal containers, and cardboard. City-serviced residences and privately serviced commercial and institutional properties must also recycle rigid plastics including clean food waste containers, jugs, tubs, trays, pots, buckets, and toys. To monitor compliance with the ordinance, annual reports must be submitted to the City's ESD from those providing recyclable material collection services.

Refuse and Recyclable Materials Storage Regulations

The City of San Diego's Refuse and Recyclable Materials Storage Regulations (SDMC Section 142.0801, et seq.) indicate the minimum exterior refuse and recyclable material storage areas required at residential and commercial properties. These are intended to provide permanent, adequate, and convenient space for the storage and collection of refuse and recyclable materials; encourage recycling of solid waste to reduce the amount of waste material entering landfills; and meet the recycling goals established by the City Council and mandated by the State of California (see above). The regulations provide minimum requirements for the size and location of material storage areas.

Construction and Demolition (C&D) Debris Deposit Ordinance

The Construction and Demolition (C&D) Debris Deposit Ordinance (SDMC Section 66.0601, et seq.) requires that the majority of construction, demolition, and remodeling projects requiring building, combination, or demolition permits pay a refundable C&D Debris Recycling Deposit and divert at least 50 percent of their waste by recycling, reusing, or donating reusable materials. For projects with permits issued on or after July 1, 2016, the diversion requirement increased to 65 percent by weight of the total C&D debris generated by the project. The diversion requirement for projects with

permits issued through June 30, 2016, remains at 50 percent. The ordinance is designed to keep C&D materials out of local landfills.

4.14.3 Issue 1: Need for Construction or Expansion of Facilities

4.14.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to expansion of utilities in the City of Chula Vista:

- Would the project require or result in the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

b. Impact Analysis

Water Facilities

The project site is located within the OWD service area; however, it does not have direct access to OWD facilities. Therefore, under all scenarios, water would be provided via the City of San Diego Water Department pipelines and infrastructure and would be subject to City of San Diego Water Facility Design Guidelines. While the site plan shows development of 215 dwelling units, the analysis for water facilities considers the possibility of development up to 221 dwelling units to provide a conservative approach. The project also includes park land and landscaping, which would require both potable and non-potable water service. The project also requires water service for fire protection. Water service to the project site would include two separate private water systems, one to provide domestic water service to residences and the other for fire protection purposes. These water facilities would connect to existing facilities in Dennery Road as detailed in Chapter 3.0, Project Description, Section 3.4.12.

As specified in Appendix T, the project's fire flow and residential water system design would be consistent with the City of San Diego Water Facility Design Guidelines.

In accordance with the City of San Diego Water Department Design Guidelines and Standards, the average potable water demands for the project would be 116,025 gpd.

Table 4.14-2 Potable Water Demand			
Land Use	Quantity	Demand Factor	Average Water Use (gpd)
Residential (11.6 du/net acre)	221 units	525 gpd/du	116,025
TOTAL			**116,025 (80.6 gpm)**
SOURCE: Appendix T (Table 2). du=dwelling unit; gpd=gallons per day; gpm=gallons per minute			

Peak factors were calculated using the City of San Diego Water Department Guidelines and Standards, Figure 2-2 (see Appendix A of Appendix T for data). Based on these standards, the maximum day demand to average annual demand ratio would be 1.7 (maximum day), resulting in an estimated maximum day demand of 197,243 gpd and the peak hour demand to average annual demand ratio would be 3.1 (peak hour), resulting in an estimated peak hour demand of 359,678 gpd (see Appendix T).

Water System Analysis

To adequately serve the water demand, the project would be required to construct a parallel 12-inch-diameter public water line in Dennery Road from the existing water regulating station at Sand Star Way up to the project frontage/entrance driveway. This new 12-inch-diameter public water line would tie in to the existing 12-inch-diameter public water line east of the supply lateral from the existing water regulating station at Sand Star Way. The length of the 12-inch-diameter public water main extension would be approximately 400 linear fee (see Figure 3-13). The off-site improvements would connect to an on-site water system sized to support the project's water demands. As shown in Figure 3-13, the on-site distribution system would be comprised of 4-inch-diameter pipes within the private driveways.

Consistent with City of Chula Vista General Plan Policy GM 1.11, a will serve letter from the City of San Diego (see Appendix R) has been provided indicating the availability of the City of San Diego to provide water service to the project. Additionally, under all scenarios, a LAFCO action would be required to ensure efficient service provision to the project site, including approval of applicable sphere of influence revisions for OWD or out of agency service agreements.

As detailed in Appendix T, the proposed pipelines would meet City of San Diego design standards and would adequately provide the pressure and volume of water to serve the residential and fire demands of the project. All impacts relative to the construction and installation of water supply infrastructure are included as part of the project and analyzed herein. Pipeline connections and improvements within Dennery Road would be limited to existing developed land within the City of San Diego right-of-way. Construction would be temporary in nature and would not affect any sensitive environmental resources. The proposed water facility off-site improvements would be installed within existing roadways and would not result in significant environmental effects beyond what has been analyzed within this Environmental Impact Report (EIR).

Wastewater Treatment

The City of Chula Vista provides sewer service within its jurisdictional boundaries; however, the project site does not have direct access Chula Vista sewer pipelines. In the No Annexation Scenario where the project would remain in Chula Vista, the project would use Chula Vista's treatment capacity in the Metro System. In Annexation Scenario 2b, where the project would annex to the City of San Diego after all Chula Vista development permits are issued, the project would not need to use Chula Vista treatment capacity. In both scenarios, the physical provision of sewer would be through City of San Diego sewer facilities, which currently exist through the project site (see Figure 3-14). A will serve letter from the City of San Diego (see Appendix R) has been provided indicating the availability of the City of San Diego to provide sewer service to the project. Additionally, under all scenarios, a LAFCO action would be required to ensure efficient service provision to the project site, including approval of a sphere of influence change to the OWD boundaries in both annexation scenarios or out of agency service agreements for the No Annexation Scenario.

The project's wastewater would be collected via an on-site private collection system that would connect to the existing, relocated City of San Diego 27-inch-diameter Otay Valley Trunk Sewer. As detailed in Section 3.4.13, a portion of the existing City of San Diego on-site public gravity sewer line would be removed with the associated sewer easements proposed to be vacated. The sewer line would be reconstructed along the northern property line with a new sewer easement to be granted (see Figure 3-14). The physical impacts associated with the sewer easement vacation and reassignment are included as a component part of the project and considered in the analysis of impacts under CEQA. Like the analysis of water facilities, this discussion assumes the potential for development of up to 221 dwelling units.

Sewer Generation

Based on the sewage generation factors and the peaking factors presented in the City of Chula Vista Wastewater Collection System Master Plan, dated May 2014, the estimated sewage generation for the project was calculated using the proposed number of dwelling units. Specifically, a wastewater duty factor of 230 gpd per dwelling unit for single-family land use and 182 gpd per dwelling unit for multi-family land use was used to calculate the project's wastewater generation. The estimated sewage generation for the project would be as follows:

- Average Day Flow = (67 units x 230 gpd/DU) + (154 units x 182 gpd/DU) = 43,438 gpd
- Peak Dry Weather = 43,438 gpd x 1.39 = 60,379 gpd
- Peak Wet Weather Flow = 60,379 gpd x 1.8 = 108,682 gpd

Sewer System Analysis

In all scenarios, wastewater service to the project site would be provided via the City of San Diego's Otay Valley Trunk Sewer connection, which currently crosses the Otay River and extends onto the project site. No wastewater infrastructure is available from the City of Chula Vista or OWD. A portion of the existing on-site public gravity sewer line would be removed and reconstructed along the northern property line, as detailed in Figure 3-14. Wastewater would gravity flow to the existing (relocated) 27-inch-diameter Otay Valley Trunk Sewer to be located at the northern property line. An

on-site private sewer collection system would consist of a 12-inch-diameter sewer lateral connected to the Otay Valley Trunk Sewer (see Appendix S).

In all scenarios, the project's average wastewater flow of 43,438 gpd and peak wastewater flow of 108,682 gpd would be added onto the City of Chula Vista's existing flow share and allocation conveyed through the Otay Valley Truck Sewer, Metro System. In the No Annexation Scenario, the wastewater flow would be added to the City of Chula Vista's existing flow share and allocation. The OWD is a participating agency of the Metro Wastewater JPA and is allocated a share of wastewater collection capacity from the Metro System which is managed by the City of San Diego. In both Annexation Scenarios the flow share would be allocated from the City of San Diego. The Otay Valley Trunk Sewer is associated with the overall ongoing regionwide South Otay and Otay Mesa sewer analyses by the City of San Diego. Currently there is additional capacity in the Otay Valley Trunk Sewer. Out of basin flows are presently being conveyed into the Otay Valley Trunk Sewer from the southern Otay Mesa region via a temporary sewer lift station. Once capacity in the Otay Valley Trunk Sewer is reached, these out of basin flows will be redirected to the future Otay Mesa Trunk Sewer system, leaving the Otay Valley Trunk Sewer with only in basin sewer flows. As detailed in Appendix S, the existing infrastructure, to which the project would connect, has available capacity for the proposed project's sewer flow and new or expanded facilities beyond those facility connections to be constructed on-site, would not be required.

Electrical Power/Natural Gas

Electric transmission lines that would be available to serve the project are currently located within and adjacent to the project site. All electrical connections would occur on-site, and impacts are evaluated throughout this EIR. Similarly, natural gas facilities are present in the surrounding roadways and available to serve the project. Impacts associated with construction of utility connections have been addressed throughout this EIR.

Stormwater/Drainage Facilities

As detailed in Chapter 3.0, Project Description Section 3.4.11, the project would construct stormwater and drainage facilities on-site to manage stormwater flows and ensure drainage conditions are not substantially altered after development. Physical impacts associated with construction of stormwater and drainage facilities are evaluated throughout this EIR.

Communication Systems

Facilities exist in surrounding roadways and are available to serve the project.

c. Significance of Impacts

The project would require the construction of water pipeline connections on and off-site with Dennery Road to serve the project. The off-site pipeline connections would be placed adjacent to existing pipes within Dennery Road. The grading and trenching effort associated with installation of off-site utility connections in Dennery Road have been evaluated throughout Chapter 4.0 of the EIR, where applicable. No additional expansion of facilities for water, wastewater treatment, storm

water/drainage, electric power, natural gas, or telecommunications would occur. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.3.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to construction or expansion of utilities:

- Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts with regard to the following utilities: natural gas, communication systems, water; sewer; and solid waste disposal?
- Result in the use of excessive amounts of fuel or energy (e.g., natural gas)?
- Result in the use of excessive amounts of power?

The City of San Diego's CEQA Significance Determination Thresholds (2022b) provides guidance for determining the potential significance of construction of new utility facilities and states that the focus of the analysis should be on the construction of water and sewer facilities. The City of San Diego's thresholds also includes the following guidance:

- Water and Sewer:
    - In projects with over 30 equivalent dwelling units (EDUs), a dual feed water pipeline system is required in case one of the pipelines fails.
    - For projects potentially affecting water and/or sewer lines, the California Department of Health Services Drinking Water Field Operations Branch requires notification if the separation between potable water and sewer or recycled water at any point is less than ten feet horizontal or one foot vertical. A minimum six-inch vertical separation is required to be maintained between utilities. Potentially significant impacts could result if these separation distances are not maintained.

In addition, the City of San Diego's Significance Determination Thresholds note the following guidance should be considered in determining whether utility work could have significant environmental effects:

- Would removal, construction, and/or relocation of the utility:
    - Be compatible with existing and adjacent land uses?
    - Change drainage or affect water quality/runoff?
    - Affect air quality?
    - Affect biological resources including habitat?
    - Have a negative aesthetic affect?

- Impact historical resources?
- Increase noise levels to existing receptors?

b. Impact Analysis

Need for New Systems

As discussed under Section 4.14.3.1, water service to the project would be provided via the City of San Diego Water Department pipelines and infrastructure and sewer would also be provided via City of San Diego wastewater facilities. Therefore, the analysis of whether the project would result in construction of new or expanded water facilities under Annexation Scenario 2a would be the same as the No Annexation Scenario and Annexation Scenario 2b. The required utility improvements, including all on-site and off-site components, have been evaluated throughout the EIR as part of the overall project footprint. All utility improvements are located within the project site and within the off-site roadway improvement areas that are evaluated throughout this EIR, with the exception of an off-site water line improvement required in Dennery Road. An approximate 200 linear feet of trenching within Dennery Road from the project entrance driveway to the existing water regulating station at Sand Star Way would be required to install a 12-inch-diameter water line extension in Dennery Road. These impacts would occur within the roadway which lacks sensitive resources. Additionally, this improvement is addressed in each environmental issue section of the EIR, where relevant.

As water, sewer, electrical, and gas facilities are available either on or adjacent to the project site, utility connections would require minimal construction to connect to existing facilities. No incompatibility with adjacent land uses or negative aesthetic effect would occur as the utility connections are available either on or adjacent to the site. The project's effect on drainage and water quality is discussed in detail in Section 4.12, Hydrology and Water Quality. As detailed therein, the project would not have an adverse effect on drainage or water quality with the incorporation of mitigation measures. Air quality and biological resources impacts associated with utility construction are evaluated as part of the overall air quality emissions calculations included in Chapter 4.2, Air Quality and Chapter 4.3, Biological Resources, respectively. All impacts related to utility construction are evaluated within each EIR section in Chapter 4.0. For example, construction of new or expanded water supply infrastructure would require limited amounts of grading and ground disturbance that are already considered in assessing project impacts. Further, to the extent construction of new or expanded water facilities would create noise impacts, compliance with the City of San Diego's Noise Ordinance during construction would avoid impacts. In addition, pipeline construction would require trenching as part of the grading phase of the project, which has been assessed in this EIR.

The analysis of the project's generation of solid waste and the City of San Diego's ability to adequately serve the project is discussed under Section 4.14.6, below. As detailed therein, no new solid waste facilities would be needed to serve the project.

Excessive Use of Fuel, Energy, or Power

A detailed discussion of project energy use is provided in Section 8.2. As detailed therein, the project would not result in an inefficient or wasteful use of energy resources during project construction or operation. An excessive amount of fuel or energy would not be expended with this project.

Furthermore, no natural gas use is proposed as the project is proposed for all electric appliances as detailed in Section 3.6.3.d, PDF-GHG-3 Electric Appliances, PDF-GHG-6 Outdoor Electrical Outlets to Allow for Electric Landscape Equipment, and PDF-GHG-9 Electric Vehicle Charging Capacity. The project has incorporated a number of measures to provide increased energy efficiency including operational efficiency related to vehicle use. Refer to Section 4.5.3.2.d for applicable GHG mitigation measures that would support energy and fuel efficiency including **GHG-SD-1** Transit Passes, **GHG-SD-2** Commute Trip Reduction Program, and **GHG-SD-3** Bicycle Micro-mobility Fleet.

c. Significance of Impacts

Need for New Systems

The project would require the construction of water, sewer, electrical power, and communication systems, to serve the project. Additional drainage and stormwater facilities would be constructed. Physical impacts associated with utility improvements are addressed throughout Chapter 4.0 of this EIR. No additional expansion of facilities for wastewater treatment, solid waste, storm water/drainage, electric power, natural gas, or telecommunications would occur that could result in physical impacts. Impacts would be less than significant.

Excessive use of Fuel, Energy, or Power

The project would not result in excessive use of fuel, energy, or power. The project is proposed as an all-electric development and would include electric vehicle charging and other design features to support reductions in fuel use and energy efficiency. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.4 Issue 2: Sufficient Water Supply

4.14.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to water supply in the City of Chula Vista:

- Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

b. Impact Analysis

From a water supply perspective, the project site is currently planned as open space in the City of Chula Vista General Plan; therefore, neither the City of Chula Vista nor the OWD would have included the project in its water supply planning documents. Further, while the project site is located

within the OWD; water supply infrastructure from the OWD is not available at the project site. The project would be served by the City of San Diego's public water system in all scenarios. However, as the project site is not currently in the City of San Diego, current San Diego water supply planning documents do not account for the water supply demands of the project. Since the City of San Diego would be the water service provider in all scenarios (see Appendix R), the evaluation of water supply is considered in light of both regional water supplies and City of San Diego water supply.

The 2020 SDCWA UWMP provides for a comprehensive planning analysis at a regional level and includes a water supply reliability assessment for the San Diego region. As detailed in Tables 9-1 through 9-3 of the SDCWA UWMP, the SDCWA anticipates adequate supply to meet or exceed the demands within its service areas during normal water years, single dry-years, and multiple dry-years (SDCWA 2021). Likewise, the City of San Diego 2020 UWMP provides a water supply reliability assessment to compare future water demands and water supplies under multiple hydrologic condition within the City of San Diego. Water demand and supplies through the Year 2045 under normal, single dry, and multiple dry year scenarios is presented in Tables 4.14-3, 4.14-4, and 4.14-5 respectively (City of San Diego 2021a).

Table 4.14-3
Normal Year Demand vs. Supply

Demands/Supplies	Demand and Supplies (AFY)				
	2025	2030	2035	2040	2045
Water Demand[1]	**202,865**	210,547	217,156	223,598	228,065
Local Water Supplies					
Pure Water San Diego[1], non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater	53,088	69,888	129,248	129,248	129,248
Water Supply from SDCWA (purchased water)	149,778	140,660	87,907	94,350	98,819
Total City of San Diego Water Supply	202,865	210,547	217,156	223,598	228,065
Estimated Water Shortage	0	0	0	0	0

SOURCE: Table 6-1 (City of San Diego 2021a).
[1]Includes consumptive use (retail and wholesale), non-revenue water, conservation, and non-potable recycled water demands for the City of San Diego.

Table 4.14-4
Single Dry Year Demand vs. Supply

Demands/Supplies	Demand and Supplies (AFY)				
	2025	2030	2035	2040	2045
Water Demand[1]	**210,169**	**218,128**	**224,973**	**231,648**	**236,274**
Local Water Supplies					
Pure Water San Diego[1], non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater	54,931	71,731	131,091	131,091	131,091
Water Supply from SDCWA (purchased water)	155,238	146,397	93,882	100,557	105,183
Total City of San Diego Water Supply	210,169	218,128	224,973	231,648	236,274
Estimated Water Shortage	0	0	0	0	0

SOURCE: Table 6-2 (City of San Diego 2021a).
Future local surface water supplies in the single dry year are estimated by using the supply from 2014.
[1]Includes consumptive use (retail and wholesale), non-revenue water, conservation, and non-potable recycled water demands in the City of San Diego.

Table 4.14-5
Multiple Dry Year Demand vs. Supply

Demands/Supplies	Demand and Supplies (AFY)				
DRY YEAR 1 (2013)	**2025**	**2030**	**2035**	**2040**	**2045**
Water Demand[1]	**202,865**	**210,547**	**217,156**	**223,598**	**228,065**
Local Water Supplies (Pure Water San Diego[2], non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater)	52,036	68,836	128,196	128,196	128,196
Water Supply from SDCWA (purchased water)	150,830	141,712	88,959	95,402	99,868
Total City of San Diego Water Supply	202,865	210,547	217,156	223,598	228,065
Estimated Water Shortage	0	0	00	0	
DRY YEAR 2 (2014)	**2025**	**2030**	**2035**	**2040**	**2045**
Water Demand	**210,169**	**218,128**	**224,973**	**231,648**	**236,274**
Local Water Supplies (Pure Water San Diego, non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater)	47,537	64,337	131,091	131,091	131,091
Water Supply from SDCWA (purchased water)	155,238	146,397	93,881	100,556	105,183
Total City of San Diego Water Supply	210,169	218,128	224,973	231,648	236,274
Estimated Water Shortage	0	0	0	0	0
DRY YEAR 3 (2015)	**2025**	**2030**	**2035**	**2040**	**2045**
Water Demand	**210,169**	**218,128**	**224,973**	**231,648**	**236,274**
Local Water Supplies (Pure Water San Diego, non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater)	47,537	64,337	131,091	131,091	131,091
Water Supply from SDCWA (purchased water)	155,238	146,397	93,881	100,556	105,183
Total City of San Diego Water Supply	210,169	218,128	224,973	231,648	236,274
Estimated Water Shortage	0	0	0	0	0
DRY YEAR 4 (2016)	**2025**	**2030**	**2035**	**2040**	**2045**
Water Demand	**207,735**	**215,601**	**222,367**	**228,964**	**233,538**
Local Water Supplies (Pure Water San Diego, non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater)	49,620	66,420	125,780	125,780	125,780
Water Supply from SDCWA (purchased water)	158,114	149,181	96,586	103,184	107,757
Total City of San Diego Water Supply	207,735	215,601	222,367	228,964	233,538
Estimated Water Shortage	0	0	0	0	0
DRY YEAR 5 (2017)	**2025**	**2030**	**2035**	**2040**	**2045**
Water Demand	**207,735**	**215,601**	**222,367**	**228,964**	**233,538**
Local Water Supplies (Pure Water San Diego, non-potable recycled, Local surface water, City-Lake Cuyamaca Interagency Agreement, Groundwater)	49,620	66,420	125,780	125,780	125,780
Water Supply from SDCWA (purchased water)	158,114	149,181	96,586	103,184	107,757
Total City of San Diego Water Supply	207,735	215,601	222,367	228,964	233,538
Estimated Water Shortage	0	0	0	0	0

SOURCE: Table 6-3 (City of San Diego 2021a).
AFY=acre feet per year
[1]Includes consumptive use (retail and wholesale), non-revenue water, conservation, and non-potable recycled water demands.
[2]The Pure Water San Diego Program will use proven water purification technology to clean recycled water to produce safe, high-quality drinking water. The Program offers a cost-effective investment for San Diego's water needs and will provide a reliable, sustainable water supply (City of San Diego 2023b).

As shown in Tables 4.14-3 through 4.14-5, the City of San Diego does not anticipate any water shortages under normal, single dry, or multiple dry year conditions. However, water use projections are based on anticipated water demand based on build-out projections in the City of San Diego. Since the project site is not currently within the City of San Diego, the project's water demand is not accounted for in the City of San Diego's 2020 UWMP. However, the 2020 UWMP does forecast that multi-family water usage and demand would increase at 34 percent over the projection period of 2025 to 2045 due to new development in the region, which would be reasonable to attribute the project's contributions to. As detailed in Table 4.14-2, the project is anticipated to result in a potable water demand of 116,025 gpd, which equates to 42,349,125 gallons per year, or 0.00000002 AFY. Based on the project's demand in relation to overall City of San Diego anticipated demand, existing water supplies would be likely to be available to serve the project. As noted above, the City of San Diego has adequate water supplies to serve the region through 2045, even during dry years. The demand projections used in the UWMPs are based on growth estimates and are not site-specific; therefore, the growth resulting from development of the project site would fit within the overall growth projections of the City of San Diego's 2020 UWMP. While the project would allow more residential development compared to the adopted land use it is not expected that the increased development allowed by the project would conflict with the City of San Diego's future water demand projections or per capita water use targets. San Diego Association of Governments (SANDAG) Series 13 estimates that the City of San Diego would grow in population by approximately 14,156 people per year from 2020 to 2035. This would equate to an additional 5,435 units per year from 2020 to 2035. Therefore, while the project would include additional residential in an area previously planned for open space, this would be accommodated in the regional growth projections and would not conflict with regional growth forecast, which accounts for residential growth in the City of San Diego.

The demand projections in the 2020 URMP are based on a projected strong economy for the San Diego region, and therefore, it is assumed that this conservative analysis would cover development of the project as it is unlikely that the San Diego region would achieve full buildout of its planned developments by 2045. As required by CVMC Section 19.92.040(B)(3), a service availability form from the City of San Diego has been provided and is included as Appendix R. This serves as acknowledgement that the City of San Diego would be able to provide adequate water supplies and related infrastructure to serve the project.

Additionally, the project would incorporate water sustainable design features, techniques, and materials that would reduce water consumption including water efficient landscaping and building construction that incorporates high-efficiency plumbing fixtures and fittings in all structures consistent with the latest building code. The project would conform to the landscape plans which demonstrate compliance with City of Chula Vista Landscape Manual including drought-tolerant landscaping that would not require the excessive use of water, or pesticides and fertilizers and incorporation of highly efficient irrigation systems.

Finally, UWMPs are required to be updated every five years; the City of San Diego's 2020 UWMP would therefore be subject to revision in 2025, which would coincide with the project's anticipated completion date. Anticipated water needs from the project would be considered in future UWMP updates should the project be approved.

NOTE: However, like the project, several of the cumulative projects served by the City of San Diego PUD require General Plan Amendments and/or Rezones and were not included in the land use assumptions made in the City of San Diego 2020 UWMP. Due to the existing housing shortage, new housing development that requires changes to existing land use plans is generally accommodating growth rather than increasing anticipated growth beyond SANDAG estimates.

c. Significance of Impacts

Although the project is not specifically accounted for in the City of San Diego's 2020 UWMP, it would not result in water demand not accounted for in the City of San Diego's 2020 UWMP as the 2020 UWMP assessed a conservative full residential build-out of the San Diego region in 2045; additionally, the City of San Diego has indicated availability to serve the project (see Appendix R). The project's water demand equates to a fraction of the overall water demand anticipated in the City of San Diego service area and would be accommodated in the City's overall anticipated growth over the five-year planning horizon since the water demand is not site specific. The project would not conflict with the City of San Diego's future water demand projections or per capita water use targets. The project would accommodate anticipated regional growth as reflected in regional plans. Impacts relating to water supply would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.4.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego's CEQA Significance Determination Thresholds (2022b) provides guidance for determining the potential significance of adequacy of water supply. Based on the City of San Diego's thresholds, a significant impact could occur if the project would result in development that requires:

- Excessive amounts of potable water. For example, a golf course use or certain industrial uses result in substantial water usage compared to most other uses. Projects should be encouraged to use reclaimed water whenever possible.

- Predominantly non-drought resistant landscaping and excessive water usage for irrigation and other purposes.

As summarized below, the City of San Diego thresholds also include the following guidance for determining significance:

- The incorporation of water conservation devices into project designs are encouraged or required, such as the use of low-flush toilets, low-flow faucets, and timers on lawn sprinklers.

- Recycled water use is regulated by Ordinance 0-17327 ("Mandatory Reuse Ordinance") adopted by the City Council on July 24, 1989. This ordinance specifies that "recycled water

shall be used within the City where feasible and consistent with the legal requirements, preservation of public health, safety, and welfare, and the environment." Compliance with this ordinance for new development is made a condition of tentative maps, land use permits, etc. based on the project's location within an existing or proposed recycled water service area. In addition, the City of San Diego Water Department is proposing additional retrofit criteria in conjunction with the Public Utilities Advisory Commission. Compliance with the Mandatory Reuse Ordinance is assured via permit conditions and therefore no significance thresholds for CEQA analysis are required. The physical placement of any reuse lines would be analyzed for impacts as part of the normal discretionary process.

b. Impact Analysis

As detailed in Section 4.14.4.1.b, neither the City of Chula Vista, OWD, or the City of San Diego have planned for the water supply demands of the project due to the project site being planned as open space in the City of Chula Vista General Plan. Additionally, since City of San Diego would be the water service provider in all scenarios (see Appendix R), the evaluation of water supply is considered in light of both regional water supplies and City of San Diego water supply.

An evaluation of the ability for the City of San Diego to provide water service to the project site considering existing and future projected water supply is detailed in Section 4.14.4.1.b, Tables 4.14-3 through 4.14-5, the City of San Diego does not anticipate any water shortages under normal, single dry, or multiple dry year conditions. While the project would allow more residential development compared to the adopted land use, it is not expected that the increased development allowed by the project would conflict with the City of San Diego's future water demand projections or per capita water use targets. Regional planning as expressed in SANDAG's Series 13 anticipates increased growth in the San Diego Region that would be accommodated by regional plans. Refer to Section 4.14.4.1.b for details. Chapter 3.0, Project Description, Section 3.5 describes the details of the LAFCO actions required for water services in all scenarios.

Additionally, the project would incorporate water sustainable design features, techniques, and materials that would reduce water consumption for both potable and non-potable water demands. Specifically, the project would utilize drought-tolerant, native vegetation for all landscapes consistent with the SDMC Landscape Regulations. High-efficiency irrigation would be used to ensure efficient landscape water use. As a multi-family residential project, the project would not include any features that would result in the use of excessive amounts of potable water. Implementation of current plumbing code requirements including low flow plumbing fixtures and highly water efficient appliances would ensure excessive potable water use is not required.

c. Significance of Impacts

Although the project would result in a greater water demand compared to the land uses included in existing plans, the project demonstrates consistency with the City of San Diego Landscape Regulations pertaining to water efficient landscaping and irrigation systems. Additionally, compliance with current building and plumbing codes would ensure excessive amounts of potable water are not used. Therefore, impacts relating to water supply would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.5 Issue 3: Wastewater Treatment Capacity

4.14.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to wastewater treatment capacity in Chula Vista:

- Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

b. Impact Analysis

As discussed in Section 4.14.3.1, project wastewater would connect to the existing 27-inch-diameter Otay Valley Trunk Sewer on the north side of the project site. The project's average wastewater flow would be 43,438 gpd with a peak wastewater flow of 108,682 gpd. In all scenarios, the project's wastewater would be conveyed through the Otay Valley Trunk Sewer Metro System. As detailed in Section 4.14.3.1.b, currently there is additional capacity in the Otay Valley Trunk Sewer. Out of basin flows are presently being conveyed into the Otay Valley Trunk Sewer from the southern Otay Mesa region via a temporary sewer lift station. Once capacity in the Otay Valley Trunk Sewer is reached, these out of basin flows will be redirected to the future Otay Mesa Trunk Sewer system, leaving the Otay Valley Trunk Sewer with only in basin sewer flows. As detailed in Appendix S, the existing infrastructure, to which the project would connect, has available capacity for the proposed project's sewer flow. New or expanded facilities beyond the on-site sewer line relocations would not be required.

Additionally, the project would be consistent with the City of Chula Vista's General Plan Objective GM 1 regarding the assurance of adequate services and facilities.

c. Significance of Impacts

There is adequate sewer facility capacity in the City of San Diego Otay Valley Trunk Sewer to serve the project. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.5.2 Annexation Scenario 2a

a. Threshold of Significance

San Diego has identified the following question to provide guidance in determining potential significance of impacts related to solid waste:

- Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts (sewer)?

The City of San Diego's CEQA Significance Determination Thresholds (2022b) provides guidance for determining the potential significance of wastewater treatment. City's thresholds include the following guidance:

- Sewer demand is handled on a project-by-project basis, where developers are now required to submit water and sewer studies using the measurement of equivalent dwelling units. The incorporation of water conservation devices into project designs are encouraged or required, such as the use of low-flush toilets, low-flow faucets, and timers on lawn sprinklers.

- Sewer trunk lines are continually monitored in the field to determine remaining levels of capacity. The Engineering Division plans its capital improvement projects several years prior to pipelines actually reaching capacity.

- For projects potentially affecting water and/or sewer lines, the California Department of Health Services Drinking Water Field Operations Branch requires notification if the separation between potable water and sewer or recycled water at any point is less than ten feet horizontal or one foot vertical. A minimum six-inch vertical separation is required to be maintained between utilities. Potentially significant impacts could result if these separation distances are not maintained. The focus of the analysis should be on the construction of water and sewer facilities.

b. Impact Analysis

The analysis of wastewater capacity is discussed under Sections 4.14.3.1 and 4.14.3.2. As detailed therein, a Sewer Study (see Appendix S) was prepared for the project, which concluded that the Otay Valley Trunk Sewer has available capacity for the project's sewer flow and new facilities would not be required. The City of San Diego Development Services Department, Engineering Division, Water and Sewer Section letter has also reviewed the project and indicated availability to serve the project (see Appendix R). At no point are any potable water lines proposed that are less than 10 feet horizontal or one foot vertical distance from sewer or recycled water pipelines.

The project includes water conservation devices including the installation of Energy Star appliances, and water efficient landscaping consistent with the SDMC (see also mitigation measures **GHG-SD-4** and **GHG-SD-6**). The implementation of the water conservation measures and compliance with applicable regulations and standards would ensure that impacts associated with wastewater capacity would be minimized.

c. Significance of Impacts

There is adequate sewer facility capacity to serve the project. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.6 Issue 4: Solid Waste

4.14.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to solid waste in Chula Vista:

- Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Would the project Comply with federal, state, and local management and reduction statutes and regulation related to solid waste.

b. Impact Analysis

Solid Waste

In the City of San Diego, refuse collection for residents on private streets is contracted through private haulers that are franchised by the City of San Diego. The City of Chula Vista also contracts refuse collection through a private hauler. Since City of San Diego private haulers already provide refuse collection to multi-family residential areas adjacent to the project site, solid waste collection would be provided by the City of San Diego in all scenarios due to efficiencies resulting from using City of San Diego contracted waste haulers. A Waste Management Plan (WMP) (Appendix U) was prepared for the City of San Diego that demonstrates compliance with City of San Diego solid waste requirements. Although the WMP is for the City of San Diego, it is referenced in this analysis as it includes information about the project's operational solid waste generation that would apply in all scenarios. Additionally, the City of San Diego would provide the contracted solid waste collection services for the project site all scenarios, compliance with City of San Diego standards related to operational solid waste requirements would be appropriate for all scenarios.

Demolition, Grading and Construction Waste

The City of Chula Vista C&DD Ordinance requires construction and demolition projects to divert their debris from landfill disposal. One hundred percent of inert material (concrete, rock and landscape debris, etc.) and a minimum of 50 percent of all other materials (carpets, drywall, cabinets, etc.) shall

be recycled and/or reused for certain projects. The project has prepared a WMP (see Appendix U) that demonstrates compliance with City of San Diego diversion requirements, and the WMP also demonstrates compliance with City of Chula Vista diversion standards. Refer to Section 4.14.5.2.b for details of anticipated construction debris and diversion. Additionally, in the No Annexation Scenario and Annexation Scenario 2b, the City of Chula Vista would require a Waste Management Report to be prepared, reviewed, and approved by the Chula Vista Environmental Services Division prior to the issuance of a demolition or building permit. This requirement would ensure state and City of Chula Vista construction waste diversion goals are met.

Occupancy-Operational Waste

The estimated annual waste to be generated during occupancy of the project was calculated based on waste generation estimates from the City of San Diego ESD (see Appendix U, Attachment 3). The estimated solid waste generation rate for detached residential is 1.6 tons per year per unit, and the estimated solid waste generation rate for multi-family uses is 1.2 tons per year per unit. Overall, the project would generate approximately 282.4 tons of waste per year.

To meet state waste reduction goals, the project would include waste reduction measures as condition PDF-UTIL-1 (see Section 3.6.3.e), to manage waste disposal. The project includes refuse, recyclable material, and organic material storage space within each residential unit's garage consistent with the SDMC. Because the project would construct 340,073 square feet of residential uses that would generate operational waste, a minimum of 432 square feet of refuse storage area, a minimum of 432 square feet of recyclable material storage area, and a minimum 432 square feet of organic waste storage area would be required to be consistent with City of San Diego requirements. The total exterior refuse, recyclable, and organic waste material storage requirement for the project would be 2,016 square feet. The project would meet this requirement by designing garages associated with each individual residential unit with enough space to accommodate three 12.83-square-foot (96-gallon) carts, resulting in a collective total of 2,759 square feet of space for refuse storage, recycling storage, and organic waste storage. Refuse, recyclables, and organic waste stored by each dwelling unit would be collected through curbside collection services.

According to the CalRecycle 2018 Facility-Based Characterization of Solid Waste in California, organic material accounted for approximately 32.6 percent of the franchised residential disposed waste. Of the 141.2 tons of refuse materials remaining after the standard 50 percent diversion rate is assumed, it is assumed that 32.6 percent of that tonnage would be organic material equal to 46.0 tons per year (see Appendix U). With implementation of the organic material recycling collection and an assumption of 75 percent individual compliance, the project would achieve adequate organic waste diversion to support Statewide compliance with SB 1383 which requires diversion of 50 percent of organic waste prior to January 1, 2025, and 75 percent diversion thereafter.

Additionally, a project design feature has been included in the project description to require compliance with the project's WMP in all scenarios. The project would be required to implement a long-term WMP to ensure the development meets or exceeds all state and local requirements. The implementation of the WMP would be a project design feature and made a condition of project approval (see Chapter 3.0, Section 3.6.3.e, PDF-UTIL-1). Specific program measures included in the WMP include the following:

(a) Residential Facilities. For single-family residential facilities that receive solid waste collection services from a Franchisee, the responsible person shall provide curbside recycling services to occupants as required by SDMC section 66.0706(c). For multi-family residential facilities that receive solid waste collection services from a Franchisee, the responsible person shall provide on-site recycling services to occupants as required by sections 66.0706(c) and 66.0706(d).

(b) Occupants of Residential Facilities. Occupants of residential facilities that receive solid waste collection services from a Franchisee shall participate in a recycling program, offered by the Franchisee or a Recyclable Materials Collector, by separating recyclable materials from other solid waste, depositing the recyclable materials in the designated recycling containers, and placing the recycling containers out for collection at the time and place designated by the Franchisee or Recyclable Materials Collector.

(c) Recycling Services. Recycling services for residential facilities shall include, at a minimum, all of the following:

(1) collection in a separate container and at least two times per month of commingled plastic and glass bottles and jars, paper, newspaper, metal containers, cardboard, and rigid plastics, including clean food containers, jugs, tubs, trays, pots, buckets, and toys;

(2) weekly collection in a separate container of yard trimmings and nonhazardous wood waste. If yard trimmings or nonhazardous wood waste will be hauled away by a gardening or landscaping service provider as an incidental part of its services at the property, then the service contract or agreement shall require the gardening or landscaping service provider to take the yard trimmings and nonhazardous wood waste to a mulching or composting facility for recycling;

(3) weekly collection in a separate container of food material and food-soiled paper mixed with food material;

(4) alternatively, in lieu of San Diego Municipal Code sections 66.0706(c)(2) and 66.0706(c)(3), weekly collection in a separate container of food material or food-soiled paper mixed with food material that is commingled with yard trimmings or nonhazardous wood waste;

(5) collection of other recyclable materials for which markets exist, such as scrap metal, as determined by the Director, with collection of such recyclable materials required beginning on the 181st day after the City gives public notice by placing an advertisement

of at least one-eighth page in a newspaper of general daily circulation in the City and posting a notice including such recyclable materials on the Department's website;

(6) utilization of recycling containers that comply with the size and color standards in the Container and Signage Guidelines established by the Manager;

(7) designated recycling collection and storage areas;

(8) signage on all recycling receptacles, containers, chutes, and/or enclosures which complies with the standards described in the Container and Signage Guidelines established by the Manager; and

(9) containers for recyclable materials in all areas where solid waste containers are located.

(d) Education. For multi-family residential facilities, and for single family residential facilities receiving recycling services through a homeowners' association, the responsible person shall ensure that persons are educated about the recycling services as follows:

(1) Information, including the types of recyclable materials accepted and not accepted, the location of recycling containers, the recycling requirements, and the person's responsibility to recycle pursuant to this Division, shall be distributed to all occupants, employees, and contractors annually;

(2) All new occupants shall be given information and instructions upon occupancy; and

(3) All occupants shall be given information and instructions upon any change in recycling service to the facility.

(e) Container Contamination. For all residential facilities, the responsible person shall prohibit placing recyclable materials in a container not designated to receive those recyclable materials and shall periodically inspect containers and inform occupants, employees, and contractors if containers are contaminated.

Overall, implementation of the WMP and compliance with SDMC requirements relating to refuse and recycling would ensure impacts associated related to solid waste would be less than significant.

c. Significance of Impacts

The implementation of a WMP, and the inclusion of adequate waste, organics, and recycling storage in garages, would ensure that the overall waste produced by the project would be reduced sufficiently to comply with State waste reduction targets and City of Chula Vista General Plan waste reduction and recycling goals. Implementation and compliance with a WMP will be a condition of approval under Scenario 2a. Solid waste impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.14.6.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to solid waste:

- Would the proposed project have an effect upon, or result in a need for new or altered solid waste facilities?

The City's Significance Determination Thresholds (City of San Diego 2022b) provides guidance for determining the potential significance of impacts related to solid waste.

- Construction/demolition/renovation projects meeting or exceeding the following thresholds are considered to have a potentially significant direct solid waste impact based on solid waste generation estimates and require the preparation of a WMP. Projects that include the construction, demolition, or renovation of 1,000,000 square feet or more of building space may generate approximately 1,500 tons of waste or more and are considered to have direct impacts on solid waste facilities.
    - Direct impacts result from the generation of large amounts of waste which stresses existing facilities. Waste management planning is based on a steady rate of waste generation and doesn't assume increased waste generation due to growth.
    - While all projects are required to comply with the City's waste management ordinances, direct and cumulative impacts are mitigated by the implementation of project specific WMPs which may reduce solid waste impacts to below a level of significance.
    - For projects over 1,000,000 square feet, a significant direct and cumulative (see Section 7.2.14.3) solid waste impact would result if the compliance with the City's ordinances and the WMP fail to reduce the impacts of such projects to below a level of significance and/or if a WMP for the project is not prepared and conceptually approved by the ESD prior to distribution of the draft environmental document for public review.

b. Impact Analysis

A WMP was prepared to identify waste reduction measures that would be implemented by the project to ensure compliance with the City of San Diego waste management ordinances, General Plan policies, and waste reduction goals (see Appendix U).

Demolition, Grading and Construction Waste

As detailed in Appendix U, the project would demolish and remove approximately 70 cubic yards of concrete foundations associated with former agricultural buildings located in the central area of the site. Based on the City of San Diego ESD C&D Debris Conversion Rate Table, demolished concrete

weighs approximately 0.7 tons per cubic yard (see Appendix U, Attachment 1). Therefore, project demolition would generate 49 tons of concrete. All demolished concrete would be source separated and recycled at the Vulcan Otay Asphalt Recycling Center for 100 percent diversion.

Project grading would require approximately 110,400 cubic yards of cut and 133,000 cubic yards of fill, requiring a net import of approximately 22,600 cubic yards of soil. Project grading would generate green waste that would be source separated and recycled at the Otay Landfill facility for 100 percent diversion.

Based on project grading of approximately 340,073 square feet of residential development and using the U.S. EPA average generation rate of 4.39 pounds of construction waste per square foot for residential uses, project construction waste is estimated to generate a total of 746.5 tons of waste during construction.

Implementing the City of San Diego's 75 percent diversion of waste target goal adopted under the Zero Waste Objective requires a majority of waste to be handled at facilities other than landfills. There are two types of waste diversion: "mixed-debris diversion" and "source-separated diversion." Mixed-debris diversion is a method in which all material waste is disposed of in a single container for transport to a mixed C&D recycling facility. Under source-separated diversion, materials are separated on-site before transport to appropriate facilities that accept specific material types. The project would implement source-separated diversion, which generally achieves a higher diversion rate. Table 4.14-6 provides a breakdown of the 746.5 tons by anticipated types of material and provides the most likely handling facility and diversion method.

Table 4.14-6
Construction Waste Diversion and Disposal by Material Type

Material Type	Estimated Waste (tons)	Percent Diverted[1]	Nearest Handling Facility[1]	Estimated Diversion (tons)	Estimated Disposal (tons)
Asphalt and Concrete	120.2	100%	Vulcan Otay Asphalt Recycling Center	120.2	0.0
Metals	170.9	100%	Cactus Recycling	170.9	0.0
Brick/Masonry/Tile	50.9	100%	Vulcan Caroll Canyon Landfill and Recycle Site	50.9	0.0
Clean Wood/Wood Pallets	28.3	100%	Otay Landfill	28.3	0.0
Carpet, Padding/ Foam	60.3	100%	DFS Flooring	60.3	0.0
Drywall	165.9	100%	EDCO Recovery & Transfer	165.9	0.0
Corrugated Cardboard	45.2	100%	Cactus Recycling	45.2	0.0
Trash/Garbage	104.5	0%	Otay Landfill	0.0	104.5
TOTAL	**746.3**			**641.8 86.0%**	**104.5 14.0%**

NOTE: Totals may vary due to independent rounding.
[1]City of San Diego ESD 2022 Certified C&D Recycling Facility Directory (see Appendix U, Attachment 2).

As shown in Table 4.14-6, use of the source separation method for most of the material types (where feasible) would result in the total diversion of approximately 641.8 tons, with 104.5 tons of trash/garbage being disposed of in the landfill.

Table 4.14-7 summarizes the amount of waste estimated to be generated and diverted by phase: demolition, grading, and construction.

Table 4.14-7
Total Waste Generated, Diverted, and Disposed of by Phase

Phase	Tons Generated	Tons Diverted	Tons Disposed
Demolition	49.0	49.0	0.0
Grading	0.0	0.0	0.0
Construction	746.3	641.8	104.5
TOTAL	**795.3**	**690.8** **86.9%**	**104.5** **13.1%**
NOTE: Totals may vary due to independent rounding.			

As shown in Table 4.14-7, of the 795.3 tons estimated to be generated, 690.8 tons would be diverted. This would result in the diversion and reuse of 86.9 percent of the waste material generated from the project from the landfill, which would meet the City of San Diego's 75 percent waste diversion goal.

Occupancy-Operational Waste

Details about waste generation during the occupancy-operational phase of the project is detailed in Section 4.14.6.1b, above. With respect to operational waste, the project would exceed the 60.0 ton-per-year threshold of significance for a cumulative impact on solid waste services in the City of San Diego (see Appendix U); however, implementation of the project's waste management plan would reduce impacts to less than significant consistent with City of San Diego thresholds of significance for solid waste. The project would implement PDF-UTIL-1 and implement refuse, recyclable material, and organic material storage space requirements in garages to ensure that the overall waste produced by the project would be reduced sufficiently to comply with waste reduction targets.

c. Significance of Impacts

The implementation of a WMP, compliance with City of San Diego construction and demolition debris ordinance, along with the provision of adequate bin storage space in garages would ensure that the overall waste produced by the project would be reduced sufficiently to comply with waste reduction targets. Impacts related to solid waste would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15 Wildfire

This section analyzes potential impacts related to wildfire that could result from implementation of the Nakano Project (project). The impact analysis is based on a Fire Protection Plan prepared by Dudek (Appendix I) in addition to an Evacuation Plan prepared by Dudek (Appendix J). As detailed in Section 4.0, the analysis for the No Annexation Scenario and Annexation Scenario 2b use applicable City of Chula Vista standards and thresholds due to the City of Chula Vista being responsible for project implementation with the exception that off-site grading in the City of San Diego would require a separate grading permit issued by the City of San Diego in both scenarios. Annexation Scenario 2a is evaluated separately using City of San Diego thresholds as the City of San Diego would be responsible for project implementation of all on-site and off-site components in this scenario.

4.15.1 Existing Conditions

Additional information related to emergency plans and wildfire existing conditions are referenced in Section 4.6.1, as part of the Health and Safety/Hazardous Materials Section of this Environmental Impact Report (EIR). Refer to that section for a complete discussion of existing conditions as it relates to emergency planning and wildfire (see Sections 4.6.1.1 and 4.6.1.3).

4.15.1.1 Wildfire Risk

As discussed in Section 4.6.1, potential wildfire risk zones are areas that have steep slopes, limited precipitation, and vegetation fuel on-site or within adjacent areas. The project site lies within an area considered a very high fire hazard severity zone (VHFHSZ) as designated by the Chula Vista Fire Department (CVFD), the San Diego Fire-Rescue Department (SDFRD), and on California Department of Forestry and Fire (CAL FIRE) Fire Hazard Severity Zone (FHSZ) maps. The FHSZ mapping is shown in Section 4.6, Figure 4.6-1.

4.15.1.2 Vegetation/Fuels

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, non-native grass-dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. In comparison, sage scrub can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but does not typically ignite or spread as quickly as light, flashy grass fuels. Vegetative fuels included in the fuel load modeling include a moderate load grass-shrub and moderate to high load shrub, and eucalyptus woodland forest/riparian habitat.

4.15.1.3 Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower spread down-slope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind. The project site is close to the Otay River valley and is relatively flat with elevations ranging from 90 feet above mean sea level in the northern portion of the project site to 180 feet above mean sea level in the southern portion of the project site.

4.15.1.4 Climate

The project site, like much of southern California, is influenced by the Pacific Ocean and a seasonal, migratory subtropical high-pressure cell known as the "Pacific High." Wet winters and dry summers with mild seasonal changes characterize the southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. The average high temperature for the project area is approximately 73.4 degrees Fahrenheit, with an average temperature in the summer and early fall months (June through October) of 78.6 degrees Fahrenheit. August and September are typically considered the hottest months of the year. The area is considered to be a semi-arid climate. Annual precipitation typically averages approximately 11.5 inches annually with the wettest months being January and December (see Appendix I).

4.15.1.5 Fire History

Fire history data provides valuable information regarding fire spread, fire frequency, ignition sources, and vegetation/fuel mosaics across a given landscape. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and, therefore, may provide a tactical defense position, what type of fire burned on the project site, and how a fire may spread. Fire history represented in the Fire Protection Plan (see Appendix I) uses the CAL FIRE Fire and Resource Assessment Program (FRAP) database. FRAP summarizes fire perimeter data dating to the late 1800s but is incomplete because it only includes fires over 10 acres in size and has incomplete perimeter data, especially for the first half of the 20th Century (see Appendix I). However, the data does provide a summary of recorded fires and can be used to show whether large fires have occurred in the project area, which indicates whether they may be possible in the future.

According to available data from the CAL FIRE in the FRAP database, thirteen (13) fires have burned within 5 miles of the project site since the beginning of the historical fire data record. No fires have burned on the project site. CVFD and SDFRD may have data regarding smaller fires (less than 10 acres) that have occurred on-site. Based on fire history, wildfire risk for the project site is associated primarily with a Santa Ana wind-driven wildfire burning or spotting on-site from the east/northeast, although a fire approaching from the west during more typical on-shore weather patterns is possible. The proximity of the project to the open space associated with the Otay River valley to the north has the potential to increase wildfire hazard in the project vicinity.

4.15.2 Regulatory Setting

Additional regulations related to existing emergency plans and wildfire are referenced in Section 4.6.2, as part of the Health and Safety/Hazardous Materials Section of this EIR in addition to Appendix I. A summary of key regulations is found below.

4.15.2.1 Federal Regulations

a. National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association Codes, Standards, Practices, and Guides National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not laws or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the local fire agency.

b. Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009, by the National Wildfire Coordinating Group, a federal multiagency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgement of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy:

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.

c. International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property, including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The International Fire Code places an emphasis on prescriptive and

performance-based approaches to fire prevention and fire protection systems. Updated every three years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated to protect life and property (often times these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

4.15.2.2 State Regulations

a. California Government Code

California Government Code Sections 51175–51189 of the California Government Code provide guidance for classifying lands in California as fire hazard areas and requirements for management of property within those lands. The CAL FIRE is responsible for classifying FHSZs based on statewide criteria and makes the information available for public review. Further, local agencies must designate, by ordinance, VHFHSZs within their jurisdiction based on the recommendations of CAL FIRE. Section 51182 of the California Government Code sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. Defensible space around structures in fire hazard areas must consist of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

b. California Code of Regulations

Title 14 Natural Resources

Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, sets forth requirements for defensible space if the distances specified in Section 51182 of the California Government Code cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape landscaping or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Building Code (CBC), California Code of Regulations (CCR) Title 24, Part 2, Chapter 7A.

c. Title 24 California Building Standards Code

California Building Code

Part 2 of Title 24 of the California Building Standards Code contains the CBC. The 2022 CBC was published July 1, 2022, with an effective date of January 1, 2023. Chapter 7A of the CBC regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a fire hazard area. FHSZs, as defined by Chapter 7A of the CBC, are

geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High or Moderate in State Responsibility Areas or as Local Responsibility Areas in VHFHSZs designated pursuant to California Government Code, Sections 51175 through 51189. The purpose of Chapter 7A is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within State Responsibility Areas or any Wildlife Urban Interface Fire Area to resist the intrusion of flames or burning embers projected by a wildfire, and to contribute to a systematic reduction in conflagration losses. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in Chapter 7A.

California Fire Code

Part 9 of Title 24 of the CBC contains the CFC, which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of the CFC is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. Chapter 49 of the CFC contains minimum standards for development in Local Responsibility Areas designated as VHFHSZs and State Responsibility Areas. The chapter contains mitigation strategies to reduce hazards from fire through requirements for fire protection plans, landscape plans and vegetation management, and defensible space. The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission.

d. California Public Resources Code

California Public Resources Code Section 4290 requires minimum fire safety standards related to defensible space that are applicable to residential, commercial, and industrial building construction in State Responsibility Area lands and lands classified and designated as VHFHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations, which are equal to or exceed minimum regulations required by the State.

California Public Resources Code Section 4291 requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered in flammable material. It is required to maintain 100 feet of defensible space around all sides of a structure, but not beyond the property line unless required by state law, local ordinance, rule, or regulations. Further, California Public Resources Code Section 4291 requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

Fire Hazard Severity Zones

CAL FIRE maps FHSZs based on fuel loading, slope, fire history, weather, and other relevant factors as directed by California Public Resources Code, Sections 420–4204, and California Government Code, Sections 51175– 51189. FHSZs are ranked from Moderate to Very High and are categorized for fire protection within a Federal Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. The project site lies within an area considered a VHFHSZ as designated by the CVFD, the SDFRD, and on CAL FIRE FHSZ maps.

e. Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed. The mutual aid agreement would apply to the project site as the site is within the fire response area for the City of Chula Vista; however, City of San Diego facilities are the closest responders.

4.15.2.3 Local Regulations–City of Chula Vista

a. Disaster Preparedness

The CVFD provides safety and education about fire prevention and disaster preparedness in the case of a wildfire or other natural disaster. Key to the City of Chula Vista's disaster protection awareness is the "Ready, Set, Go!" program which explains how to be prepared, practice safety, and evacuate in a timely manner (City of Chula Vista 2023).

b. City of Chula Vista Multiple Species Conservation Program Subarea Plan

The City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan is a comprehensive, long-term habitat conservation plan which addresses the needs of multiple species and the preservation of natural vegetation communities in San Diego County. Because fire is a natural feature of the Chula Vista Subarea, under normal circumstances natural re-growth of habitat is expected. However, the Wildlife Agencies have indicated that certain repetitive fires within the same location of the Chula Vista MSCP Preserve may adversely affect the Covered Species conserved by the Subarea Plan as a result of habitat type conversion from existing habitat(s) to invasive or non-native weeds. In order to further reduce the risk of fire, the City of Chula Vista has instituted a special weed abatement and brush management program focused particularly on the edges between urban areas and open space Preserve lands. Brush management is required to be undertaken in the City in areas where urban development interfaces with open space, in order to reduce fire fuel loads and reduce potential fire hazard.

c. Chula Vista General Plan

The following objectives and policies from the City of Chula Vista General Plan are relevant to wildfire:

Objective E 16: Minimize the risk of injury and property damage associated with wildland fire hazards.

> **Policy E 16-1:** Implement brush management programs which are consistent with the Chula Vista MSCP Subarea Plan and the City's Urban-Wildland Interface Code, within urban development and open space interface areas in order to reduce potential wildland fire hazards. Brush management guidelines within the MSCP Subarea Plan and the Urban-Wildland Interface Code shall include limits and measures to prevent increased risk of erosion.

d. City of Chula Vista Municipal Code

The Chula Vista Municipal Code (CVMC) Chapter 15.36 adopts by reference the 2019 edition of the CFC (or current edition at the time of project approval). A city, county, or city and county may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographical conditions. The CVMC contains provisions for fire prevention and safety, reflecting regulations set forth by the CFC, such as requirements for emergency planning and preparedness (Section 15.36.045), fire protection systems (Section 15.36.055 and 15.36.060), and vegetation management and clearance (Section 15.36.065). CVMC Chapter 15.34, defines that the City Council designates VHFHSZs as recommended by the Director of CAL FIRE and as designated on a map titled "Very High Fire Hazard Severity Zones (VHFHSZ)."

4.15.2.4 Local Regulations – City of San Diego

a. City of San Diego General Plan

Multiple elements of City of San Diego's General Plan address wildfire safety and risk. The General Plan provides policies for protecting communities from unreasonable risk of wildfire, including the following.

The **Urban Design Element** (City of San Diego 2008) establishes goals and policies for the pattern and scale of development and the character of the built environment. The following policies found in the Urban Design Element are relevant to the project:

- **Policy UD-A.3p:** Design structures to be ignition and fire-resistant in fire prone areas or at-risk areas as appropriate. Incorporate fire-resistant exterior building materials and architectural design features to minimize the risk of structure damage or loss due to wildfires.

The **Public Facilities, Services and Safety Element** (City of San Diego 2023) includes goals and policies related to the overall provision of adequate public infrastructure throughout the City of San Diego.

- **Policy PF-D.12:** Protect communities from unreasonable risk of wildfire within very high fire hazard severity zones.
    a. Assess site constraints when considering land use designations near wildlands to avoid or minimize wildfire hazards as part of a community plan update or amendment. (see also LU-C.2.a.4)
    b. Identify building and site design methods or other methods to minimize damage if new structures are located in very high fire hazard severity zones on undeveloped land and when rebuilding after a fire.
    c. Require ongoing brush management to minimize the risk of structural damage or loss due to wildfires.
    d. Provide and maintain water supply systems to supplies for structural fire suppression.
    e. Provide adequate fire protection. (see also PF-D.1 and PF-D.2 [analyzed in Public Services and Utilities in Section 5.13]).
- **Policy PF-D.13:** Incorporate fire safe design into development within very high fire hazard severity zones to have fire-resistant building and site design, materials, and landscaping as part of the development review process.
    a. Locate, design and construct development to provide adequate defensibility and minimize the risk of structural loss from wildland fires.
    b. Design development on hillsides and canyons to reduce the increased risk of fires from topography features (i.e., steep slopes, ridge saddles).
    c. Minimize flammable vegetation and implement brush management best practices in accordance with the Land Development Code.
    d. Design and maintain public and private streets for adequate fire apparatus vehicles access (ingress and egress), and install visible street signs and necessary water supply and flow for structural fire suppression.
    e. Coordinate with the Fire-Rescue Department to provide and maintain adequate fire breaks where feasible or identify other methods to slow the movement of a wildfire in very high fire hazard severity zones.
- **Policy PF-D.14:** Implement brush management along City maintained roads in very high fire hazard severity zones adjacent to open space and canyon areas.

- **Policy PF-D.15:** Maintain access for fire apparatus vehicles along public streets in very high fire hazard severity zones for emergency equipment and evacuation.
- **Policy PF-D.16:** Provide wildland fire preparedness education for fire safety advance planning.

b. City of San Diego Fire Code

The San Diego Fire Code consists of San Diego Municipal Code (SDMC) Chapter 5, Article 5, Sections 55.0101 through 55.9401, which adopts the 2022 CFC with some modifications, and applicable sections of the CCR. Provisions of the CFC are described under 4.15.2.2.b, State Regulations, above. According to the City of San Diego Fire Code (adopted CFC-SDMC Section 511.8201) residential developments of more than 30 dwelling units located in a state responsibility area or a VHFHSZ are required to include secondary access.

c. City of San Diego Building Regulations

The City of San Diego's Building Regulations (SDMC Chapter 14, Article 5, Division 1) are intended to regulate the construction of applicable facilities and encompasses (and formally adopts) associated elements of the CBC. Specifically, this includes 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." The City of San Diego's Building Regulations also establish acceptable construction materials for development near open space to minimize fire risk through adoption of Chapter 7, "Fire Resistance-Rated Construction," and Chapter 7A, "Materials and Construction Methods for Exterior Wildlife Exposure," of the CBC (SDMC Chapter 14, Article 5, Division 7).

d. City of San Diego Brush Management Regulations

The City of San Diego'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 of San Diego 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:

1. **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.

2. **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.

4.15.3 Issue 1: Emergency Plans

4.15.3.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following California Environmental Quality Act (CEQA) Guidelines, Appendix G question is used as guidance for determining the significance of impacts related to the project's effect on implementation of an emergency plan in the City of Chula Vista:

- Would the proposed project substantially impair an adopted emergency response plan or emergency plan?

b. Impact Analysis

The project's effect on implementation of an emergency plan is discussed in detail in Section 4.6.5.1. A summary of the impact analysis is provided below. As detailed in Section 4.6.5.1, the project's Wildfire Evacuation Plan addresses all aspects of the 2018 San Diego County Emergency Operations Plan Annex-Q, Evacuation (see Appendix J). The Evacuation Plan provides strategies, procedures, and recommendations that can be used to implement a coordinated evacuation if the project is faced with the need for a mass evacuation. The Evacuation Plan provides evacuation routes, highlighting primary and secondary emergency access connecting the project site to major local and regional roadways. As the project has been found to be able to safely evacuate in the event of an emergency, the project would not interfere with County of San Diego (Multi-Jurisdictional Hazard Mitigation Plan) or any other local level evacuation plans. As detailed in Appendix J and Section 4.6.5.1, implementation of the project would not significantly impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

c. Significance of Impacts

As demonstrated in the project's Evacuation Plan and discussed in Section 4.6.5.1, implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.3.2 Annexation Scenario 2a

a. Threshold of Significance

The City of San Diego has identified the following question to provide guidance in determining potential significance of impacts related to an emergency plan:

- Would the proposed project impair implementation of an adopted emergency response plan or emergency evacuation plan?

The City of San Diego assesses impacts associated with the approval of projects in wildfire-prone areas through the guidance presented by the Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act Memorandum (Bonta Memo) (State of California Office of the Attorney General 2022). Under Section IV C. Analyzing the Project's Impact on Evacuation and Emergency Access, the Bonta Memo notes that a lead agency would be best positioned to ensure that a proposed development project facilitates emergency access and ease constraints on evacuation with an assessment of evacuation modelling and planning prior to project approval.

Evacuation modeling and analysis should include the following:

- Evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.
- Assessment of the timing for evacuation.
- Identification of alternative plans for evacuation depending upon the location and dynamics of the emergency.
- Evaluation of the project's impacts on existing evacuation plans.
- Consideration of the adequacy of emergency access, including the project's proximity to existing fire services and the capacity of existing services.

- Traffic modeling to quantify travel times under various likely scenarios.
- If a project presents significant increased wildfire risks and/or evacuation and access impacts, CEQA requires the lead agency to consider and adopt feasible alternatives and mitigation measures to avoid or reduce the project's impacts (or make a finding of overriding consideration).

b. Impact Analysis

Evacuation response and implementation of emergency response plans would be the same under all scenarios. The project's Evacuation Plan is consistent with and includes all relevant elements for evacuation modeling and analysis identified in the Bonta Memo. As discussed in Section 4.6.5.1.b and the Wildfire Evacuation Plan (see Appendix J), roadway capacities can accommodate project and community evacuation in addition to access by emergency responders. Evacuation timing would be acceptable for the types of wildfires that may occur in the project vicinity. Furthermore, alternative plans for evacuation, such as using alternate routes, only evacuating perimeter residents, or enacting a temporary shelter in place, are included in the evacuation assessment. For further details, refer to Section 4.6.5.1.b.

There are no published evacuation plans for the project area and the project would not affect existing evacuation routes. The project would use primary evacuation routes that would be available to other evacuees, and the potential additional time needed to evacuate is considered insignificant due to the variety of options available to emergency managers that can facilitate early evacuations.

As discussed in Section 4.6.5.1.b and 4.13.3.1.b, the project would not impair the ability of existing fire response resources to respond to the anticipated project calls. SDFRD Fire Station 6 is within 1.4 miles of project structures and can respond, under multiple scenarios, within 4.5 minutes travel time (see Tables 4.13-4 and 4.13-5; see Appendix I).

c. Significance of Impacts

As demonstrated in the project's Wildfire Evacuation Plan and discussed in Section 4.6.5.1.b, implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.4 Issue 2: Pollutants from Wildfire

4.15.4.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to exacerbation of wildfire and increased release of pollutants from wildfire in the City of Chula Vista:

- Due to slope, prevailing winds, and other factors, would the proposed project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

b. Impact Analysis

The project site lies within an area considered a VHFHSZ, as designated by CAL FIRE. The project site is in an area with historically fire-adapted vegetation communities, including chaparral, riparian oak woodlands, and non-native grasslands. The adjacent lands have similar vegetation types, with chaparral and eucalyptus woodlands, as well. These are vegetation communities that experience occasional wildfire and can burn in an extreme manner under the occasional severe fire weather (dry and windy) conditions that occur in the area. Based on the region's fuels, fire history, and expected fire behavior, severe fires may occur, with moderate- to severe-intensity fire expected to occur in the project area. Additionally, based on prevailing wind patterns, including high wind velocities associated with downslopes, canyons, and Santa Ana winds, project site conditions could be subject to wildfire risk.

The project's Fire Protection Plan (see Appendix I) conducted worst-case fire modeling of the project site for pre- and post-development conditions. Worst-case surface fire behavior would be expected under peak weather conditions in the fall season, which could include wind-driven fire from the north/northeast. Preconstruction expected surface flame length could potentially reach approximately 41 feet with wind speeds of 50 plus miles per hour (mph). Fireline intensities could reach 18,348 British thermal units per feet per second with moderate spread rates of 6.2 mph and could have a spotting distance up to 2.3 miles away. Because embers could spot within 2.3 miles of the project site, a crown fire could potentially occur within the small eucalyptus woodland area within the riparian Otay River, located approximately 550 feet northwest of the project site. Potential crown fire flame lengths could reach 58 feet with sustained winds of 18 mph or 147 feet with wind gusts of 50 plus mph. Under the preconstruction scenario, crown fireline intensities could reach 20,083 British thermal units per feet per second with moderately slow crown spread rates of 4.1 mph (see Appendix I). These wind/fire conditions could lead to fire-related pollutant exposure to nearby developments.

Although the project would be subject to fire risk and associated release of pollutants in the event of a wildfire, the project would not exacerbate existing risk. Through compliance with CBC Chapter 7A in addition to incorporation of appropriate fuel management zones, the project would not

exacerbate fire risk due to slope changes or changes in wind patterns. The topographic changes to the site, including a slight raising of the site elevation to ensure a flood free building site, would not change wind patterns or exacerbate fire risk. CBC Chapter 7A regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a fire hazard area to reduce ignition potential. The project also includes fuel management zones that serve to reduce fire intensity and flame lengths from advancing fire through restricted vegetation and irrigated areas around the perimeter of structures. A typical landscape/fuel modification installation per the City of Chula Vista's Fire Code consists of a 50-foot-wide Zone 1 and a 50-foot-wide Zone 2 for a total of 100 feet in width. As discussed in Section 4.6.6.1, due to the constraints within the project site, the project includes a reduced fuel management zone in constrained areas but incorporates alternative fire-resistant materials and measures to provide fire protection functional equivalency as a full brush management zone. Figure 3-9 illustrates the fuel management zones in addition to proposed masonry and fire rated walls to enhance structural fire protection. Therefore, with inclusion of the proposed fire protection structural features and landscape elements, the project would not exacerbate wildfire risk or expose project occupants to substantial pollutant concentrations.

c. Significance of Impacts

As detailed in the Fire Protection Plan (see Appendix I), the project area's fire history, historical weather and wind data, terrain, and fuels were evaluated to identify fire risk. With the proposed fuel management and fire protection features incorporated into the project design, the project would not exacerbate wildfire risks; therefore, impacts related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.4.2 Annexation Scenario 2a

a. Threshold of Significance

In the absence of specific City of San Diego Significance Determination Thresholds, this analysis relies on the CEQA Guidelines, Appendix G questions as guidance for determining the significance of impacts related to the exacerbation of wildfire and increased release of pollutants from wildfire:

- Due to slope, prevailing winds, and other factors, would the proposed project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

b. Impact Analysis

As detailed in Section 4.15.4.1.b, the project would not exacerbate fire risk due to slope changes or changes in wind patterns. CBC Chapter 7A regulates building materials, systems, and/or assemblies

used in the exterior design and construction of new buildings located within a fire hazard area to reduce ignition potential.

As detailed in Section 4.6.6.2.b, the City of Chula Vista Fuel Modification Zone, is equivalent to the City of San Diego Brush Management Zones, which is used by the City of San Diego to describe defensible space. Until the project is annexed to the City of San Diego, the CVFD is the Fire Authority Having Jurisdiction (FAHJ) and would be the department charged with the approval and enforcement of the requirements of the project's Fire Protection Plan (see Appendix I). However, once the project is annexed into the City of San Diego, the SDFRD would be the FAHJ and would enforce all fire-related requirements.

Typical brush management for the City of San Diego includes establishment of a minimum 35-foot-wide irrigated Zone A and a minimum 65-foot-wide thinning Zone B on the periphery of the project site, beginning at the structure. As discussed above, the project's Fuel Modification Zones (i.e., Brush Management Zones in the City of San Diego), would meet the more restrictive requirements of the CVFD, and would serve to reduce fire intensities and spread rate, which would in turn reduce potential fire-related pollutant exposure due to reductions in fire intensity near the development. Implementation of City of San Diego brush management standards, CBC Chapter 7a requirements, in addition to project design features discussed in Section 4.6.6.1.b. would ensure fire risk is not exacerbated.

c. Significance of Impacts

As detailed in the Fire Protection Plan (see Appendix I), the project area's fire history, historical weather and wind data, terrain, and fuels were evaluated to identify fire risk. With the proposed fuel management and fire protection features incorporated into the project design (refer to Section 4.6.6.1.b), the project would not exacerbate wildfire risks; therefore, impacts related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.5 Issue 3: Infrastructure

4.15.5.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to the exacerbation of wildfire due to infrastructure improvements in City of Chula Vista:

- Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

b. Impact Analysis

The project includes the construction of multi-family homes, interior roadways and parking, and connections to existing water, sewer, electricity, and gas infrastructure. Utility connections would be required to comply with the current 2022 CCR, Title 24 Parts 1–12, which would require review and approval through the building permit process. All project site access, including road widths and connectivity, would be consistent with the City of Chula Vista's roadway standards and CFC Section 503, which outlines the requirements for fire apparatus access roads and gates to ensure adequate emergency access within the project site. Further, as discussed in greater details in Section 4.6.5.1.b, the project provides important road network improvements, including connection of existing dead-end road that would provide secondary fire access for the project and the neighboring community. These improvements would assist project access as well as provide a public benefit for existing residents by providing an additional route that may be utilized, at the discretion of the fire department/law enforcement, for responder ingress and/or resident egress (see Appendix J). Additionally, the project is subject to review by FAHJ to ensure compliance with applicable safety standards.

Existing power lines are present on the project site, along the project's eastern boundary and traversing the southern portion of the project site. The San Diego Gas and Electric easement along the eastern property line would be vacated and utility infrastructure would be located underground. The existing 69-kilovolt power line traversing the southern property line would remain. The 69-kilovolt power line is located on top of an existing slope, separated from the proposed development area by approximately 130 feet and a 55-foot elevation differential. No land use changes are proposed within the vicinity of the existing power lines; therefore, the project would not exacerbate fire risks. No other infrastructure improvements have been identified that could exacerbate fire risk.

c. Significance of Impacts

The project would not exacerbate wildfire as a result of infrastructure improvements. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.5.2 Annexation Scenario 2a

a. Threshold of Significance

In the absence of specific City of San Diego Significance Determination Thresholds, this analysis relies on the CEQA Guidelines, Appendix G questions as guidance for determining the significance of impacts related to the exacerbation of wildfire due to infrastructure improvements are used to determine whether the project would have a significant environmental impact associated with exacerbation of wildfire s a result of infrastructure improvements.

- Would the proposed project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

b. Impact Analysis

As detailed in section 4.6.5.1.b, the project would comply with all applicable regulations relating to road improvements, and utility connections. Through regulatory compliance and fire district approval, the project would not exacerbate fire risk related to infrastructure improvements.

c. Significance of Impacts

The project would not exacerbate wildfire as a result of infrastructure improvements. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.6 Issue 4: Flooding or Landslides

4.15.6.1 No Annexation Scenario and Annexation Scenario 2b

a. Threshold of Significance

The following CEQA Guidelines, Appendix G questions are used as guidance for determining the significance of impacts related to flooding and landslides in the City of Chula Vista:

- Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

b. Impact Analysis

As discussed in Section 4.12.1.3, the project site is located on a flat site with a slight decline in elevations on the site which allows runoff from the project site to flow from south to north via sheet flows towards the Otay River. In existing conditions, the project site has a low risk of contributing to downstream flooding or landslide as a result of post-fire slope stability because the site is relatively flat with the exception of a north-facing slope at the southern end of the project site. The project would be developed within the existing flat portion and would not disturb the north-facing slope area. After site grading and development, the residential area would be slightly elevated on a manufactured slope but would be relatively flat, reducing the potential for slope instability. The proposed manufactured slope on the north side of the site would not be subject to slope instability in post-fire conditions based on grading and geotechnical requirements implemented during site grading that ensure slope compaction and stability.

Post-project drainage patterns would be similar to the existing condition with drainage flow being conveyed through the project site and discharged to the Otay River in a manner that would not change drainage patterns or result in downstream flooding (refer to Section 4.12.5.1.b for discussion of drainage patterns and Section 4.12.6.1.b for discussion related to downstream flooding). In post-fire conditions, the potential risk associated with downstream flooding as a result of runoff or drainage changes would not be increased. As detailed in 4.12.5.1.b and Appendix N, under post-development conditions, the proposed drainage design including permanent best management practices and a detention vault would allow the project to decrease runoff volumes compared to the existing condition.

The project's landscape plan includes plantings of all slopes which would support slope stability and decrease erosion potential. Minor remedial grading north of the project parcel within an area subject to flooding would be conducted to remove fill materials and ensure a stable slope to reduce land instability from potential off-site post-fire conditions. Overall, through project design features aimed at reduction of runoff, drainage improvements, and landscaping to provide slope stability, the project would not result in exposure of people to risks related to downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

c. Significance of Impacts

The project would not change drainage patterns nor leave soils exposed in a manner that would result in post-fire flooding or slope instability. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

4.15.6.2 Annexation Scenario 2a

a. Threshold of Significance

In the absence of specific City of San Diego Significance Determination Thresholds, this analysis relies on the CEQA Guidelines, Appendix G questions as guidance for determining the significance of impacts related to exposure of people or structures to risks from post-fire flooding or landslides.

- Would the proposed project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

b. Impact Analysis

As detailed in Section 4.15.6.1.b, the project would not change drainage patterns nor leave soils exposed in a manner that would result in post-fire flooding or slope instability.

c. Significance of Impacts

The project would not change drainage patterns nor leave soils exposed in a manner that would result in post-fire flooding or slope instability. Impacts would be less than significant.

d. Mitigation Measures

Impacts would be less than significant. No mitigation is required.

Chapter 5.0
Significant Unavoidable Environmental Effects/Irreversible Changes

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(b) and (c) require that the significant unavoidable impacts of the Nakano Project (project), as well as any significant irreversible environmental changes that would result from project implementation, be addressed in the Environmental Impact Report (EIR).

5.1 Significant Environmental Effects Which Cannot Be Avoided if the Project is Implemented

In accordance with CEQA Guidelines Section 15126.2(c), any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in the EIR. As discussed in Chapter 4.0, all significant impacts could be mitigated to below a level of significance, except impacts related to Land Use (Policy Consistency in Annexation Scenario 2a) Transportation (Vehicle Miles Traveled in all Scenarios) and Greenhouse Gas Emissions (Greenhouse Gas Emissions in Annexation Scenario 2a and Conflicts with Plans in all scenarios), which would remain significant and unavoidable. Impacts identified in Chapter 4.0 related to Biological Resources, Geologic and Paleontological Resources, Health and Safety/Hazardous Materials, Historical Resources, Hydrology and Water Quality, and Tribal Cultural Resources would be reduced to below a level of significance with the mitigation measures identified in Chapter 4.0 and in the Mitigation Monitoring and Reporting Program (Chapter 10.0).

5.2 Irreversible Environmental Changes Which Would Result if the Project is Implemented

In accordance with CEQA Guidelines Section 15126.2(d):

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Implementation of the project would not result in significant irreversible impacts to agricultural land, mineral resources, water bodies, historical resources, paleontological resources, or tribal cultural resources. The project site is vacant, supporting an assortment of vegetation communities including Diegan coastal sage scrub, non-native grassland, wetland communities, and disturbed habitat. Development of the project would result in significant impacts to sensitive vegetation communities and special status plants and wildlife. Although irreversible, these impacts would be mitigated to a less than significant level by mitigation measures under all scenarios, as outlined in Section 4.3 of the EIR.

The project would have the potential to disturb archaeological and paleontological resources during grading activities; however, the requirement for a paleontological monitor under both scenarios and archaeological and Native American monitor during grading activities (either through mitigation and/or code compliance) would ensure that any buried resources discovered during grading are evaluated for significance, and if required, handled through a data recovery program or site capping in consultation with Native American monitors as outlined in Section 4.7 of the EIR.

The project site does not contain agricultural or forestry resources, nor are there Prime Farmland, Unique Farmland, or Farmland of Statewide Importance present on-site. Although mineral resource deposits (Mineral Resource Zone 2) underlie portions of the project, the project site has experienced increased urbanization and development with land uses (such as residential) incompatible with typical mineral extraction and processing operations. Additionally, the project site and surrounding area are historically and currently designated and zoned for uses that would preclude mineral resource operations; therefore, the loss of renewable mineral resources is not considered significant. Therefore, as evaluated in Chapter 8.0 of this EIR, implementation of the project would not result in significant irreversible impacts to agriculture, forestry resources, or mineral resources.

Implementation of the 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 non-renewable sources, such as fossil and nuclear fuels, would be consumed during construction and operational lighting, heating, cooling, and transportation uses. To minimize the use of energy, water, and other natural resources, the project would incorporate sustainable building practices into the project site, architectural, and landscape designs. As described in Section 8.2 of the EIR, the project's adherence to state and local regulations aimed at improving energy efficiency would serve to reduce irreversible water, energy, and building materials consumption associated with construction and occupation of the project.

Chapter 6.0
Growth Inducement

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(e) requires that an Environmental Impact Report (EIR):

> Discuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

As detailed in the project description, three scenarios are evaluated throughout this EIR including the Annexation Scenario 2a, with the Nakano Project (project) site being annexed and developed in the City of San Diego, Annexation Scenario 2b with the site being annexed into the City of San Diego after site development in the City of Chula Vista, and the No Annexation Scenario, with the project site remaining in the City of Chula Vista.

The City of Chula Vista relies on the CEQA Guidelines section stated above. The City of San Diego's 2022 Significance Determination Thresholds (City of San Diego 2022) provide further guidance to determine potential significance for growth inducement. The City of San Diego has identified the following issue questions relating to growth inducement.

> Would the project:
>
> - Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the community plan)?
> - Substantially alter the planned location, distribution, density, or growth rate of the population of an area?
> - Include extensions of roads or other infrastructure not assumed in the community plan or adopted Capital Improvements Project list, when such infrastructure exceeds the needs of the project and could accommodate future developments?

The City of San Diego's significance thresholds include a two-step analysis. The first step is to determine if the project is growth-inducing. This includes projects that foster economic growth or

population or construct a new water or sewer line where none previously existed. If this is the case, then this must be analyzed (Step Two) in the appropriate issue area.

The analysis that follows incorporates both jurisdictions' standards for the determination of whether the project would be growth inducing. As detailed in Section 6.1 below, the project would not induce growth or remove any barriers to growth. As detailed in Section 6.2, existing public infrastructure is adequate to serve the project and no new facilities would be required to serve the project. Thus, the project is not growth inducing and no associated growth-inducing impacts would occur.

6.1 Short-Term Growth

The analysis of short-term growth inducement would be the same under all development scenarios. During project construction, demand for various construction trade skills and labor would increase. It is anticipated that this demand would be met predominantly by the local labor force and would not require importation of a substantial number of workers or cause an increased demand for temporary or permanent local housing. Further, construction of the project is expected to take approximately 48 months. Since construction would be short-term and temporary, it would not lead to an increase in employment on site that would stimulate the need for additional housing or services. Accordingly, no associated substantial short-term growth-inducing effects would result.

6.2 Induce Population Growth/Alter Growth Rate

The project proposes to construct up to 221 dwelling units, supporting a density range of 6.1 to 11 dwelling units per acre. The project site is designated as Open Space by the City of Chula Vista General Plan and is zoned as Agricultural Zone A-8 by the City of Chula Vista Zoning Code. The project would require a City of Chula Vista General Plan Amendment and adoption of a Specific Plan to allow up to 221 units where the current plan designates the site for open space. Under the Annexation Scenarios, the City of San Diego would require a General Plan Amendment, Community Plan Amendment, and Prezone (refer to Section 3.5 for a comprehensive list of discretionary actions required for each scenario).

In all scenarios, the project would result in greater population growth than originally assessed under both the City of Chula Vista and City of San Diego General Plans. The proposed construction of 221 units is not anticipated to result in an unplanned population increase beyond the San Diego Association of Governments (SANDAG) Regional Population and Housing Forecast considering there is a shortage of housing to accommodate the existing and planned population. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Thus, the project would not directly induce substantial unplanned population growth to the area. The population would be accommodated in proximity to a major transit stop, regional shopping, medical uses, and parks. The project site is not located in a Transit Priority Area, as defined by SANDAG's San Diego Forward: 2021 Regional Plan.

6.2.1 City of Chula Vista

As detailed in Section 4.2.3.1 of the EIR, SANDAG Series 13 estimates the population in the City of Chula Vista would grow from 287,173 in 2020 to 326,625 in 2035. This would equate to an additional 2,630 persons per year from 2020 to 2035. Furthermore, SANDAG Series 13 estimates that housing would increase from 89,176 units in 2020 to 101,188 units in 2035. This would equate to an additional 801 units per year from 2020 to 2035. Thus, the addition of the project's residential units in 2025 would provide balanced and diverse housing to the City of Chula Vista and would provide housing to accommodate the City of Chula Vista's future growth projections. The project would be consistent with the vision of the East Planning Area of the City of Chula Vista (City of Chula Vista 2005).

6.2.2 City of San Diego

As detailed in Section 4.2.3.2 of the EIR, SANDAG Series 13 estimates the population in the City of San Diego would grow from 1,453,267 in 2020 to 1,665,609 in 2035. This would equate to an additional 14,156 people per year from 2020 to 2035. Additionally, SANDAG Series 13 estimates that the City of San Diego would have 559,143 residential units in 2020 and 640,668 residential units in 2035. This would equate to an additional 5,435 units per year from 2020 to 2035. Implementation of the project would result in an increase in up to 221 residential units in a location assumed to be open space in SANDAG's growth projections.

The City of San Diego's assigned target of the Regional Housing Needs Allocation (RHNA) target for the 2021-2029 RHNA Cycle is 108,036 homes. Although the City of San Diego is planning for additional housing to meet current need, during the fifth RHNA Cycle (2010-2020) the City of San Diego was assigned a target of permitting 88,096 new housing units and less than half of those units were constructed (42,275) as December. The proposed construction of 221 units is not anticipated to result in an unplanned population increase beyond the SANDAG Regional Population and Housing Forecast considering there is a shortage of housing to accommodate the existing and planned population. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Thus, the project would not directly induce substantial unplanned population growth to the area.

6.3 Induce Extension of Roads

Regarding infrastructure, the properties surrounding the project site consist of residential and commercial development served by existing public service and utility infrastructure. As discussed in Section 4.14, Utilities and Service Systems, the project would connect to existing utility connections that serve the surrounding community to accommodate the internal utility infrastructure needs of the development. No major new infrastructure facilities are required specifically to accommodate the project. No existing capacity deficiencies were identified for water, wastewater, or storm drain facilities that would serve the project. Furthermore, the project would not generate sewage flow or stormwater that would exceed the capacity already planned for the sewer line or storm drain. Lastly,

the internal roadway network proposed to be constructed within the project site would connect to the existing roadway network surrounding the project site.

Since the project site is surrounded by existing development and would connect to existing utility infrastructure, implementation of the project would not remove a barrier to economic or population growth through the construction or connection of new public utility infrastructure.

6.4 Conclusion

Under all scenarios, the project would result in the construction of additional housing on a site that has not been designated for residential development in the respective General Plans. Nonetheless, the project would not conflict with SANDAG's regional growth forecast for either City, would not induce substantial population growth, but would accommodate anticipated growth and housing needs. Overall, the project would not remove barriers to growth and would not be considered growth-inducing.

Chapter 7.0
Cumulative Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15130(a) requires an Environmental Impact Report (EIR) to discuss of cumulative impacts of a project "when the project's incremental effect is cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3)." 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."

According to CEQA Guidelines Section 15130(b), the discussion of cumulative effects "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." The evaluation of cumulative impacts is to be based in either "(A) a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or (B) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified which described or evaluated regional or area-wide conditions contributing to the cumulative effect." For this analysis, where evaluation of potential cumulative impacts is localized (e.g., noise, traffic, public utilities), a list of project methods was employed. For potential cumulative impacts that are more regional in scope (e.g., air quality, global warming, and cultural resources), planning documents were additionally used in the analysis.

7.1 List of Cumulative Projects

Tables 7-1 and 7-2 provide a list of cumulative projects within the City of San Diego and City of Chula Vista, respectively. The locations of the cumulative projects are depicted in Figure 71. As shown on Figure 7-1, cumulative projects are located between 0.5 and 3.5 miles from the Nakano Project (project) site. While a list of projects is provided, the cumulative analysis approach for each issue uses a summary of projections approach where appropriate. For example, the cumulative analysis also relies on regional planning documents and associated CEQA documents to serve as an additional basis for the analysis of the broader, regional cumulative effects of the project, such as air quality and global climate change. The regional planning documents used in this analysis include the City of Chula Vista and City of San Diego General Plans, Otay Mesa Community Plan, San Diego Association of Governments' (SANDAG) San Diego Forward: The Regional Plan, and San Diego Air Pollution Control District Regional Air Quality Standards (RAQS). These plans have been discussed throughout this EIR and are incorporated by reference in the appropriate sections of the cumulative analysis below. The basis and geographic area for the individual cumulative impact analyses are discussed throughout the section and are dependent on the nature of the issue.

Image Source: Nearmap (flown: April 2022)



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FIGURE 7-1
Cumulative Projects

Table 7-1 City of San Diego Cumulative Projects				
Project Name	City of San Diego Project #	Project Description	Location	Project Status
1) AMC-Amendment	569517	Existing retail center that is proposed to have a portion of the existing movie theater repurposed with additional retail uses and two drive-thru restaurants.	City of San Diego, Southwest corner of Palm Avenue at Dennery Road	Approved. Under construction.
2) Azul Playa Del Sol/Luna	605702	Residential project with up to 739 multi-family units.	City of San Diego, South corner of Ocean View Hills Parkway and Del Sol Boulevard.	Approved. Approximately 369 units were occupied cumulative project list was developed; therefore, 370 units are yet to be constructed.
3) California Terraces PA61	605191/ 690358	Residential project with up to 346 multi-family units and a 0.19-acre private park	City of San Diego, Southeast corner of Otay Mesa Road and Caliente Avenue.	Approved. Under construction.
4) Candlelight	40329	Multi-family project with 475 units	City of San Diego, Caliente Avenue south of Airway Road.	Approved. (Although an amendment to the existing permit is in review for 450 units under City of San Diego Project #691625.)
5) Central Village Specific Plan (Total Project)		Mixed use (residential and commercial) project with 425 multi-family units (less than 20 du/ac), 4,060 multi-family units (greater than 20 du/ac), 139,700 square feet of community commercial, 16.1 acres of active park space, and an elementary school (K–8). Initial phase for Central Village is Lumina TM (described below, #8) planned in year 2027.	South of Heritage Road and east of Cactus Road.	Approved. Portions of project are under construction.
6) Dennery Park	RD22001	Nine-acre city park.	City of San Diego, North side of Dennery Road at Black Coral Way.	Approved. Not yet constructed.

Table 7-1 City of San Diego Cumulative Projects				
Project Name	City of San Diego Project #	Project Description	Location	Project Status
7) Handler Retail Center	659064	Retail center with 24,000-square-foot restaurant, 6,000-square-foot fast food, and 189-room motel.	City of San Diego, South side of Otay Mesa Road between Emerald Crest Court and Corporate Center Drive.	Approved. Community Plan Amendment/ Rezone under City of San Diego Project # 673818 has been approved to change the project to 430 multi-family units and 6,000 square feet of retail/commercial uses.
8) Lumina TM	555609	Subset of Central Village Specific Plan.	South of Heritage Road and east of Cactus Road.	Approved. Under construction.
9) Metropolitan Airpark	559378/ 664354	Aviation and commercial project with expansion of existing aviation uses, commercial office, industrial, restaurants, and hotel.	City of San Diego, northeast corner of Otay Mesa Road and Heritage Road.	Approved. Not yet constructed.
10) Southview	370044	Multi-family project with 277 units.	City of San Diego, Airway Road east of Caliente Avenue	Approved. Constructed.
11) Southview East	371807	Multi-family project with 136 units.	City of San Diego, Airway Road east of Caliente Avenue.	Approved. Constructed.
12) Southwind[1]	412529	Multi-family project with 100 units.	City of San Diego, West of Caliente Avenue and south of Airway Road.	Closed with no permits issued.
13) Southwest Village	614791	Phased mixed-use project up to 5,130 residential units, 175,000 square feet of commercial/retail uses as well as parks and schools consistent with the Otay Mesa Community Plan. Phase 1 with up to 920 units.	City of San Diego, South of Airway Road and Caliente Avenue	Under review.
13) BDM	673818	560 DUs and approx. 7,500 SF commercial space on an undeveloped 13.13-acre site located on the southeast corner of Otay Mesa Road and Emerald Crest Court.	City of San Diego, southeast corner of Otay Mesa Road and Emerald Crest Court.	Approved. Not yet constructed.
SOURCE: Appendix M-2. [1]Although no permits were issued, the project is conservatively included as an application to grade this site in anticipation of development has been submitted.				

Table 7-2 City of Chula Vista Cumulative Projects			
Project Name	Project Description	Location	Project Status
1) In-N-Out Restaurant	Fast Food Restaurant	1810 Main Court	Under Construction
2) Cannabis Dispensary	Cannabis Sales	1891 Nirvana Avenue	Approved
3) Escaya Industrial	Industrial Park Design Review	NWC Heritage/Santa Maya within the Otay Ranch Village 3 SPA	In Review
4) Chula Vista School District Vehicle Repair Shop	Vehicle Repair and Maintenance Facility	1855 Maxwell Road	In Review
5) Nirvana Business Park	Business Park	821 Main Street	In Review
6) Tentative Map	Tentative Map	750 Main Street	In Review
7) Mossy Chrysler Dodge Ram & Jeep Chula Vista Showroom & Sales Office	Car Sales	1875 Auto Park Avenue	Under Construction
8) BWM Dealership	Car Sales	670 Main Street	In Review
9) Automotive Repair	Vehicle Repair/Maintenance	1880 Auto Park Place	In Review
SOURCE: Stan Donn (City of Chula Vista), personal communication, September 2023.			

7.2 Cumulative Effects Analysis

7.2.1 Land Use and Planning

The project is in an area characterized by residential and commercial development to the east, west, and south, and open space along the Otay River to the north. The cumulative project area for land use and planning would be those projects most closely surrounding the project site. The projects identified within this cumulative project area propose primarily residential, commercial, and mixed-use development. Additionally, projects proposed for annexation would be appropriate for consideration in the land use cumulative analysis; however, there are no known annexation projects in the project area.

The project, combined with other cumulative projects would not physically divide an established community. Each of the cumulative projects would include development within infill sites or vacant lands that would contribute to the build-out of existing communities or result in new planned communities. As a result, a cumulative impact related to physical division of a community would not occur.

The project, combined with other cumulative projects would not result in a cumulative impact related to land use plan consistency because each individual project requires an evaluation of land use plan consistency including applicable General Plan, community plan, airport land use plans, and other applicable planning documents. As detailed throughout Section 4.1, Land Use and Planning, the project has demonstrated that it would implement the applicable goals, policies, guidelines, and recommendations contained within the City of Chula Vista and City of San Diego General Plan and the Otay Mesa Community Plan (see Appendix B, Tables 1 and 2).

The project would require amendments to City of San Diego and City of Chula Vista plans and development regulations in either scenario. Under the No Annexation Scenario and Annexation Scenario 2b, the project would not conflict with any applicable City of Chula Vista environmental goals or land use plans and policies. Under the Annexation Scenario, the project would be consistent with the City of San Diego's General Plan Land Use and Noise Elements; however, the project would be inconsistent with Goal 5 of the City of San Diego General Plan Housing Element. Specifically, the project would not align with state and local greenhouse gas (GHG) emission reduction and climate adaptation strategies (Goal 5, Objective O) because while the project would implement mitigation measures and project design features outlined in Section 4.5.3.2.d to reduce GHG emissions, the associated reduction cannot be shown to result in net zero emissions it cannot be demonstrated that the project would achieve emissions consistent with the City of San Diego Climate Action Plan (CAP). As discussed, there is a significant impact related to these policy issues at the project level; however, GHG is, by its nature, a cumulative issue. Therefore, while all projects within the cumulative project area would similarly be required to comply with the City's CAP consistency regulations and implement requirements related to housing, cumulative land use policy consistency related to GHG would be cumulatively significant.

The project, like other cumulative projects demonstrates consistency with applicable airport land use plans and Multiple Species Conservation Program Subarea Plans, including cumulative projects in the City of Chula Vista and the City of San Diego. The project is located within Review Area 2 of the Airport Influence Area for the Brown Field Airport; however, the project would not conflict with the Brown Field Airport Land Use Compatibility Plan. No conflict with the City of San Diego or City of Chula Vista Multiple Species Conservation Program under either the No Annexation or Annexation Scenarios was identified. As the project would not conflict with these land use plans, the project would not contribute to a cumulative land use inconsistency impact related to airport land use plans and Multiple Species Conservation Program Subarea Plans. Under the Annexation Scenario 2a, the project would require two deviations from the City of San Diego's Land Development Code: allow a 10-foot side yard setback where up to 50 percent of the length of the building envelope on one side of the premises may observe the minimum 5-foot side setback, provided the remaining percentage of the building envelope length observe at least the standard side setback of feet 5 feet or 10 percent of the lot width (100 feet), whichever is greater pursuant to San Diego Municipal Code (SDMC) Section 131.0443(d)(2)(A), Table 131-04G; and allow retaining wall heights up to 24 feet outside of the setback where the maximum allowed is 12 feet pursuant to SDMC Section 142.0340(e). As discussed in Section 4.1.6.2.b due to changes in elevations, the project site, including buildings setbacks and retaining walls would not be substantially visible to the adjacent development. The proposed setback deviations would result in a development density consistent with the RiverEdge Terrace project to the east. The internal retaining walls would be integrated into the project's design and would not be visible from any public viewing areas. The wall proposed along the main entrance would be landscaped and screened. Therefore, the requested deviations would not result in an adverse effect to any environmental issue or sensitive resource, and they would not result in a physical impact on the environment. As the project under the Annexation Scenario 2a would not result in significant direct impacts associated with the proposed deviations, the project would not contribute to a cumulative impact for these issues. Cumulative land use impacts would be less than significant.

7.2.2 Air Quality

Because air quality is a regional issue, the cumulative study area for air quality impacts cannot be limited to a defined localized area, but rather includes the San Diego Air Basin (SDAB) as a whole. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the San Diego Air Pollution Control District develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

The SDAB has been designated as a federal nonattainment area for the federal ozone standard and a state nonattainment area for ozone standards, the particulate matter with a diameter of 10 microns and less standard, and the particulate matter with a diameter of 2.5 microns and less standard. The air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (reactive organic gases and oxides of nitrogen (NO_X), which are precursors to the formation of ozone (O_3) potentially contribute to worsened air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment. If the project does not exceed thresholds and is determined to have less than significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are more than established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact). As detailed in Section 4.2.4, under all development scenarios, the project would not exceed project level thresholds for air emissions, therefore it would not have a cumulatively considerable contribution to air quality impacts.

As discussed in Sections 4.2.3.1.b and 4.2.3.2.b, for the SDAB, the RAQS serves as the long-term regional air quality planning document. The RAQS also serves the purpose of assessing cumulative operational emissions in the basin and to ensure the SDAB continues to make progress toward federal and state attainment status. As such, projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections. The proposed development would be greater than anticipated for the site in the growth projections and therefore result in greater emissions attributed to the site than those accounted for in the RAQS. However, as detailed in Section 4.2.3, project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants (see Issue 2 in Section 4.2.4.2.b); therefore, the project would not contribute to existing air quality violations or result in regional emissions than would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards, or result in a cumulatively considerable net increase in criteria pollutants, including ozone precursors (ROG and NO_X). Additionally, the proposed

construction of 221 units is not anticipated to result in an unplanned population increase beyond SANDAG Regional Population and Housing Forecast considering there is a shortage of housing to accommodate the existing and planned population. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Thus, the project would not directly induce substantial unplanned population growth to the area.

Overall, the project would not result in a cumulatively considerable contribution to pollutant emissions. Impacts to air quality would not be cumulatively considerable during construction and operation. Therefore, the project's incremental contribution to cumulative air quality impacts would be less than significant.

7.2.3 Biological Resources

Cumulative impacts consider how a project may affect biological resources on a regional scale. The cumulative study area included the localized habitat areas defined generally by topography and man-made features that reduce wildlife movement and generally create a local wildlife ecoregion. This ecoregion includes the project site and the adjacent Otay River Valley both in the City of Chula Vista and the City of San Diego. As discussed in Section 4.3, Biological Resources, under all development scenarios the project would result in potentially significant direct and/or indirect impacts to sensitive vegetation (coastal sage scrub, non-native grasslands), special status plants (Otay tarplant [*Deinandra conjugens*]), special status wildlife (least Bell's vireo [*Vireo bellii pusillus*], California coastal gnatcatcher [*Polioptila californica californica*], burrowing owl [*Athene cunicularia*], yellow-breasted chat [*Icteria virens*], yellow warbler [*Setophaga petechia*]), Crotch's bumble bee [*Bombus crotchii*], and jurisdictional wetlands. The project's impacts to biological resources combined with those associated with cumulative projects could result in a cumulatively significant impact to these biological resources. The project would implement mitigation measures to address the project's significant impacts in accordance with the regulations of both the City of Chula Vista and the City of San Diego (see **BIO-CV-1** through **BIO-CV-9**/**BIO-SD-1** through **BIO-SD-10**. Under all development scenarios, the implementation of mitigation measures would mitigate project level impacts to less than significant levels. Likewise, all future projects would be required to comply with all relevant regulations pertaining to impacts to biological resources including implementation of PDFs, avoidance, and mitigation measures consistent with the City of San Diego Subarea Plan and/or City of Chula Vista Subarea Plan, which would ensure regional conservation levels are adequate to protect sensitive habitats and species. Additionally, the project and all cumulative projects would be required to comply with applicable agency permit requirements related to wetland impacts, which would ensure no net loss of wetlands regionally.

Impacts related to wildlife corridors, habitat conservation plans, natural community conservation plan, or other approved local regional or state habitat conservation plan, or any local policies or ordinances would be less than significant and would not contribute to a cumulative impact for these issues. The project would not contribute to a cumulative biological impact, impacts would be less than significant.

7.2.4 Geologic and Paleontological Resources

7.2.4.1 Geology and Soils

As discussed in Section 4.4, Geologic and Paleontological Resources, subsections 4.4.3 through 4.4.5, no soils or geologic conditions were encountered that would preclude the development of the project site as proposed, with incorporation of the recommendations outlined in the Geotechnical Investigation (see Appendices E-1 through E-4). Further, the project would be required to comply with requirements of the California Building Code, which would further reduce impacts related to geologic hazards. Short-term erosion and sedimentation impacts would be addressed through conformance with applicable stormwater regulations, implementation of stormwater pollution prevention plans, and compliance with National Pollutant Discharge Elimination System standards.

Due to the localized nature of geology and soils, all projects would address potential impacts to geology and soils on a project-by-project basis consistent with the California Building Code, as potential geologic hazards and soil composition varies by site. All projects would be required to assess individual and site-specific geologic conditions, which would inform construction and development of each site. Development would be subject to grading ordinance requirements including preparation of site-specific geotechnical reports and implementation of associated report recommendations to ensure residents and structures are not exposed to geologic hazards. Based on required compliance with applicable agency grading ordinance requirements and stormwater standards, cumulative impacts under all development scenarios would be less than significant.

7.2.4.2 Paleontology

The project is underlain by Mission Valley and San Diego Formation, both of which are designated as having a High Sensitivity paleontological resource potential. As described in Section 4.4.6.1.d, under the No Annexation Scenario and Annexation Scenario 2b, construction activity could uncover and potentially damage paleontological resources resulting in a significant impact. The project would implement mitigation measures under the No Annexation Scenario and Annexation Scenario 2b (**GEO-CV-1**) which would ensure that a qualified paleontologist is on site during grading and excavation to monitor construction activity. Implementation of the mitigation measure would reduce significant impacts to less than significant levels.

Under the Annexation Scenario, the project would comply with SDMC. Specifically, the SDMC Section 142.0151 applies to all grading in the City of San Diego and requires paleontological monitoring for projects that exceed specified grading quantities depending on the underlying geological formations and associated paleontological sensitivity. Regulatory compliance would preclude any significant impact and ensure protection and preservation of paleontological resources.

Any impact to significant paleontological resources would add to a cumulative loss of cultural and scientific information. The cumulative study area would not be limited to a specific definable area and all projects would address potential impacts on a project-by-project basis. Cumulative development in the City of San Diego could be underlain by geologic formations with high sensitivity for resources; however, each project would be required to adhere to the SDMC requirements for paleontological monitoring. Individual project compliance with the SDMC would ensure that

potential significant impacts to paleontological resources resulting from future development would not rise to the level of significance. Similarly, cumulative development within the City of Chula Vista would be analyzed for consistency with City of Chula Vista General Plan policies that ensure protection of paleontological resources. As such, under all development scenarios cumulative impacts to paleontology would be less than significant.

7.2.5 Greenhouse Gas Emissions

Due to the global nature of the assessment of GHG emissions and the effects of global climate change, GHG emissions analysis, by its nature, is a cumulative impact analysis. Therefore, the information and analysis provided in Section 4.5, Greenhouse Gas Emissions, to determine project-level impacts is also a cumulative analysis.

Under the No Annexation Scenario and Annexation Scenario 2b, as detailed in Section 4.5.3.1.b, the project's total annual unmitigated GHG emissions would not exceed South Coast Air Quality Management District Residential/Commercial Screening levels (3,000 metric tons of carbon dioxide equivalent per year; see Table 4.5-5). Therefore, under the No Annexation Scenario and Annexation Scenario 2b, project emissions would be less than the applicable screening level and project-related impacts associated with GHG emissions would be less than significant. However, as discussed in Section 4.5.3.2.b the project under the No Annexation Scenario and Annexation Scenario 2b would be consistent with the measures and policy goals of the City of Chula Vista General Plan, San Diego Forward, and the 2008 *Climate Change Scoping Plan: A Framework for Change* and 2017 *Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target* ; however, the project would be inconsistent with several of the key Prioritization Strategies of the *2022 Scoping Plan Update for Achieving Carbon Neutrality* (2022 Scoping Plan) (see Table 4.5-10). Therefore, in the No Annexation Scenario and Annexation Scenario 2b, the project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The project would implement mitigation measures **GHG-CV-1** through **GHG-CV-6** and PDF-GHG-1 through PDF GHG-9, which would reduce the project's cumulative GHG emission impact; however, because the project would remain inconsistent with Scoping Plan 2022 strategies, the project would conflict with plans addressing GHG emissions. While the project GHG emissions are not considerable in light of the mitigation measures and design features that would be implemented, the project's inconsistency with the 2022 Scoping Plan would result in an incremental impact contributing to the significant cumulative GHG impact.

Under the Annexation Scenario 2a, the significance of the project's GHG emissions would be measured by the project's consistency with the City of San Diego CAP Consistency Regulations (SDMC Section 143.1401, *et seq*.) and consistency with the emissions assumed via land use assumptions. As detailed in Section 4.5.3.2.b, notwithstanding the project's implementation of the City of San Diego's CAP Consistency Regulations, because the project would not be consistent with the growth projections used in the development of the CAP, cumulative GHG impacts would be significant. Additionally, although the project would implement **GHG-SD-1** through **GHG-SD-6** and PDF-GHG-1 through PDF-GHG-9 to reduce the project's GHG emission impact and implement the City of San Diego's CAP Consistency Regulations, development of the project site was not accounted for in the CAP; therefore, the project would be inconsistent with the CAP. A project not included in the CAP would be required to achieve net zero emissions in order to not increase emissions beyond

the level assumed in the CAP. While the proposed mitigation measures would reduce GHG emissions to the extent feasible (see Table 4.5-6), the project would not achieve net zero emissions.

Under all development scenarios, the project's significant impact combined with impacts resulting from projects similarly unable to meet Scoping Plan strategies would add to a cumulative GHG impact. The project would incrementally contribute to the existing significant cumulative GHG impact despite implementation of all feasible mitigation measures. Therefore, cumulative impacts related to GHG emissions would be significant.

7.2.6 Health and Safety/Hazardous Materials

The cumulative study area for potential impacts associated with hazards would be more localized, including surrounding areas that could be affected by hazardous conditions resulting from the projects or cumulative projects that could contribute to hazardous conditions in the surrounding area. Due to the potential for burn ash to be discovered on-site during grading activities due to the project site's proximity to the Shinohara historical burn site, impacts related to accidental release of hazardous materials would be potentially significant under all development scenarios. Property within the cumulative project area could contain or otherwise be affected by on-site recognized environmental conditions and/or surrounding hazardous conditions. As detailed in Sections 4.6.3.1.d and 4.6.3.2.d, under all development scenarios, the project would implement mitigation measure (**HAZ-CV-1/HAZ-SD-1**). The mitigation measure would require the preparation of a Community Health and Safety Plan and consultation with the applicable Local Enforcement Agency during grading activities to ensure safety in the event burn ash is encountered. Through implementation of the mitigation measures, the project would reduce potentially significant impacts to less than significant levels and ensure the project's incremental contribution to a cumulative release of hazardous materials would be less than significant.

Other cumulative projects could contribute to cumulative hazardous materials or health and safety impacts. For example, the nearby Shinohara II burn site is a potential source of contaminants, as is the adjacent Davies property in the City of Chula Vista. However, the Shinohara II burn site has been capped to contain release of hazardous materials. Similarly, hazardous debris and drums containing unknown substances have been removed from the adjacent Davies property; however, hazardous materials conditions may exist in the soil and/or groundwater. To ensure no cumulative impact relating to exposure of persons to hazardous conditions would occur due to potential burn ash on the Davies property, a health risk assessment was conducted to ensure windblown dust from the Davies property would not result in a negative effect on adjacent residents. The health risk assessment concluded that the maximum threshold values would not be exceeded from dispersion of burn ash from the Davies property (see Appendix H-4). Implementation of the Community Health and Safety Plan for all scenarios (**HAZ-CV-1** and **HAZ-SD-1**) would ensure the project does not exacerbate any risk of contaminated release related to the capped Shinohara II burn site.

In addition to potential release of hazardous materials, the project and all cumulative projects using any hazardous materials utilized during construction of the project, or during operation, would be required to adhere to all applicable federal, state, and local laws and regulations pertaining to the management and use of hazardous materials during transportation, storage, handling, and disposal of potentially hazardous materials. The project would not result in hazardous emissions or handle

hazardous or acutely hazardous materials, substance, or waste within 0.25 mile of an existing or proposed school. The project would not result in airport safety hazards for people residing or working in the project area, as the project would be consistent with the Brown Field Airport Land Use Compatibility Plan and the project would not result in a safety hazard for people residing or working within an airport influence area. Therefore, the project's incremental contribution to a cumulative impact would be less than significant.

7.2.7 Historical Resources

Historical and archaeological resources are non-renewable resources. Any direct impact could contribute to a cumulative loss of cultural resources.

7.2.7.1 Historic Built Resources

As discussed in Section 4.7, the records search and on-site pedestrian survey revealed one historic-era built resource (NK-S-001) consisting of the remnants of four concrete foundations. The foundations were not found to meet any criterion associated with historical significance. Therefore, under all development scenarios, the project's incremental contribution to cumulative impacts to historic resources would be less than significant.

7.2.7.2 Archaeological Resources

Ground-disturbing activities within the project site could result in impacts to three prehistoric archaeological resources (P-37-007983, P-37-026987, and NK-S-002. Project impacts combined with impacts to archaeological resources from cumulative projects could result in a cumulative impact to archaeological resources. Under all development scenarios, the project would be required to implement mitigation measures which require archaeological and Native American monitoring during grading as detailed in Sections 4.7.3.1.d and 4.7.3.2.d (**HIST-CV-1** and **HIST-SD-1** under the No Annexation Scenario and Annexation Scenario 2b and **HIST-SD-1** under the Annexation Scenario 2a). Under all development scenarios, implementation of mitigation would ensure that project level impacts to archaeological resources would be less than significant. Therefore, under all development scenarios, the project's incremental contribution to cumulative archaeological resources impacts would be less than significant.

As further discussed in Sections 4.7.4.1.b and 4.7.4.2.b, impacts to human remains would be addressed through compliance with existing regulation (applies as mitigation in the No Annexation Scenario and Annexation Scenario 2b). The project, in addition to all cumulative projects, would be required to comply with regulatory procedures in the unlikely event of the discovery of human remains during project grading. Requirements set forth in the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) require work to be halted and the coroner contacted if the remains may be human. Compliance with these regulations would ensure cumulative impacts related to human remains would be avoided.

7.2.8 Noise

Of the cumulative projects, there are no projects located within 0.25 mile of the project site. The closest cumulative project to the project site is Dennery Park project which is a City of San Diego park and would not result in the same level of construction or operational noise as the project. The remainder of the cumulative projects are located over 0.25 mile from the project site, the cumulative projects would be at a distance such that noise would not combine with the project site's noise to result in a cumulative noise impact, as detailed further below.

7.2.8.1 Ambient Noise

Construction/ Vibration

As discussed in Sections 4.8.3.1 and 4.8.3.2, impacts related to construction noise under all development scenarios would be less than significant because the project would adhere to regulations limited construction noise. Additionally, construction-related groundborne vibration levels are not anticipated to exceed the annoyance threshold of 0.1 inches per second peak particle velocity or the building damage thresholds of 0.3 to 0.5 inch per second peak particle velocity at the nearest structure. Cumulative projects may be under construction at the same time as the proposed project; however, there are no adjacent sites that could be developed concurrent with the project that could create a cumulative construction noise impact. Therefore, the project's incremental contribution to cumulative construction noise impacts would be less than significant.

7.2.8.2 Roadway Traffic Noise Levels

The project would increase traffic volumes on local roads resulting in an increase in ambient noise levels. As summarized in Table 4.8-7, the project would result in direct noise level increases ranging from 0.4 to 0.9 decibels (dB) on Dennery Road, and a direct noise level increase of 0.1 dB on Palm Avenue. The analysis in Section 4.8.3.1.d, applicable to all development scenarios, addresses cumulative road noise by considering traffic noise levels based on future build-out. Cumulatively, when comparing future horizon year 2062 traffic noise levels to existing noise levels, the increase would range from 0.9 to 2.5 dB. The project plus cumulative projects (build-out to year 2062) would not result in a cumulative noise increase of more than 3 dB. Therefore, a cumulative impact associated with road noise would not occur under any development scenario and the project's contribution to cumulative traffic noise would be less than significant.

7.2.8.3 On-site Stationary Noise

Under all development scenarios, the proposed project includes a variety of noise-producing mechanical equipment including mechanical ventilation and an outdoor-exposed air-cooled condenser. The project would also include pocket parks throughout the site. As discussed in Sections 4.8.3.1.d and 4.8.3.2.d, modelling was completed using the most restrictive noise level limits for each development scenario. As stated therein and shown in Figure 4.8-2, property line noise levels due to on-site noise sources would not exceed the most restrictive noise level limits. None of the cumulative projects are located close enough to the project site to contribute to on-site noise

effects and nonetheless, cumulative projects are proposed to be developed with similar land uses and would thus generate similar levels of noise as the project. It is anticipated that nearby cumulative projects would likewise not result in operational noise impacts or, if any of the cumulative projects would result in operational noise impacts, appropriate mitigation would be implemented to reduce potential impacts consistent with City of San Diego requirements. Therefore, a cumulative impact associated with stationary noise would not occur under any development scenario and the project's contribution to a cumulative impact would be less than significant.

7.2.9 Transportation

The projects listed in Table 7-1 represent cumulative projects that have the potential to add to existing traffic volumes because project traffic would distribute to City of San Diego roads only. This list of projects, as delineated on Figure 7-1, represents the cumulative study area as it relates to transportation. The study area for transportation impacts is limited to the City of San Diego due to the location of the project site in relation to City of San Diego roads. Project traffic is not anticipated to contribute to traffic within Chula Vista.

As discussed in Sections 4.9.3.1.b and 4.9.3.2.b, under all development scenarios, the project would not conflict with plans, ordinances or policies addressing the circulation system. The project along with all cumulative projects would undergo a consistency analysis with applicable transportation system plans and policies and the applicable jurisdiction would ensure project-level policy consistency to avoid a cumulative impact.

As discussed in Sections 4.9.5.1.b and 4.9.5.2.b, the project would not result in hazards due to design features. Similarly, all cumulative projects would undergo transportation review to ensure compliance with roadway design standards to avoid cumulative impacts related to this issue.

As discussed in Sections 4.9.6.1.b and 4.9.6.2.b the project would not result in inadequate emergency access. Project compliance with the applicable agency fire code requirements for emergency ingress and egress would ensure cumulative impacts related to emergency access would be avoided. Therefore, the project would not contribute to cumulative impacts related to policy consistency, hazardous design features, or emergency access.

Regarding vehicle miles traveled (VMT), as discussed in Sections 4.9.4.1.b and 4.9.4.2.b, the project is forecasted to have a significant impact related to VMT, under all scenarios. Under the No Annexation Scenario and Annexation Scenario 2b, the project would apply the City of Chula Vista Transportation Study Guidelines recommended VMT reductions. However, notwithstanding the City of Chula Vista Transportation Study Guidelines reductions, with the application of California Air Pollution Control Officers Association 2021 VMT Strategy Reductions (see Table 4.9-1), project design features for transportation and GHG emissions, and the implementation of mitigation measures (**GHG-CV-1**, **GHG-CV-2**, **TRA-CV-1**) including payment of Active Transportation Impact Fee, project VMT impacts would not be reduced below City of Chula Vista VMT threshold of significance. At the project level, the project would be unable to reduce VMT impacts to a less than significant level. Therefore, the project's contribution to traffic/VMT in the surrounding area, combined with that of the projects in the cumulative study area, would be cumulatively significant.

Under Annexation Scenario 2a, the project would apply the City of San Diego Transportation Study Manual recommended VMT reductions. However, notwithstanding the strategy reduction, and application of California Air Pollution Control Officers Association 2021 VMT Strategy Reductions (see Table 4.9-1), impacts would be significant. The project would implement mitigation measure **TRA-SD-1** (payment of Active Transportation Impact Fee) to further reduce significant impacts; however, project VMT impacts would not be reduced below City of San Diego VMT threshold of significance. Therefore, the project's contribution to traffic/VMT in the surrounding area, combined with that of the projects in the cumulative study area, would be cumulatively significant.

In all scenarios, the Owner/Permittee would be required to pay the City of San Diego Active Transportation In-Lieu fee consistent with SDMC Section 143.1101. In the No Annexation Scenario and Annexation Scenario 2b this requirement would be applied as mitigation to the extent feasible for cumulative VMT impacts. In Annexation Scenario 2a, the payment of the City of San Diego Active Transportation In-Lieu fee would also be required through SDMC compliance. Although impacts would be significant after implementation of mitigation (and ordinance compliance in Annexation Scenario 2a), this conclusion would be consistent with the Findings and Statement of Overriding Considerations that were adopted with the Complete Communities: Housing Solutions and Mobility Choices Final Program EIR.

7.2.10 Tribal Cultural Resources

As discussed in Section 4.10.3.1.b, the project area is considered sensitive for potential tribal cultural resources (buried cultural resources and/or subsurface deposits). Therefore, there is the potential for inadvertent discovery of resources, the loss of which could be significant. Under the No Annexation Scenario and Annexation Scenario 2b, the project would implement mitigation measure **HIST-CV-1** and under the Annexation Scenario 2a, the project would implement mitigation measure **HIST-SD-1**. Consistent with both measures, Native American monitoring during ground disturbance activities would be required consistent with the results of tribal consultation to ensure that potentially significant project level impacts to tribal cultural resources are reduced to a less than significant level. Similarly, cumulative projects would be reviewed for potential tribal cultural resources through tribal consultation as required in per Assembly Bill 52 and Senate Bill 18, and project-level CEQA review. Where applicable, Native American monitoring would be required during grading to mitigate potentially significant direct impacts to tribal cultural resources. Therefore, the project's incremental contribution to cumulative impacts to tribal cultural resources would be less than significant.

7.2.11 Aesthetics

Projects contributing to a cumulative aesthetic impact include those within the project viewshed. The viewshed encompasses the geographic area within which the viewer is most likely to observe the project and surrounding uses. This could be delineated based on topography, as elevated vantage points, offer unobstructed views of expansive visible landscapes. Otherwise, it can be based on location where multiple projects can be seen within the same viewing. Additionally, the City of San Diego thresholds relating to visual resources (City of San Diego 2022) identifies the following thresholds relating to cumulative aesthetic impacts:

- Would the project have a cumulative effect by opening up a new area for development, which will ultimately cause "extensive" view blockage. View blockage would be considered "extensive" when the overall scenic quality of a visual resource is changed; for example, from an essentially natural view to a largely manufactured appearance.

- Would the project open up a new area for development or changing the overall character of the area (e.g., rural to urban, single-family to multifamily). As with views, cumulative neighborhood character effects are usually considered significant for a community plan analysis, but not necessarily for individual projects. Project level mitigation should be identified at the community plan level. Analysts should also evaluate the potential for a project to initiate a cumulative effect by building structures that substantially differ from the character of the vicinity through height, bulk, scale, type of use, etc., when it is reasonably foreseeable that other such changes in neighborhood character will follow.

The project site is located within an urbanized area, surrounded by residential and commercial development; therefore, the project would not change the overall character of the area. Development of the site would also not open up a new area to development as existing multi-family residential is located immediately adjacent to the east and a medical facility is directly to the south. As discussed under Sections 4.11.3.1.b and 4.11.3.2.b, under all development scenarios, the proposed development would not substantially block views of any identified public resources from a public viewing area. Given that the project site lies approximately 25 feet below Interstate 805 (I-805) and proposed grading would not substantially change the grade on-site, the project development regulations ensure height and mass of on-site structures would not result in an impediment to any existing views of the Otay River through the project site. As shown in Figure 7-1, none of the cumulative projects are in visual proximity to the project. Other than the AMC Amendment project, none would be visible to motorists traveling on I-805. The AMC Amendment project is far enough south of the project site that it is unlikely the combination of these two projects along the I-805 corridor would result in a noticeable increased urbanization. The area is already primarily urbanized along this corridor and the change would not be significant.

Cumulative aesthetic impacts would occur if projects are combined to result in substantial adverse impacts to the visual quality of the environment and increase sources of lighting and glare. As discussed in Sections 4.11.6.1.b and 4.11.6.2.b, under all development scenarios, the project would adhere to all relevant regulations, under either development scenario, associated with construction and operational lighting. Further, development of the project site would be guided by the Nakano Specific Plan under the No Annexation Scenario and Annexation Scenario 2a, or Design Guidelines under the Annexation Scenario 2b, which include design requirements for project lighting. All cumulative projects would also be required to comply with jurisdictional development standards pursuant to the applicable agency's municipal code. Through compliance regulations applicable for all cumulative projects, cumulative light and glare impacts would be less than significant.

Overall, the project would not combine with other cumulative projects or existing developments to result in significant cumulative aesthetic impacts. The project's incremental contribution to cumulative impacts to visual resources would be less than significant.

7.2.12 Hydrology and Water Quality

The geographic scope of the cumulative impact analysis for hydrology and water quality generally includes drainage basins, watersheds, water bodies or groundwater basins, depending on the location of the potential impact and its tributary area. The project's cumulative study area is Otay Hydrologic Unit, within which the project is located. Under all development scenarios, the project would be required to adhere to the federal, state, and local regulations for the design and implementation of site design, source control, treatment control best management practices to ensure all stormwater standards are met. Conformance with the applicable stormwater, drainage and flooding standards would preclude potentially significant water quality impacts from occurring and all project level impacts associated with hydrology and water quality would be less than significant. As detailed in Sections 4.12.3.1.b and 4.12.3.2.b, the project would implement project-specific site design, source control, and structural pollutant control measures consistent with federal, regional, and local water quality standards to ensure adverse impacts to water quality resulting potential erosion of soils was minimized; however, due to the potential to encounter burn ash within off site grading areas a potentially significant direct impact to water quality could occur. Implementation of mitigation measure **HAZ-CV-2**/**HAZ-SD-1** requiring preparation and approval of a Community Health and Safety Plan under the oversight of the County of San Diego Local Enforcement Agency prior to ground disturbance would ensure potential water quality impacts relating to burn ash would be less than significant. Through implementation of the mitigation measure, under all scenarios, the project would reduce potentially significant direct impacts to less than significant levels and ensure the project's incremental contribution to a cumulative impact on water quality would be less than significant.

7.2.13 Public Services and Facilities

The project, in conjunction with other projects in the area, would place an added demand for public services. The cumulative study area would consist of those projects within the service areas for each public service. As discussed in Section 4.13, Public Services and Facilities, the project would introduce an estimated 693 additional residents to the project area which could result in an increase demand for public services including fire protection, police and emergency services, parks and recreational facilities, libraries, and schools. As detailed in Section 4.13.3.1.b, under the No Annexation Scenario and the Annexation Scenario 2a, no physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed, and none are required as a result of project implementation. Likewise, under the Annexation Scenario 2b, the project would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries. Therefore, the project's incremental contribution to cumulative impacts related to public services and facility construction would be less than significant.

7.2.14 Utilities and Service Systems

The cumulative study area for utilities would be the boundaries of the district providing services to the project.

7.2.14.1 Infrastructure Expansion

As discussed in Sections 4.14.3.1.b and 4.14.3.2.b, the project would require the construction of water, sewer, electrical power, and natural gas utility connections to serve the project. Drainage and stormwater facilities would also be constructed. Physical impacts associated with utility improvements are localized and addressed throughout Chapter 4.0 of this EIR. Cumulative projects would similarly require the construction of utilities and service systems to support respective projects; however, those impacts would also be localized and addressed as part of each individual project's environmental analysis. As physical impacts related to the provision of utilities and service systems would be localized and would be addressed on a project-by-project basis, these impacts would not combine to result in a cumulative impact. Therefore, cumulative impacts related to the physical impacts associated with installation of utilities and services would be less than significant.

7.2.14.2 Water Supply

Under all development scenarios, the project would receive water and be served by facilities operated by the City of San Diego Public Utilities Department (PUD). Cumulative projects within the City of San Diego would also be served by the City of San Diego PUD resulting in a cumulative demand for water supply and infrastructure. The water supply assessment discussed in Sections 4.14.4.1.b and 4.14.4.2.b is a cumulative analysis by nature as water supply planning is completed based on anticipated regional growth and associated demand for new water supplies. As discussed therein, under all development scenarios, the total water supplies available to the City of San Diego during normal, single-dry, and multiple dry years within a 20-year projection would meet the projected water demand of the City. However, like the project, several of the cumulative projects served by the PUD require General Plan Amendments and/or Rezones and were not included in the land use assumptions made in the City of San Diego Urban Water Management Plan. Due to the existing housing shortage, new housing development that requires changes to existing land use plans is generally accommodating growth rather than increasing anticipated growth beyond SANDAG estimates. Therefore, the project combined with cumulative projects is not anticipated to result in a cumulative impact on water supply. With the requirement for five-year updates to Urban Water Management Plan (California Water Code Sections 10610-10656), the City of San Diego would be able to evaluate and accommodate water needs of development. The City of San Diego development of the Pure Water program in addition to local water supplies and availability of imported water provides additional flexibility to accommodate demand. Therefore, the project's incremental contribution to cumulative impacts related to water supply would be less than significant.

7.2.14.3 Wastewater

Under all development scenarios, wastewater service to the project site would be provided by facilities operated by the City of San Diego PUD. All cumulative projects within the City of San Diego would also be served by the PUD resulting in a cumulative demand on wastewater infrastructure and treatment capacity.

As discussed in Sections 4.14.3.1.b and 4.14.3.2.b, the sewage generation for the project was estimated to total an average day flow of 43,438 gallons per day (gpd), peak dry weather flow of

60,379 gpd, and peak wet weather flow of 108,682 gpd. The Sewer Study prepared for the project (Appendix S) states that the proposed connection to the Otay Valley Trunk Sewer has enough capacity to serve the needs of the project. Based on the 2022 City of San Diego Significance Determination Thresholds, sewer demand is handled on a project-by-project basis where developers are required to submit sewer studies to show adequate facility and treatment capacity. All cumulative projects would be required to include facility improvements as part of their project level environmental analysis and ensure that potential impacts are avoided or mitigated. Therefore, the project's incremental contribution to cumulative impacts related to new or improved wastewater facilities would not be cumulatively considerable and cumulative impacts would be less than significant.

7.2.14.4 Solid Waste

Under all development scenarios, solid waste management would be provided by the City of San Diego. All cumulative projects included in Table 7-1 are within the City of San Diego and would also be served by the City of San Diego, resulting in a cumulative demand on solid waste disposal. According to the 2022 City of San Diego Significance Determination Thresholds, cumulative impacts to solid waste facilities would be significant if a project includes the construction, demolition, and/or renovation of 40,000 square feet or more of building space. Projects that meet this criterion are required to prepare a project-specific Waste Management Plan (WMP) to address waste generated during construction and operation. A project-specific WMP was prepared for the project (Appendix U) that identifies waste diversion measures consistent with state and local regulations and a long-term WMP (PDF-UTIL-1). The measures identified in the WMP, when implemented, would ensure that potential cumulative impacts to solid waste management facilities would be below a level of significance. Similarly, applicable cumulative projects identified in Table 7-1 would be required to comply with all applicable state and local regulations and prepare WMPs (for those that meet the 40,000-square-foot threshold) to show adequate waste diversion measures to reduce individual cumulatively considerable contributions to the accumulation of solid waste. Additionally, City of Chula Vista projects shown in Table 7-2 would contribute to regional generation of solid waste. The City of Chula Vista has a similar requirement for a waste management plan to be prepared, which is applied as a condition of future development. Therefore, through the application of design features, and regulatory compliance including recycling, the project's incremental contribution to cumulative impacts related to solid waste would not be cumulatively considerable and cumulative impacts would be less than significant.

7.2.15 Wildfire

Due to the unpredictable and damaging nature of a wildfire, all undeveloped areas in proximity to the project site could be considered the cumulative impact area for wildland fire hazard impacts. The project site is within a Very High Fire Hazard Severity Zone as designated by Chula Vista Fire Department, the San Diego Fire-Rescue Department, and on California Department of Forestry and Fire Hazard Severity Zone maps (see Figure 4.7-1). The project includes fuel modification/ brush management zones consistent with applicable regulations. Under both development scenarios, the project would provide adequate defensible space, providing protection from an approaching wildfire. All cumulative projects located within both the City of San Diego and the City of Chula Vista

would be required to meet minimum fire fuel modification and/or clearing requirements applicable to their location and would be reviewed by fire district having jurisdiction to ensure adherence to all relevant fire safety standards. Adherence to all fire regulations and district requirements for cumulative projects would ensure cumulative wildfire impacts are avoided. As demonstrated in the project's Evacuation Plan (see Appendix I) and discussed in Section 4.6.5.1.b, implementation of the project would not impair or interfere with an existing emergency response or evacuation plan. Cumulative projects would also be required to address adequacy of emergency response; therefore, no cumulative impact related to emergency response would occur. The project's incremental contribution to cumulative impacts related to wildfire exposure would be less than significant.

Chapter 8.0
Effects Found Not to be Significant

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15128, this section briefly describes the environmental issue areas that were determined during preliminary Nakano Project (project) review not to be significant and are therefore not discussed in detail in Chapter 4.0 of the Environmental Impact Report (EIR).

8.1 Agriculture and Forestry Resources

CEQA Guidelines Appendix G questions related to agriculture and forestry resources include the following:

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

The City of San Diego CEQA Significance Determination Thresholds (City of San Diego 2022) provides the following issue questions and guidance:

Would the proposal result in:

a) Conversion of a substantial amount of Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or Williamson Act contract?

c) Involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The City of San Diego CEQA Significance Determination Thresholds (City of San Diego 2022) further explains factors to consider when addressing agricultural resources, including the soils and economic viability.

The project site has been historically used for agricultural purposes; however, agricultural operations ceased on the site circa 2010. The vacant project site is currently designated Open Space by the City of Chula Vista General Plan and is within Agricultural Zone A-8 of the City of Chula Vista Zoning Code. As shown in Figure 8-1, the California Department of Conservation Farmland Mapping and Monitoring Program identifies that the project site supports Farmland of Local Importance and Other Land. Farmland of Local Importance is land of importance to the local economy, as defined by each county's local advisory committee and adopted by its Board of Supervisors. In San Diego County, Farmland of Local Importance is land that meets all the characteristics of Prime and Statewide, with the exception of irrigation. Farmlands of Local Importance are farmlands not covered by the above categories but are of significant economic importance to the county. They have a history of good production for locally adapted crops. The soils are grouped in types that are suited for truck crops (such as tomatoes, strawberries, cucumbers, potatoes, celery, squash, romaine lettuce, and cauliflower) and soils suited for orchard crops (avocados and citrus) (California Department of Conservation 2018).

The project site does not contain Prime Farmland, Unique Farmland or Farmland of Statewide Importance, and therefore the project would not result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use. Although the project site contains Farmland of Local Importance, the site does not have any recent history of agricultural production; therefore, it does not meet the criteria for that designation. The project site is not in a Williamsons Act contract or within an agricultural preserve.

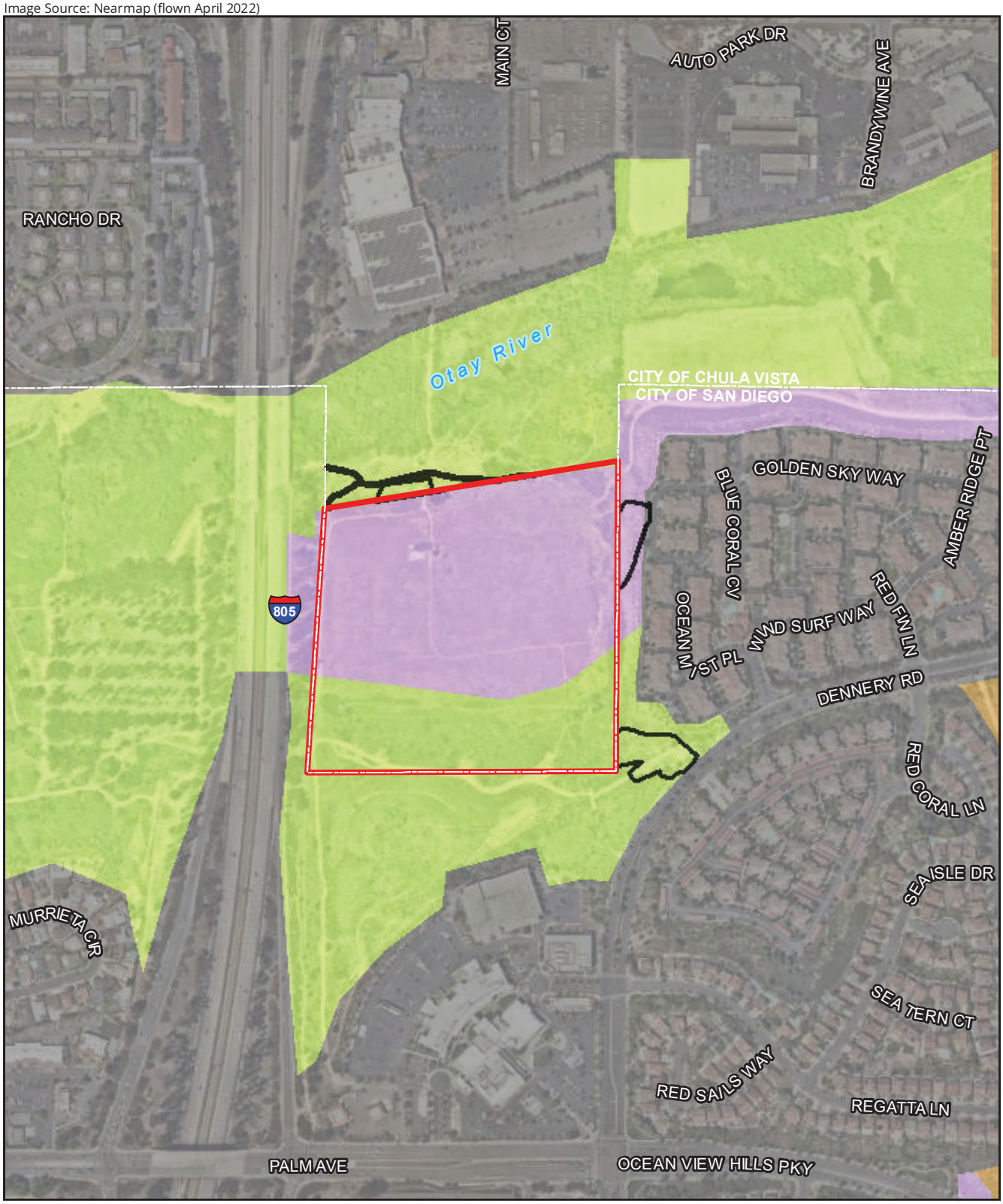
While the project site is currently designated open space by the City of Chula Vista, this designation does not preclude development of the project site or require that it be maintained as open space. The project includes an amendment to the City of Chula Vista General Plan to remove the open space designation and redesignate the site to Specific Plan-Residential Medium. Development of the site with residential uses would be consistent with surrounding developed uses as there is no active agriculture in the vicinity of the project site. Surrounding land uses have been built out to include the Kaiser Permanente medical facility and residential development to the east and southeast. As discussed throughout Section 4.1, the project would be consistent with all relevant land use plans, policies, and regulations of both cities.

Therefore, the conversion of the project site to a proposed residential use would not conflict with agricultural zoning, a Williamson act Contract and would not convert land mapped pursuant to the Department of Conservation Farmland Mapping and Monitoring Program. Lastly, the project site is not designated forestland and would not result in the designation or rezoning or loss of forest land.

Pertinent to the City of San Diego CEQA Significance Determination Thresholds (2022), each of the proposed scenarios would not conflict with the on-site zoning, violate a Williamson Act Contract, or result in the conversion of a substantial amount of Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. As such, impacts are not significant.

Impacts related to agriculture and forestry resources would be less than significant.

Image Source: Nearmap (flown April 2022)



Project Site

Off-site Improvements

Farmland Desigantion

- Farmland of Local Importance
- Grazing Land
- Other Land
- Urban and Built Up Land

0 Feet 500

FIGURE 8-1

California Department of Conservation
Farmland Mapping and Monitoring Program

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8.2 Energy

CEQA Guidelines Appendix G questions related to energy include the following:

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Also, the City of San Diego has identified the following questions to provide guidance in determining potential significance of impacts related to construction or expansion of energy utilities:

- Would the project result in a need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts with regard to the following utilities: natural gas, communication systems, water, sewer, and solid waste disposal?

- Result in the use of excessive amounts of fuel or energy (e.g., natural gas)?

Result in the use of excessive amounts of power? The energy/distribution context of the Nakano site includes a San Diego Gas and Electric (SDG&E) 69-kilovolt power line along the project site's southern boundary. An existing dirt access road from Dennery Road provides SDG&E access to the existing on-site utility lines. An SDG&E above-ground power line also extends along the project site's eastern boundary. Electric transmission lines that would be available to serve the project are currently located within and adjacent to the project site. All electrical connections would occur on-site, and impacts are evaluated throughout this EIR. Similarly, natural gas facilities are present in the surrounding roadways and available to serve the project. Impacts associated with construction of utility connections have been addressed throughout this EIR. New systems would not be required to serve the project site.

Construction-Related Energy Usage

During construction, energy use would occur in two general categories: fuel use from vehicles used by workers commuting to and from the construction site, and fuel use by vehicles and other equipment to conduct construction activities. Energy use associated with the project was calculated as part of the air quality and greenhouse gas (GHG) modeling detailed in Sections 4.3 and 4.5 and Appendices C and G.

Workers associated with project construction would generate up to 159 one-way trips per day during the building construction phase. Fuel consumption associated with construction worker commute would be similar to any other typical commute in San Diego County, and would not result in a wasteful, inefficient, or unnecessary consumption of gasoline or diesel fuel. The project would include fuel use associated with hauling of approximately 37,800 cubic yards of soil import which would generate up to 75 one-way hauling trips per day. The project would also include up to 24 one-way vendor trips per day during the building construction phase to deliver construction materials to

the project site. As fuel use associated with soil import is necessary to support the grades required for the primary access road connection to Dennery Avenue and fuel use associated with delivery is necessary to get building materials to the project site, it is not considered to be wasteful, inefficient, or unnecessary.

The construction equipment required for the project is summarized in Table 4.2-4. Project construction would include the use of tractors/loaders/backhoes, dozers, excavators, scrapers, cranes, forklifts, generators, welders, pavers, rollers, paving equipment, and air compressors. Consistent with state requirements, all construction equipment would meet California Air Resources Board Tier 3 In-Use Off-Road Diesel Engine Standards. Engines are required to meet certain emission standards, and groups of standards are referred to as Tiers. A Tier 0 engine is unregulated with no emission controls, and each progression of standard level (i.e., Tier 1, Tier 2, Tier 3, etc.) generate lower emissions, use less energy, and are more advanced technologically than the previous tier. California Air Resources Board's Tier 3 In-Use Off-Road Diesel Engine Standards requires that construction equipment fleets become cleaner and use less energy over time. There are no known conditions in the project area that would require nonstandard equipment or unusual construction practices that would increase on-site heavy-duty construction equipment use. Additionally, construction activities would be temporary and short-term and would adhere to all construction best management practices. Therefore, project construction would not result in the use of excessive amounts of fuel or other forms of energy, and impacts would be less than significant.

Operation-Related Energy Usage

During operation, energy use would be associated with transportation-related fuel use (gasoline, diesel fuel, and electric vehicles), and building-related energy use (electricity). Energy use associated with the project was calculated as part of the air quality and GHG modeling detailed in Sections 4.2 and 4.5 and Appendices C and G.

Transportation-Related Energy Use

Buildout of the project and vehicle trips associated with the project would result in transportation energy use. Trips by individuals traveling to and from the project site would result from use of passenger vehicles. Vehicles would be mostly powered by gasoline, with some fueled by diesel or electricity. The maximum weekday trip rate from the Local Mobility Analysis Report is 1,902 trips per day. Based on California Emissions Estimator Model default trip lengths, the project would generate 5,705,004 vehicle miles traveled annually.

Project fuel consumption would decline over time beyond the initial operational year of the project as a result of continued implementation of increased federal and state vehicle efficiency standards. Each unit would include a listed raceway to accommodate a dedicated 208/540-volt branch circuit for electric vehicle charging. Additionally, the project would increase density, incorporate affordable housing, and provide pedestrian and bicycle network improvements (refer to Section 3.6.3.d). There is no component of the project that would result in unusually high vehicle fuel use during operation. Therefore, operation of the project would not create a land use pattern that would result in wasteful, inefficient, or unnecessary use of energy, and impacts would be less than significant.

Non-Transportation-Related Energy Use

Non-transportation energy use would be associated with electricity. Energy use associated with a project is also related to natural gas; however, the project would not include natural gas appliances. The project would be required to adhere to state regulations enforced to ensure energy efficiency and reduction of wasteful energy consumption, including the California Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6; California Energy Code) and the California Green Building Standards Code. The California Energy Code (2022 Energy Code) establishes energy-efficiency standards for residential buildings to reduce California's energy consumption. The 2022 Energy Code increases on-site renewable energy generation from solar, increases electric load flexibility to support grid reliability, reduces emissions from newly constructed buildings, reduces air pollution for improved public health, and encourages adoption of environmentally beneficial efficient electric technologies. New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission. The 2022 California Green Building Standards Code institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements. The mandatory measures are related to planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

The Renewables Portfolio Standard (RPS) promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by Executive Orders S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, Senate Bill (SB) 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's renewable energy mix goal to 50 percent by year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030. Once operational, the project would be served by San Diego Gas & Electric (SDG&E). Based on the most recent annual report, SDG&E has already procured 39 percent (California Public Utilities Commission 2021) renewable energy and is on track to procure 60 percent by 2030 as outlined in SDG&E's 2019 RPS Procurement Plan. Additional regulations addressing energy use are found in Section 4.5.2, relating to GHG emissions.

Electricity service to the project site is provided by SDG&E. Once operational, the project would use electricity 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. As previously mentioned, the project would not use natural gas. As a part of the air quality and GHG modeling prepared for the project, the California Emissions Estimator Model was used to estimate the total operational electricity consumption associated with the project. The project would use 810,264 kilowatt-hours annually.

Excessive use of Fuel, Energy, or Power

The project would not result in an inefficient or wasteful use of energy resources during project construction or operation. An excessive amount of fuel or energy would not be expended with this project. Furthermore, no natural gas use is proposed as the project is proposed for all electric appliances as detailed in Section 3.6.3.d, PDF-GHG-3 Electric Appliances, PDF-GHG-6 Outdoor Electrical Outlets to Allow for Electric Landscape Equipment, and PDF-GHG-9 Electric Vehicle Charging Capacity. Also, the project has incorporated a number of measures to provide increased energy efficiency including operational efficiency related to vehicle use. Refer to Section 4.5.3.2.d for applicable GHG mitigation measures that would also serve to support energy and fuel efficiency including **GHG-SD-1** Transit Passes, **GHG-SD-2** Commute Trip Reduction Program, and **GHG-SD-3** Bicycle Micro-mobility Fleet.

The project would not result in excessive use of fuel, energy, or power. The project is proposed as an all-electric development and would include electric vehicle charging and other design features to support reductions in fuel use and energy efficiency. Impacts would be less than significant.

Overall, the project would incorporate energy efficient design measures and construction features to meet the California and local standards, under all project scenarios. Through regulatory compliance, it is ensured that the project would not result in wasteful, inefficient, or unnecessary energy consumption and no significant impacts would occur.

8.3 Mineral Resources

CEQA Guidelines Appendix G questions related to mineral resources include the following:

Would the project:

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The City of San Diego CEQA Significance Determination Thresholds (City of San Diego 2022) provides the following issue questions and guidance:

- Is the project site located in the MRZ 2 classification area?
- Is the site large enough to allow economically feasible aggregate mining operations?
- If the site is too small for an economically feasible mineral resource extraction operation, would its development with the proposed use preclude a mining operation adjacent to or surrounding the site?
- Is the site currently being mined?

As shown in Figure 8-2, the project site is categorized as supporting Mineral Resource Zone 2 (MRZ-2). Areas mapped as MRZ-2 are considered to have extractable aggregate deposits. For all development scenarios, the project is not, nor has it ever been used for mineral resource extraction. Additionally, the surrounding area has experienced increased urbanization and development including commercial/medical and residential which would be incompatible with typical mineral extraction and processing operations. Therefore, while the project would result in the development of land designated MRZ-2, it would not result in the loss of availability of locally important or any known valuable mineral resource as extraction of the site would not be considered compatible with existing surrounding land uses. Impacts to mineral resources would be less than significant.

8.4 Population and Housing

CEQA Guidelines Appendix G questions related to population and housing include the following:

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

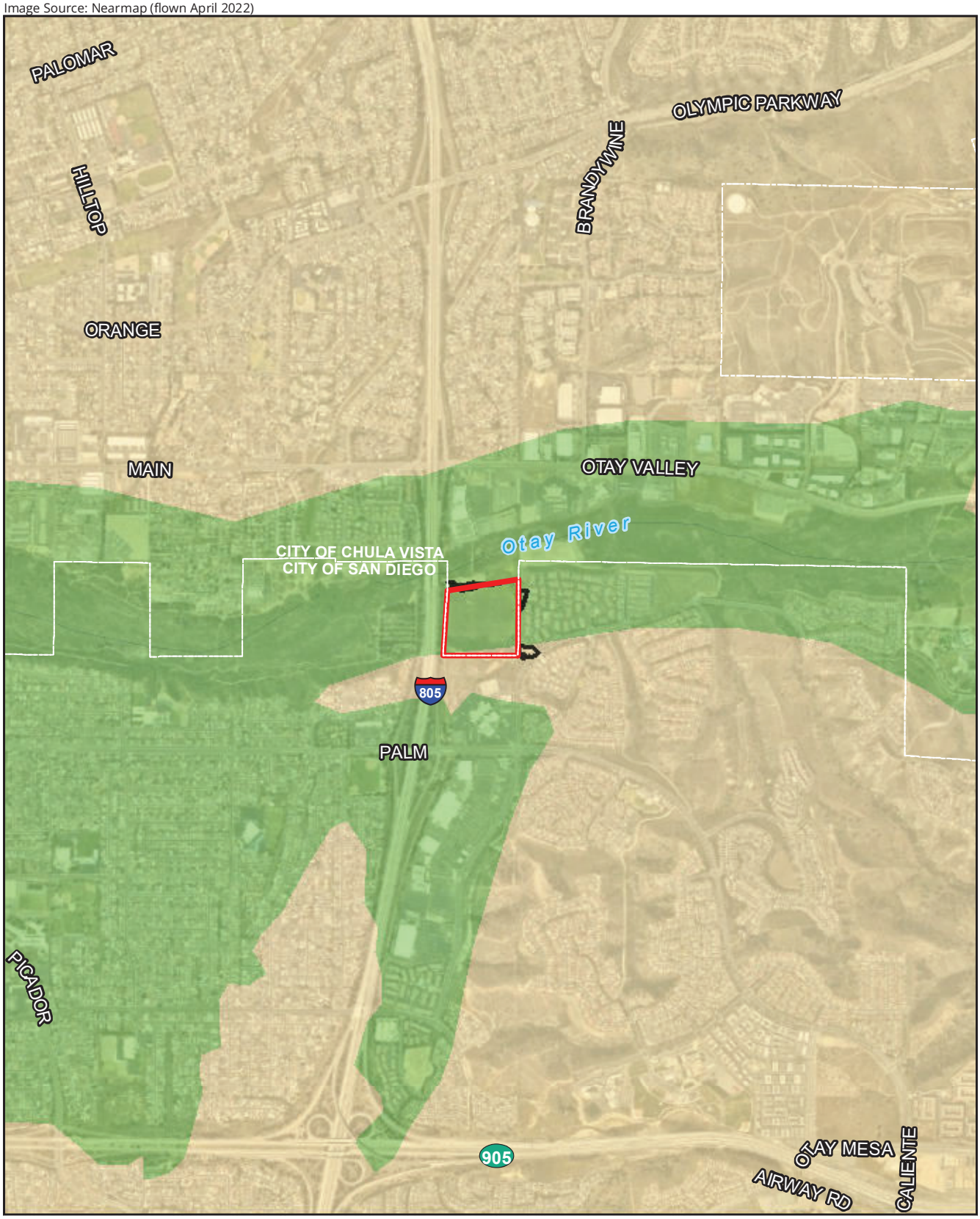
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently vacant and supports no housing. Therefore, it would not displace existing people or housing.

The project site is surrounded by development including commercial/medical just south of the project site, with community shopping beyond to the south; neighborhood and community shopping north, beyond the Otay River, residential to the east and Interstate 805 due west. The project site sits in the East Planning Area as defined in the City of Chula Vista General Plan. Pursuant to the City of Chula Vista Land Use and Transportation Element, the East Planning Area is defined by six master planned communities consisting of housing; office parks; general development parameters; local and regional commercial centers; schools; and churches. Within this area, the City of Chula Vista General Plan envisioned the creation of a balanced community, including a variety of housing types and neighborhoods; employment opportunities in light industrial and commercial businesses; the full range of community facilities and services; and a multi-modal circulation system that accommodates vehicles and mass transit (City of Chula Vista 2005).

If the project ultimately proceeds with annexation either under Annexation Scenario 2a or 2b, the project would be within the Northwest District of the Otay Mesa Community Plan. The Northwest District is characterized by residential development and commercial services and comprises several Precise Planning Areas that are almost completely developed (City of San Diego 2014). Specifically, as detailed in the Otay Mesa Community Plan land use map, surrounding land uses are designated Residential Low-Medium and Community Commercial.

Image Source: Nearmap (flown April 2022)



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FIGURE 8-2
Mineral Resources Zone

The project proposes a residential development offering a variety of housing options, which compliment the existing land uses (see Section 4.1.4 for a detailed discussion of the project's consistency with land use plans and policies). The project would serve to accommodate anticipated growth as expressed in regional planning documents prepared by the San Diego Association of Governments (SANDAG). While the project requires amendments to the respective agency planning documents to allow the proposed residential use within each respective city, the housing production would support the regional need for housing identified by the California Department of Housing and Community Development. The California Department of Housing and Community Development, in consultation with SANDAG, identified a need for over 171,000 new housing units between 2021 and 2029. As detailed in SANDAG's final Regional Housing Needs Allocation, the City of Chula Vista was allocated a total of 11,105 while the City of San Diego was allocated 108,036 housing units (SANDAG 2020). While each agency has adopted Housing Elements to identify plans for achieving these housing units, neither agency has met its required housing unit production. The proposed construction of 221 units is not anticipated to result in an unplanned population increase beyond SANDAG Regional Population and Housing Forecast considering there is a shortage of housing to accommodate the existing and planned population. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project. Thus, the project would not directly induce substantial unplanned population growth to the area. The project would support regional efforts to generate housing, including affordable housing. Therefore, the project would not induce substantial unplanned population growth.

Additionally, the project site is accessed by existing major roadways and existing utilities are available including water and sewer pipelines either on or near the project site (see Section 4.14.3.1.b). The project does not require the expansion of roads or other infrastructure. Therefore, no significant impacts associated with population and growth would occur.

Chapter 9.0
Project Alternatives

In order to fully evaluate the environmental effects of projects, the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.) mandates that alternatives to the project be analyzed. CEQA Guidelines Section 15126.6 requires a discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project," even if these alternatives would impede to some degree the attainment of the project objectives.

CEQA also requires the evaluation of a No Project Alternative. The discussion of the No Project Alternative may proceed along two lines:

1. If the project is a development proposal, the No Project Alternative is the circumstance under which the project does not proceed.
2. When the project is the revision of an existing land use or regulatory plan, the No Project Alternative is the continuation of the existing plan.

In the case of the project described in this Environmental Impact Report (EIR), both types of No Project Alternative would be evaluated. The first type is considered the No Project (No Development) Alternative in this chapter and the second type is considered the No Project (Development Under the Existing Plan) Alternative, as detailed below.

As discussed in Chapters 4.0 and 7.0, the project would result in significant, direct, and/or cumulative environmental impacts related to land use, biological resources, geologic and paleontological resources, greenhouse gas (GHG) emissions, health and safety/hazardous materials, historical resources, transportation, tribal cultural resources, and hydrology and water quality. Mitigation measures have been identified that would reduce all direct and cumulative impacts to below a level of significance except the following issues would remain significant:

- Land Use (Plan Consistency in Annexation Scenario 2a)
- GHG Emissions (GHG Emissions in Annexation Scenario 2a and Conflicts with Plans in all scenarios)
- Transportation – Vehicle Miles Traveled (VMT) – all scenarios

In developing the alternatives to be addressed in this section, consideration was given to their ability to meet the basic objectives of the project and eliminate or substantially reduce significant environmental impacts. As identified in Chapter 3.0, project objectives include the following:

1. Develop underutilized property to provide housing in response to regional housing needs.

2. Achieve efficient provision of services through reorganization of the property through an application to the San Diego Local Agency Formation Commission (LAFCO) to detach from the City of Chula Vista and Otay Water District and annex into the City of San Diego.

3. Provide a compact residential development pattern that is conducive to walking and bicycling.

4. Construct a variety of housing types at a density range that maximizes development potential consistent with the surrounding residential communities.

5. Provide amenities that contribute to the nearby Otay Valley Regional Park (OVRP) recreational uses and community connectivity, including an overlook to the park and multi-modal connections.

6. Generate financial benefits to the local economy, through efficient provision of public services, providing workforce housing, and generating property tax and local jobs.

The alternatives identified in this section are intended to provide a reasonable range of alternatives that could further reduce or avoid significant environmental effects of the project. This section includes a discussion of those alternatives considered but rejected, as required pursuant to CEQA Guidelines Section 15126.6(c), a No Project (No Development) Alternative as required pursuant to CEQA Guidelines Section 15126.6(e), and a No Project (Development Under the Existing Plan) Alternative. To provide a full range of alternatives to the possible development scenarios that comprise the project, a No Annexation and Annexation Scenario 2b Reduced Project Alternative and an Annexation Scenario 2a Reduced Project Alternative are also fully analyzed. The alternatives discussed herein include the following:

- No Project (No Development) Alternative: This alternative is the circumstance under which no development would occur, and the project site would remain in its existing condition which is an undeveloped site subject to trespass and homeless encampments.

- No Project (Development Under the Existing Plan) Alternative: This alternative is selected based on build out of a project consistent with the existing City of Chula Vista Agricultural Zone (A-8) and Open Space (OS) General Plan designation. This alternative assumes the project site would be developed with a passive park, including roadway improvements to allow vehicular access to the site via Dennery Road and on-site parking primarily as trail staging for public access to the OVRP. Passive park improvements are assumed to include natural and landscaped open space areas including grass play areas, picnic areas with shade structures, and trail improvements.

- Reduced Unit Alternative: This alternative is the scenario under which the project would be developed in the City of Chula Vista with a 200-unit residential project. A 200-unit project is selected because the City of Chula Vista adopted International Fire Code 2021, Appendix D, Fire Apparatus Access Roads, Section D106, which requires a secondary emergency access road for projects having more than 200 multi-family residential units. This project alternative would include similar park and recreational facilities, roads, and mix of residential units, albeit slightly reduced. Impacts of the Reduced Unit Alternative are compared to impacts under the project's No Annexation Scenario and Annexation Scenario 2b. would be subject to City of Chula Vista regulations.

- Reduced Footprint Wetland Impact Reduction Alternative: This alternative considers development of the same number of residential units as the project within a condensed footprint in order to accommodate two bridges over the on-site wetlands and a 100-foot on-site wetland buffer. This alternative was selected to avoid wetland impacts and reduce impacts to upland biological resources. It is assumed, for the consideration of a range of alternatives, that this alternative would be annexed to the City of San Diego. This project alternative would include similar on-site recreational amenities, roads, and mix of residential units; however, to accommodate the reduced footprint a portion of the structures would be three-stories in height. Impacts of the Reduced Footprint Wetland Avoidance Alternative are compared to impacts under the project's Annexation Scenario 2a and would be subject to City of San Diego regulations.

Each major issue area included in the impact analysis of this EIR has been given consideration in the alternatives analyses, and a matrix comparison of the impacts of the project compared to each alternative is provided in Tables 9-1, 9-2, and 9-3.

As required under CEQA Guidelines Section 15126.6 (e), the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among the alternatives evaluated must be identified as the environmentally superior project. Section 9.5 addresses the Environmentally Superior Alternative.

9.1 Alternatives Considered but Rejected

This section of the EIR is provided consistent with CEQA Guidelines, which state that the EIR needs to examine in detail only a reasonable range of alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project. Further, the EIR should identify any alternatives that were considered by the lead agency but were rejected and briefly explain the reasons underlying the lead agency's determination. Factors used to eliminate alternatives from detailed consideration in the EIR are failure to meet most of the basic project objectives, infeasibility, or inability to avoid significant environmental effects (CEQA Guidelines 15126.6[c]).

Table 9-1 Comparison of Project and No Project Alternatives Impacts				
	Project Impact Conclusions			
Environmental Issue	No Annexation Scenario/ Annexation Scenario 2b	Annexation Scenario 2a	No Project (No Development) Alternative	No Project (Development under the Existing Plan) Alternative
LAND USE AND PLANNING				
Physically Divide an Established Community	LTS	LTS	Less	Same
Land Use Plan Consistency	LTS	SU	Less	Less
Consistency with MSCPs	LTS	LTS	Less	Same
Deviation or Variance	N/A	LTS	Less	N/A
AIR QUALITY				
Air Quality Plan Implementation	LTS	LTS	Less	Same
Air Quality Standards	LTS	LTS	Less	Less
Sensitive Receptors	LTS	LTS	Less	Less
Odor and Other Emissions	LTS	LTS	Less	Less
Air Movement	N/A	LTS	Less	N/A
BIOLOGICAL RESOURCES				
Sensitive Species and Habitats	SM	SM	Less	Less
Wetlands	SM	SM	Less	Less
Wildlife Corridors and Nursery Sites	LTS	LTS	Less	Same
Conflicts with Local Plans, Policies, or HCPs/NCCPs	LTS	LTS	Less	Same
GEOLOGIC AND PALEONTOLOGICAL RESOURCES				
Geological Hazards	LTS	LTS	Less	Same
Erosion	LTS	LTS	Less	Same
Unstable Geologic Units or Soils	LTS	LTS	Less	Same
Paleontological or Unique Geologic Feature	SM	LTS	Less	Same
GREENHOUSE GAS EMISSIONS				
Greenhouse Gas Emissions	LTS	SU	Less	Less
Conflicts with the CAP or other Plans or Policies	SU	SU	Less	Less (LTS)
HEALTH AND SAFETY/HAZARDOUS MATERIALS				
Hazardous Materials	SM	SM	Less	Less
Airport Safety Hazards	LTS	LTS	Less	Same
Emergency Plans	LTS	LTS	Less	Same
Wildland Fires	LTS	LTS	Less	Same
HISTORICAL RESOURCES				
Prehistoric/Historic Resources	SM	SM	Less	Same
Human Remains	SM	LTS	Less	Same
Religious/Sacred Uses	N/A	LTS	Less	N/A
NOISE				
Ambient Noise Levels/Construction	LTS	LTS	Less	Same

Table 9-1 Comparison of Project and No Project Alternatives Impacts				
	Project Impact Conclusions			
Environmental Issue	No Annexation Scenario/ Annexation Scenario 2b	Annexation Scenario 2a	No Project (No Development) Alternative	No Project (Development under the Existing Plan) Alternative
Ambient Noise Levels/ Operation	LTS	LTS	Less	Same
Groundborne Vibration	LTS	LTS	Less	Same
Airport Noise	LTS	LTS	Less	Same
TRANSPORTATION				
Circulation System	LTS	LTS	Less	Same
Vehicle Miles Traveled	SU	SU	Less	Less (LTS)
Hazards due to a Design Feature	LTS	LTS	Less	Same
Emergency Access	LTS	LTS	Less	Same
TRIBAL CULTURAL RESOURCES				
Tribal Cultural Resources	LTS	LTS	Less	Same
AESTHETICS				
Scenic Vistas/Scenic Views	LTS	LTS	Less	Less
Scenic Resources	LTS	LTS	Less	Less
Visual Character	LTS	LTS	Less	Less
Light or Glare	LTS	LTS	Less	Same
HYDROLOGY AND WATER QUALITY				
Water Quality	SM	SM	Less	Less
Groundwater	LTS	LTS	Less	Less
Drainage	LTS	LTS	Less	Less
Flood Hazard	LTS	LTS	Less	Less
Conflict with Water Quality Plans	LTS	LTS	Less	Less
PUBLIC SERVICES AND FACILITIES				
Public Services & Facilities	LTS	LTS	Less	Same
UTILITIES AND SERVICE SYSTEMS				
Need for Construction or Expansion of Facilities	LTS	LTS	Less	Less
Sufficient Water Supply	LTS	LTS	Less	Less
Wastewater Treatment Capacity	LTS	LTS	Less	Less
Solid Waste	LTS	LTS	Less	Less
WILDFIRE				
Emergency Plans	LTS	LTS	Less	Same
Pollutants from Wildfire	LTS	LTS	Less	Same
Infrastructure	LTS	LTS	Less	Same
Flooding or Landslides	LTS	LTS	Less	Same
N/A = Not Applicable; LTS = less than significant; SM = significant, but mitigated to less than significant; SU = significant and unavoidable; Less = Impacts of the alternative would be less than the project; Same = Impacts of the alternative would be the same or similar as the project; CAP = Climate Action Plan; HCP = Habitat Conservation Plan; NCCP = Natural Community Conservation Plan; MSCP = Multiple Species Conservation Plan				

Table 9-2 Comparison of No Annexation Scenario/ Annexation Scenario 2b and Reduced Unit Alternative		
Environmental Issue	Project: No Annexation Scenario/Annexation Scenario 2b	Reduced Unit Alternative
LAND USE AND PLANNING		
Physically Divide an Established Community	LTS	Same
Land Use Plan Consistency	LTS	Same
Consistency with MSCPs	LTS	Same
Deviation or Variance	N/A	N/A
AIR QUALITY		
Air Quality Plan Implementation	LTS	Same
Air Quality Standards	LTS	Less
Sensitive Receptors	LTS	Same
Odor and Other Emissions	LTS	Same
Air Movement	N/A	N/A
BIOLOGICAL RESOURCES		
Sensitive Species and Habitats	SM	Same
Wetlands	SM	Less
Wildlife Corridors and Nursery Sites	LTS	Same
Conflicts with Local Plans, Policies, or HCPs/NCCPs	LTS	Same
GEOLOGIC AND PALEONTOLOGICAL RESOURCES		
Geological Hazards	LTS	Same
Erosion	LTS	Same
Unstable Geologic Units or Soils	LTS	Same
Paleontological or Unique Geologic Feature	SM	Same
GREENHOUSE GAS EMISSIONS		
Greenhouse Gas Emissions	LTS	Less
Conflicts with the CAP or other Plans or Policies	SU	Less (SU)
HEALTH AND SAFETY/HAZARDOUS MATERIALS		
Hazardous Materials	SM	Same
Airport Safety Hazards	LTS	Same
Emergency Plans	LTS	Same
Wildland Fires	LTS	Same
HISTORICAL RESOURCES		
Prehistoric/Historic Resources	SM	Same
Human Remains	SM	Same
Religious/Sacred Uses	N/A	N/A
NOISE		
Ambient Noise Levels/Construction	LTS	Same
Ambient Noise Levels/Operation	LTS	Same
Groundborne Vibration	LTS	Same
Airport Noise	LTS	Same
TRANSPORTATION		
Circulation System	LTS	Same
Vehicle Miles Traveled	SU	Less (SU)
Hazards due to a Design Feature	LTS	Same
Emergency Access	LTS	Same
TRIBAL CULTURAL RESOURCES		
Tribal Cultural Resources	LTS	Same

Table 9-2 Comparison of No Annexation Scenario/ Annexation Scenario 2b and Reduced Unit Alternative		
Environmental Issue	Project: No Annexation Scenario/Annexation Scenario 2b	Reduced Unit Alternative
AESTHETICS		
Scenic Vistas/Scenic Views	LTS	Same
Scenic Resources	LTS	Same
Visual Character	LTS	Same
Light or Glare	LTS	Same
HYDROLOGY AND WATER QUALITY		
Water Quality	SM	Same
Groundwater	LTS	Same
Drainage	LTS	Same
Flood Hazard	LTS	Same
Conflict with Water Quality Plans	LTS	Same
PUBLIC SERVICES AND FACILITIES		
Public Services and Facilities	LTS	Same
UTILITIES AND SERVICE SYSTEMS		
Need for Construction or Expansion of Facilities	LTS	Same
Sufficient Water Supply	LTS	Less
Wastewater Treatment Capacity	LTS	Less
Solid Waste	LTS	Less
WILDFIRE		
Emergency Plans	LTS	Same
Pollutants from Wildfire	LTS	Same
Infrastructure	LTS	Same
Flooding or Landslides	LTS	Same
N/A = Not Applicable; LTS = less than significant; SM = significant, but mitigated to less than significant; SU = significant and unavoidable; Less = Impacts of the alternative would be less than the project; Same = Impacts of the alternative would be the same or similar as the project; CAP = Climate Action Plan; HCP = Habitat Conservation Plan; NCCP = Natural Community Conservation Plan; MSCP = Multiple Species Conservation Plan		

Table 9-3 Comparison of Annexation Scenario 2a and Reduced Footprint Wetland Impact Reduction Alternative		
Environmental Issue	Project: Annexation Scenario 2a	Reduced Footprint Wetland Impact Reduction Alternative
LAND USE		
Physically Divide an Established Community	LTS	SAME
Land Use Plan Consistency	SU	SAME
Consistency with MSCPs	LTS	SAME
Deviation or Variance	LTS	SAME
AIR QUALITY		
Air Quality Plan Implementation	LTS	SAME
Air Quality Standards	LTS	SAME
Sensitive Receptors	LTS	SAME
Odor and Other Emissions	LTS	SAME
Air Movement	LTS	SAME

Table 9-3 Comparison of Annexation Scenario 2a and Reduced Footprint Wetland Impact Reduction Alternative		
Environmental Issue	Project: Annexation Scenario 2a	Reduced Footprint Wetland Impact Reduction Alternative
BIOLOGICAL RESOURCES		
Sensitive Species and Habitats	SM	SAME
Wetlands	SM	LESS
Wildlife Corridors and Nursery Sites	LTS	SAME
Conflicts with Local Plans, Policies, or HCPs/NCCPs	LTS	SAME
GEOLOGICAL AND PALEONTOLOGICAL RESOURCES		
Geological Hazards	LTS	SAME
Erosion	LTS	SAME
Unstable Geologic Units or Soils	LTS	SAME
Paleontological or Unique Geologic Feature	LTS	LESS
GREENHOUSE GAS EMISSIONS		
Greenhouse Gas Emissions	SU	SAME
Conflicts with the CAP or other Plans or Policies	SU	SAME
HEALTH AND SAFETY/HAZARDOUS MATERIALS		
Hazardous Materials	SM	SAME
Airport Safety Hazards	LTS	SAME
Emergency Plans	LTS	SAME
Wildland Fires	LTS	SAME
HISTORICAL RESOURCES		
Prehistoric/Historic Resources	SM	LESS
Human Remains	LTS	LESS
Religious/Sacred Uses	LTS	SAME
NOISE		
Ambient Noise Levels/Construction	LTS	SAME
Ambient Noise Levels/Operation	LTS	SAME
Groundborne Vibration	LTS	SAME
Airport Noise	LTS	SAME
TRANSPORTATION		
Circulation System	LTS	SAME
Vehicle Miles Traveled	SU	SAME
Hazards due to a Design Feature	LTS	SAME
Emergency Access	LTS	SAME
TRIBAL CULTURAL RESOURCES		
Tribal Cultural Resources	LTS	LESS
AESTHETICS		
Scenic Vistas/Scenic Views	LTS	SAME
Scenic Resources	LTS	SAME
Visual Character	LTS	SAME
Light or Glare	LTS	SAME
HYDROLOGY AND WATER QUALITY		
Water Quality	SM	SAME
Groundwater	LTS	SAME
Drainage	LTS	SAME
Flood Hazard	LTS	SAME
Conflict with Water Quality Plans	LTS	SAME

Table 9-3 Comparison of Annexation Scenario 2a and Reduced Footprint Wetland Impact Reduction Alternative		
Environmental Issue	Project: Annexation Scenario 2a	Reduced Footprint Wetland Impact Reduction Alternative
PUBLIC SERVICES AND FACILITIES		
Public Services and Facilities	LTS	SAME
UTILITIES AND SERVICE SYSTEMS		
Need for Construction or Expansion of Facilities	LTS	SAME
Sufficient Water Supply	LTS	SAME
Wastewater Treatment Capacity	LTS	SAME
Solid Waste	LTS	SAME
WILDFIRE		
Emergency Plans	LTS	SAME
Pollutants from Wildfire	LTS	SAME
Infrastructure	LTS	SAME
Flooding or Landslides	LTS	SAME
LTS = less than significant; SM = significant, but mitigated to less than significant; SU = significant and unavoidable; Less = Impacts of the alternative would be less than the project; Same = Impacts of the alternative would be the same or similar as the project; Greater = Impacts of the alternative would be greater than the project; CAP = Climate Action Plan; HCP = Habitat Conservation Plan; NCCP = Natural Community Conservation Plan; MSCP = Multiple Species Conservation Plan		

9.1.1 Mixed-Use Alternative

9.1.1.1 Description

This alternative considers the possibility of including both residential and locally serving commercial use on the project site to increase VMT efficiency by offering local services in proximity to residential use. It is envisioned that the grading footprint of this alternative would remain the same as the project; however, residential building heights would be increased to three stories to support residential density similar to the project (up to 221) with commercial use. The alternative would require a Rezone and Otay Mesa Community Plan designation supporting multi-family and mixed-use commercial as the site would be annexed to the City of San Diego under this alternative. The addition of commercial uses is considered under this alternative to reduce VMT impacts compared to the project.

9.1.1.2 Feasibility

The project site would not be well suited for commercial development due to the site access constraints. The site can only support one viable public ingress and egress point, which makes supporting anticipated commercial traffic potentially infeasible. A single driveway access would create congestion and possibly affect the surrounding neighborhoods. Moreover, the site lacks visibility from the surrounding roadways, that would be conducive for a successful commercial development. Furthermore, the landowner is exclusively a single-family and low-rise housing developer and does not develop commercial uses. Developing a high-rise residential development

with commercial uses is not within their purview of potential development projects. Overall, the Mixed-Use Alternative is not potentially feasible.

9.1.1.3 Impact Analysis

The intent of this alternative would be to reduce VMT by co-locating commercial and residential uses. More specifically, the intent would be to reduce the distance between the residents and commercial uses such as restaurants, grocery stores and retail. Reducing VMT could potentially reduce significant transportation impacts compared to the project under all development scenarios; however, due to the project's characteristics and location outside a VMT efficient area, the VMT impact under this alternative would likewise be significant.

Under this alternative, the co-location of residential and commercial uses within the project site could result in less GHG emissions compared to the project due to the proximity of commercial and residential uses. Specifically, the collocation of land uses through the development of mixed-use development would reduce GHG emissions through placing residents within closer distances to key community resources and reducing VMT per trip. The development of mixed-use communities would also include an improved network of bicycling and pedestrian transportation infrastructure, which would encourage alternative transportation, further reducing emissions. The project's residential-only community would require residents to travel distances primarily via single-occupancy vehicles to key community resources, resulting in a higher VMT per capita. Reducing the length of travel between commercial and residential would potentially reduce significant GHG emission impacts compared to the project. While GHG emissions would be reduced, this alternative would still not be consistent with the growth projections used in the development of the City of San Diego Climate Action Plan (CAP). Therefore, even with similar project design features (PDF-GHG-1 through PDF-GHG-9) and mitigation measures (**GHG-SD-1** through **GHG-SD-6/GHG-CV-1** through **GHG-CV-6**) as the project, this alternative would not be able to achieve net zero emissions to achieve consistency with the City of San Diego CAP and the State Scoping Plan. Therefore, although GHG emissions would be reduced compared to the project, GHG emission and CAP Consistency impacts would remain significant.

Because the footprint of this alternative would be the same as the project, under all scenarios, significant impacts associated with biological resources, geologic and paleontological resources, health and safety/hazardous materials, historical resources, tribal cultural resources, and hydrology and water quality would be similar under this alternative compared to the project. With the implementation of regulations and mitigation measures similar to the project, impacts would be the same as the project.

Overall, the Mixed-Use Alternative would result in reduced significant and unmitigated transportation, land use, and GHG impacts relative to the project. All other significant impacts of this alternative (biological resources, health and safety/hazardous materials, historical resources, and hydrology and water quality) would be similar to the project.

9.1.1.4 Project Objectives

This alternative would meet five of the basic project objectives, including developing underutilized property for housing (Objective 1), achieving efficient services through LAFCO annexation (Objective 2), providing development conducive to walking and bicycling (Objective 3), providing recreational amenities (Objective 5), and provide property tax and local jobs (Objective 6). However, the objective of constructing a variety of housing (Objective 4) types at a density range that maximizes development potential consistent with the surrounding residential communities would not be met because a high-rise residential development would not be consistent with surrounding residential communities. Overall, the Mixed-Use Alternative would meet five of the six objectives, thereby meeting the majority of the basic project objectives.

9.1.1.5 Conclusion

Overall, the Mixed-use Alternative would result in the reduction of significant impacts related to VMT and GHG. Additionally, this alternative would meet the basic project objectives. Notwithstanding this alternative's ability to meet project objectives, the project applicant does not develop mixed-use or commercial projects and the cost associated with high-rise residential development with commercial uses would not be economically feasible. Therefore, the Mixed-use Alternative was considered and rejected.

9.1.2 Removal of Secondary Access Alternative

9.1.2.1 Description

This alternative is a reduced residential project alternative including construction of up to 30 residential units, assuming annexation of the project site to the City of San Diego and development of the project subject to City of San Diego standards. This unit count was selected because a project with 30 dwelling units or less would not require a secondary access road, which would reduce impacts to the drainage located along the eastern edge of the property. According to the City of San Diego Fire Code (adopted California Fire Code-San Diego Municipal Code [SDMC] Section 511.8201) multi-family residential developments of more than 30 dwelling units located in a state responsibility area or a Very High Fire Hazard Severity Zone are required to include secondary access. A comparison of impacts of the Removal of Secondary Access Alternative to the project is provided in Section 9.1.2.2, below to further describe why it was rejected from further consideration.

9.1.2.2 Feasibility

The project site would not be well suited for development of only 30 residential units; surrounding residential land uses within the City of San Diego are high-density, multi-family, residential developments including RiverEdge Terrace and Ocean View Hills. The inconsistency with surrounding land uses would result in impacts related to visual character (see Section 9.1.2.3).

Furthermore, this alternative would not meet the housing need of the City of San Diego. The City of San Diego's portion assigned target of the County of San Diego's (County's) Regional Housing Needs

Allocation (RHNA) target for the 2021-2029 RHNA Cycle Housing Element period is 108,036 homes. The project site is adjacent to high-density, multi-family, residential developments; and the City of San Diego would require similar, consistent land uses that would accommodate the existing and planned population. Considering the housing shortage in the City of San Diego, this alternative would be rejected because (1) it would be inconsistent with surrounding high-density residential communities, and (2) it would not maximize housing to support the anticipated regional growth.

Therefore, the Removal of Secondary Access Alternative is not potentially feasible.

9.1.2.3 Impact Analysis

The intent of this alternative would be to reduce the need for secondary emergency access that would allow for avoidance of wetlands and other sensitive habitat along the eastern property line and accommodate a larger wetland buffer. Thus, wetland impacts would be reduced but not completely avoided considering the primary site access would continue to result in some wetland impacts. This alternative would result in significant impacts to upland sensitive habitat and covered species similar to the project. Like the project, this alternative would be required to comply with mitigation measures to reduce impacts to less than significant. Overall, this reduced project alternative would reduce biological resource impacts relative to the project.

This alternative would result in the same or similar impact as the project to the remaining following environmental issue areas: land use, geological hazards, paleontological resources, health and safety, historic, noise, tribal cultural resources, hydrology and water quality, and wildfire.

With respect to GHG emissions, construction and operational GHG emissions under this alternative would be reduced because less building square footage would be developed, and less traffic would be generated. Like the project, however, this alternative would not be consistent with the City of San Diego's CAP because of the site's location and the unaccounted emissions. Although this alternative would implement similar project design features and mitigation measures, it would not be feasible to demonstrate that it could achieve net zero emissions. Therefore, although this alternative's GHG emission would be incrementally less compared to the project, impacts would be significant, like the project.

Regarding VMT, this alternative would generate 270 average daily traffic (ADT) (30 dwelling units x 9 trips per dwelling unit). Pursuant to the City of San Diego Transportation Study Manual, this alternative would be presumed to have less than significant VMT impact as a small project generating less than 300 unadjusted ADT. Therefore, VMT related impacts under this alternative would be less compared to the project.

Because this alternative would not be visually consistent with surrounding residential developments, impacts associated with visual character would be greater compared to the project.

Under this alternative, impacts to the following environmental issue areas would be less compared to the project: air quality, public services, and utilities.

In conclusion, this Removal of Secondary Access Alternative would reduce the following significant impacts of the project: GHG, transportation, and biological resources.

9.1.2.4 Project Objectives

The Removal of Secondary Access Alternative would meet Objective 1, as it would redevelop an underutilized property to provide housing. This alternative would meet Objective 2 because this alternative assumes annexation to the City of San Diego and Otay Water District. The residential alternative development would be adjacent to the existing pedestrian and bicycle network, could include such on-site amenities, and would meet Objective 3. This alternative would provide 30 units, would be at a lower density than the surrounding developments, and would not meet Objective 4. This alternative would provide amenities that contribute to the nearby OVRP recreational uses, including an overlook to the park and multi-modal connections, thereby meeting Objective 5. Construction of this alternative would generate some financial benefits and meet Objective 6. Overall, the Removal of Secondary Access Alternative would meet five out of six objectives and would meet the basic project objectives.

9.1.2.5 Conclusion

The Removal of Secondary Access Alternative would reduce the following significant impacts associated with the project: biological resources; GHG, and transportation. The Removal of Secondary Access Alternative would meet the basic project objectives. However, this alternative was determined to be infeasible because it would be inconsistent with surrounding high-density residential communities, and (2) it would not serve to accommodate housing to support the anticipated regional growth (see Section 9.1.2.2).

Therefore, the Removal of Secondary Access Alternative was considered and rejected.

9.1.3 Alternate Location Alternative

Section 15126.6(f)(2) of the CEQA Guidelines provides that off-site alternatives should be considered if development is feasible and would avoid or substantially lessen the significant effects of the project. Factors that need to be considered when identifying an off-site alternative include the size of the site, its location relative to the general area, the General Plan (or other applicable planning document) land use designation, and the ability to meet the project objectives. One of the factors for feasibility of an alternative site is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." No alternative location exists in the City of Chula Vista or in the City of San Diego that is available, of suitable size, owned and controlled by the applicant that is not already planned for development. The project applicant controls land within the City of San Diego within Otay Mesa, east of Interstate 805 (I-805) and south of State Route 905; however, these lands are currently in the process of obtaining development entitlements consistent with City of San Diego planning documents. The applicant owns excess land outside of the planned development area in Otay Mesa; however, these lands are within the City's Multi-Habitat Planning Area and are not suitable for development due to this land being necessary for build-out of the City of San Diego's Multiple Species Conservation Plan (MSCP) preserve system. While there may be other sites within either City of an approximately equivalent size to the project site that could be redeveloped with a multi-family residential project; the project applicant does not control comparable land area that is available for development.

9.2 No Project (No Development) Alternative

The following discussion of the No Project Alternative is based on the CEQA Guidelines Section 15126.6(e)(3)(B) which states:

> If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the no project alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this no project consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve existing physical environment.

Further, according to CEQA Guidelines Section 15126.6(e)(3)(C):

> After defining the no project alternative . . . the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The No Project (No Development) Alternative would be maintaining the site as its current vacant use, under the jurisdiction of the City of Chula Vista. As the site is currently designated as open space, it is not a site that would be readily developed by another party without substantial land use entitlements including coordination and entitlements with both the City of Chula Vista and the City of San Diego, in addition to LAFCO actions due to the lack of availability of City of Chula Vista services. Although the entitlement process would be difficult, it is a site that is likely to be pursued for some development potential in the future based on its accessibility to City of San Diego roads and services in addition to the fact that it is an infill site surrounded by residential and medical office developed uses. Implementation of this alternative would not meet any of the project.

The No Project (No Development) Alternative would be the maintenance of the project site as Open Space, as designated in the City of Chula Vista General Plan. Under the No Project Alternative, none of the development associated with the project would occur. New residential, including affordable units, would not be established. Additionally, no roadway improvements or outdoor recreational amenities would be provided to residents and the public. In this alternative, the site would be retained in its existing condition. Additionally, trespass and homeless encampments would likely continue to be an issue, including associated trash and pollutants that could affect downstream receiving waters. Because no changes to the project site would occur, this alternative would avoid all significant impacts associated with the project. However, since the use of the site as a vacant

undeveloped site is not likely in the long term, the No Project (No Development) Alternative is not analyzed further.

9.3 No Project (Development Under the Existing Plan) Alternative

The No Project (Development Under the Existing Plan) Alternative is the No Project Alternative that could reasonably be expected to occur if the project did not proceed and development would be completed in accordance with applicable land use plans and zoning. The No Project (Existing Plan) Alternative assumes the site would be developed with a passive recreational use consistent with the City of Chula Vista Agricultural Zone (A-8) and Open Space (OS) General Plan designation and the OVRP Concept Plan (County of San Diego et. al. 2021). Under the City of Chula Vista General Plan, the OS designation allows passive recreation uses such as trails, staging areas, scenic overlooks, and picnic areas. Specific permitted uses within the A-8 zone include agriculture, single-family use, public parks, and mobile homes (subject to additional zoning provisions). This alternative assumes the project site would be developed with a passive park, including roadway improvements to allow vehicular access to the site via Dennery Road and on-site parking primarily as trail staging for public access to the OVRP. Parking areas are assumed to be pervious. Passive park improvements are assumed to include natural and landscaped open space areas including grass play areas, picnic areas with shade structures, and trail improvements. One caretaker's residence is assumed for the site that would rely on a septic system. A secondary emergency access road through the residential development to the east would not be required under this alternative Considering the minimal development area needed, off-site remedial grading in the Davies property would likewise not be required. Under this alternative, the project site would remain in the City of Chula Vista.

9.3.1 Impact Analysis

This alternative is compared to all development scenarios.

9.3.1.1 Land Use and Planning

The No Project (Existing Plan) Alternative does not have any features that would have the potential to physically divide an established community. Under the No Annexation Scenario and Annexation Scenario 2b, this alternative would not require an amendment to land use or zoning designations and future development within the site would be as permitted under the existing designations and would not conflict with any relevant land use plans or policies, including the City of Chula Vista and San Diego MSCP subarea plans or climate action goals

Under Annexation Scenario 2a, this alternative would avoid the project's conflict with the goals, objectives and policies contained within the City of San Diego General Plan Housing Element that requires housing to be consistent with the City of San Diego's CAP (Housing Element Goal 5). Overall, because this alternative would be consistent with existing plans, and the significant and unavoidable conflict with San Diego Housing Element Goal 5 would be avoided, potential impacts related to land use would be less compared to the project.

9.3.1.2 Air Quality

As discussed in Section 4.2.3.1.b, the project would not stimulate population growth, a population concentration or housing above what is assumed in local and regional land use plans, or projections made by regional planning authorities. Further, project emissions from construction and operation would be less than the applicable thresholds for all criteria pollutants. Therefore, under the No Annexation Scenario and Annexation Scenario 2b, the project would not conflict with or obstruct implementation of the regional air quality standards. Under the Annexation 2a Scenario, the project would not conflict with the San Diego Association of Governments (SANDAG) regional growth forecast, which accounts for residential growth in the City of San Diego. Although the project would increase the residential density of the site, the proposed housing would be growth accommodating because of the need for housing to support the anticipated regional growth that would occur with or without development of the project (see Section 4.2.3.2.b). Development under the No Project (Development Under the Existing Plan) Alternative would result in minimal population growth and like the project, under all scenarios, would not conflict with or obstruct implementation of the Regional Air Quality Strategy. Impacts under this alternative related to air quality land use plan consistency would be similar compared to the project.

The No Project (Development Under the Existing Plan) Alternative would include development of passive park related uses. Construction related air quality impacts under this alternative would be less than the project, under all scenarios, and would likewise generate less traffic related air quality emissions. Based on the size and generation of average daily trips, both construction and operational emissions of air quality pollutants, including temporary construction related odors, would be less compared to the project.

9.3.1.3 Biological Resources

As discussed in Sections 4.3.3.1.b and 4.3.3.2.b, the project would result in significant direct and indirect impacts to sensitive species and habitats and wetlands resulting from construction activities required for site preparation and within off-site improvement areas in both the City of Chula Vista and the City of San Diego. Through implementation of mitigation measures **BIO-CV-1** through **BIO-CV-9** and **BIO-SD-1** through **BIO-SD-10**, all impacts to biological resources would be reduced to less than significant.

Under the No Project (Development Under the Existing Plan) Alternative, Dennery Road (within the City of San Diego) would be extended to serve as project access which would require impacts to wetlands and Otay tarplant, similar to the project. Wetland impacts would be reduced because the No Project (Development Under the Existing Plan) Alternative would not require the secondary emergency access road and associated wetland impacts; however, significant wetland impacts would occur where the main project access would cross the existing on-site drainage for a main access road. On-site habitat removal would be limited to allow landscaped open space areas including grass play areas, picnic areas with shade structures, and trail improvements. These amenities would be located centrally within the project site resulting in impacts to non-native grasslands and allowing a greater wetland buffer between the north south drainage located along the eastern edge of the project site. Like the project, this alternative would be required to implement mitigation measures to ensure an adequate ratio of preservation of off-site non-native

grassland, and to reduce potential indirect effects on special-status species and habitat to less than significant levels. Likewise, preconstruction surveys and avoidance measures would be required prior to any habitat removal. This alternative would not conflict with any local plans, policies, or habitat conservation plans. Overall, due to the reduced footprint and reduced intensity, impacts to biological resources under this alternative would be less compared to the project.

9.3.1.4 Geologic and Paleontological Resources

Although limited in scope, this alternative would be constructed on the same project site, with the same underlying geotechnical conditions. This alternative would implement any recommendations consistent with the California Building Code (CBC) to ensure the risk of potential effects from geologic hazards would be reduced to an acceptable level of risk. This alternative would also implement appropriate erosion and sediment control best management practices (BMPs) as part of, and in conformance with City of Chula Vista stormwater regulations and National Pollutant Discharge Elimination System (NPDES) requirements. Both the project and this alternative would avoid potential erosion and sedimentation impacts. This alternative would result in reduced grading requirements and limited on-site improvements, but would be required to implement geotechnical recommendations, similar to the project. Implementation of this alternative would result in a less than significant impact related to geology and soils, similar to the project.

With respect to paleontological resources, although limited, construction activities under this alternative activity could uncover and potentially damage paleontological resources. Potential impacts to paleontological resources would be less under the No Project (Development Under the Existing Plan) relative to the project. Nonetheless, this alternative would be required to implement mitigation similar to **GEO-CV-1** to ensure that a qualified paleontologist is on site during grading and excavation to monitor construction activity and inspect cuts for fossils and paleontological resources that may be uncovered. Through inclusion of mitigation measures impacts related to paleontological resources would be less than significant. Under the Annexation Scenario 2b, compliance with the SDMC and the City of San Diego General Grading Guidelines for Paleontological Resources contained within Appendix P of the Land Development Manual would ensure adverse impacts to paleontological resources during construction are avoided and any fossils discovered are recovered; impacts would be less than significant. Therefore, implementation of this alternative would result in more impacts relative to Annexation Scenario 2b.

9.3.1.5 Greenhouse Gas Emissions

As discussed in Section 4.5.3.1.b, under the No Annexation Scenario and Annexation Scenario 2a, the project's total annual unmitigated GHG emissions would be below screening levels and impacts would be less than significant. With respect to project consistency with the State Scoping Plan zero emission goals, the project would not be consistent and impacts were determined to be significant. The No Annexation Scenario and Annexation Scenario 2a would implement mitigation measures **GHG-CV-1** through **GHG-CV-6**; however, even with mitigation the project under these scenarios would remain inconsistent with several of the key Prioritization Strategies of the 2022 State of California Climate Change Scoping Plan (2022 Scoping Plan) and would not be consistent with statewide GHG reduction goals required by Assembly Bill 1279. Therefore, project impacts associated with plan consistency were found to be significant. Under Annexation Scenario 2b, the

project would implement the City of San Diego's CAP Consistency Regulations and project design features. However, because the project would not be consistent with the growth projections used in the development of the CAP, cumulative GHG impacts would be significant. The Annexation Scenario 2b would implement mitigation measures **GHG-SD-1** through **GHG-SD-6**; however, per the City of San Diego's CAP threshold guidance, a project that would generate more emissions than planned for in the City of San Diego CAP would result in a significant impact with regards to GHG. Therefore, while the proposed mitigation measures would reduce GHG emissions to the extent feasible, the project would not achieve net zero emissions and therefore would not be consistent with the CAP, resulting in a significant cumulative GHG emission impact after mitigation.

The No Project (Development Under the Existing Plan) Alternative would include construction of passive park amenities. GHG emissions related to construction and operation would be less than the project, under all scenarios. This alternative would not conflict with the 2022 Scoping Plan as emissions would be limited and would likely fall below screening levels and/or emissions could be offset with limited solar panels. Therefore, impacts related to GHG emissions and plan consistency would be less than significant and therefore, less compared to the project.

9.3.1.6 Health and Safety/Hazardous Materials

This alternative would have reduced risks associated with health and safety (hazardous materials) as the project due to site development and introduction of people to the site.

Under this alternative in all scenarios, construction activities could include grading for road improvements and passive recreational amenities, which would involve temporary transport, management, handling, use, and storage of hazardous materials such as diesel fuels, lubricants, petroleum products, paints, solvents, and other typical chemicals required during construction. Like the project, under all scenarios, adherence to federal, state, and local regulations during construction activities would ensure that impacts relating to the transport, storage and disposal of hazardous materials would be less than significant. Under this alternative, secondary emergency access would not be constructed and therefore, off-site remedial grading within the Davies property would not be required. Although potential impacts associated with accidental release of burn ash would be reduced because the Davies property would not be disturbed, burn ash could be released as a result of grading within the project site. Implementation of this alternative under all scenarios would include mitigation measure similar to **HAZ-CV-1/HAZ-SD-1** that would require preparation and approval of a Community Health and Safety Plan by the County Department of Environmental Health and Quality, Local Enforcement Agency. Implementation of this mitigation measure would ensure adverse impacts related potential to accidental release of burn ash during grading would be reduced to less than significant; however, due to the avoidance of impacts within the Davies property, impacts would be less compared to the project.

This alternative would be required to comply with existing regulations regarding the use or disposal of hazardous materials and wastes during both construction and operation of the project. Impacts related to such would be similar compared to the project, under all scenarios. Like the project, this alternative would not result in airport safety hazards, nor would it interfere with adopted emergency response plan or emergency evacuation plans. All landscaping under this alternative would be consistent with City of Chula Vista and Chula Vista Fire Department standards.

Both the project and this alternative have the potential to result in significant impacts related to the release of hazardous materials, which would be reduced to less than significant through inclusion of mitigation measures. Overall, impacts related to health and safety/hazardous materials would be similar to the project.

9.3.1.7 Historical Resources

Due to the site's location, under this alternative there would be a similar potential for an inadvertent discovery of archaeological resources or buried human remains. Under the No Annexation Scenario and Annexation Scenario 2b, this alternative would implement mitigation measures similar to **HIST-CV-1** and **HIST-CV-2** requiring the presence of an archaeological and Native American monitor during ground disturbing activities to allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated for significance. Under the No Annexation Scenario and Annexation Scenario 2a, this alternative would implement mitigation measures similar to **HIST-SD-1** requiring specified processes to ensure adequate archeological and Native American monitoring prior, during and after construction. Additionally, under Annexation Scenario 2b this alternative would adhere to Public Resources Code Section 5097 relating to the protection of Native American burial sites. Through mitigation measures and regulatory compliance, impacts associated with historical resources would be reduced to a less than significant level similar to the project under all scenarios.

9.3.1.8 Noise

As discussed in Section 4.8.3.1.b, estimated construction noise associated with the project would not exceed the Federal Transit Administration based guidance construction noise threshold used to evaluate noise impacts within the City of Chula Vista. As discussed in Section 4.8.3.2.b, construction noise would not exceed City of San Diego standards. Noise generated during construction that could be heard above the ambient condition would be temporary and not exceed noise level limits. Noise impacts associated with construction of the No Project (Development Under the Existing Plan) Alternative would be less than the project, under all scenarios, because this alternative would include less grading and construction-related activities and would likely be completed in less time. Therefore, construction noise and vibration impacts would be incrementally less under this alternative compared to the project under all scenarios.

This alternative would support recreational activities including play and picnic areas, a parking area, a caretaker's residence, and trail improvements. Average daily trips to and from the site would be fewer than the project and the generation of roadway traffic noise under this alternative would be less compared to the project. This alternative would likely require some noise producing mechanical equipment such as a Heating Ventilation and Conditioning unit for the caretaker's residence. On-site noise could occur due to recreational use and play areas; however, noise levels would not be greater than the proposed operational uses of the project and associated park areas. This alternative would provide greater recreational opportunities than the project; however, it would not be expected that such activities would exceed the noise level limits under any scenario.

Overall, construction and operational noise from this alternative would be incrementally less than the project.

9.3.1.9 Transportation

This alternative proposes the development of passive recreational activities which may include grass play and picnic areas, a caretaker's residence, a trailhead parking area, and trail improvements. This alternative would be consistent with the City of Chula Vista General Plan Open Space land use designation and the OVRP Concept Plan.

As discussed in Sections 4.9.4.1.b and 4.9.4.2.b, the project, under all scenarios, would result in a significant VMT transportation impact because based on the project location and proposed land use it would generate VMT per capita above the City of Chula Vista and City of San Diego thresholds of 85 percent of the regional average VMT per capita. Although the project would include VMT reduction strategies (**GHG-CV-1** and **GHG-CV-2/GHG-SD-1** and **GHG-SD-2**) and implement mitigation measure **TRA-CV-1/TRA-SD-1** requiring payment of City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101, it was determined that VMT impacts, under all scenarios, would remain significant.

Under both the City of Chula Vista Transportation Study Guidelines and City of San Diego Transportation Study Manual, the No Project (Development Under the Existing Plan) Alternative would be compared to the VMT initial screening criteria. A project that meets at least one of the screening criteria is presumed to have a less than significant VMT impact due to project characteristics and/or location. As a park and trail project, this alternative would meet Criterion 5 as a locally serving public facility and community purpose facility in the City of Chula Vista Transportation Study Guidelines, and a Small Project under the City of San Diego Transportation Study Manual. Per the City of San Diego Transportation Study Manual, a small project would generate less than 300 ADT. This alternative would generate approximately 120 ADT at a rate of five trips per acre for a 23.77-acre undeveloped park per the City of San Diego's Trip Generation Manual. Therefore, this alternative would be presumed to have a less than significant transportation/VMT impacts. Impacts associated with transportation/VMT analysis would be less compared to the project.

9.3.1.10 Tribal Cultural Resources

The No Project (Development Under the Existing Plan) Alternative would require less ground disturbing activities compared to the project; however, there would be a similar potential for an inadvertent discovery of tribal cultural resources. This alternative would be required to implement mitigation similar to **HIST-CV-1/HIST-SD-1** requiring the presence of an archaeological and Native American monitor during ground disturbing activities to allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated for significance. Therefore, the significance of impacts would be similar to the project.

9.3.1.11 Aesthetics

The No Project (Development Under the Existing Plan) Alternative would require minimal grading and construction activities. As discussed in Sections 4.11.3.1.b and 4.11.3.2.b, visual impacts associated with the project would be less than significant due to intervening topography screening the project site from public views. Additionally, the project would include development regulations

relating to height and bulk that would ensure the project would not alter views, nor result in increased light and glare, which would negatively affect views of the Otay River and would not detract from the scenic resource of the Otay River valley. This alternative would keep the site for recreational use with greater public access to the Otay River. Views for trail users along the OVRP trail would be more rural and open compared to a residential project. Therefore, because scenic views toward the river and visual resources and character of the site would be preserved under this alternative, visual impacts associated with the No Project (Existing Plan) Alternative would be incrementally less than the project for the issues of scenic vistas/scenic views, scenic resources, and visual character. Impacts related to light and glare would be the same, as both alternatives would require some degree of lighting that would be shielded.

9.3.1.12 Hydrology and Water Quality

Similar to the project under all scenarios, this alternative would increase the impervious surfaces within the project site, albeit to a lesser degree. Like the project, this alternative would include private on-site drainage systems, as necessary, to capture and convey stormwater runoff, although on a smaller scale than the project due to the reduction in impervious surfaces with this alternative. Detention vaults could likely be avoided as the site would have more room for natural infiltration across the site. As needed, water quality treatment facilities would be provided in accordance with the requirements of the City of Chula Vista and City of San Diego regulations, in concert with CVMC Chapter 19.09, and the San Diego Regional Water Quality Control Board Municipal Separate Storm Sewer System permit. Similar to the project, this alternative's implementation of site design, source control, and structural pollutant control measures would preclude any violations of applicable standards and discharge regulations, ensuring consistency with all water quality plans and regulations.

Likewise, this alternative would ensure no negative effect on drainage volumes and velocities. Although this alternative would result in the creation of less impervious surfaces compared to the project, it would still be required to adhere to all relevant regulations, including City of Chula Vista policies intended to ensure reliable drainage facilities and reduce ill effects of storm water run-off. All necessary drainage facilities would be consistent with the City of Chula Vista BMP Design Manual to reduce potential erosion and siltation.

Through regulatory compliance, this alternative would be consistent with all relevant water quality control plans. However, due to the reduced site impermeability due to less paving, roads, and structures, this alternative would result in incrementally less impacts related to hydrology and water quality compared to the project.

9.3.1.13 Public Services and Facilities

Compared to the project, the No Project (Development Under the Existing Plan) Alternative would generate reduced demand for police services and no demand for library services. Fire services demand would also likely be reduced compared to the project. Under this alternative, , services would be provided by the City of San Diego due to the site's location in relation to police and fire responders and existing mutual aid agreements. Like the project, this alternative would not require construction of any new fire, policy, school, or library services that could result in significant impacts

on the environment. With respect to parks and recreational facilities, this alternative would assist the City of Chula Vista in meeting citywide goals for increased park sites and improved recreational experiences. Overall, neither the project nor the alternative would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. However, due to reduced demands on public services this alternative's impacts associated with public services would be less compared the project.

9.3.1.14 Utilities and Service Systems

The No Project (Development Under the Existing Plan) Alternative's passive park improvements are assumed to include natural and landscaped open space areas including grass play and picnic areas, a pervious parking area, a caretaker's residence, and trail improvements. Landscaped areas would include drought tolerant plants but would require irrigation systems to provide on-going care of the areas. As discussed in Section 4.13.3.1.b, the site is located within the Otay Water District service area; however, it does not have direct access to City of Chula Vista water services. Therefore, like the project, this alternative would require connection to City of San Diego Water Department pipelines and infrastructure and would be subject to City of San Diego Water Facility Design Guidelines. Sewer easement relocation and reconstruction of existing City of San Diego sewer facilities could likely be avoided under this alternative. Connections to the City of San Diego sewer pipelines could likely be avoided through use of septic systems for the on-site residence and any public toilets; although if connection to sewer was required it could be provided through City of San Diego facilities. Overall, pipeline construction improvements would be less compared to the needs of the project. This alternative would require electrical power and communication systems to serve the caretaker's residence and to provide limited lighting for the passive recreational facilities. Like the project, this alternative would require refuse collection via City of San Diego; however, it would generate less waste than the project. Similarly, the project would require less potable water demand than the project. Overall, this alternative would result in less demand on water supplies and local utilities and impacts would be less compared to the project.

9.3.1.15 Wildfire

The site lies within an area considered a very high fire hazard severity zone as designated by the Chula Vista Fire Department, and on California Department of Forestry and Fire Hazard Severity Zone maps. The No Project (Development Under the Existing Plan) Alternative would create recreational opportunities for existing residents and would not generate a substantial source of new traffic on local or regional roadways. Therefore, this alternative would not impair an adopted emergency response plan or emergency evacuation plan.

The No Project (Development Under the Existing Plan) Alternative would include a single residence that would need to be designed for consistency with very high fire hazard severity zone; however, the residence could be designed with 100-foot fire buffers without modifications or fire walls. This alternative's landscaping plan could include drought-tolerant, fire-resistive trees, shrubs, and groundcovers consistent with City of Chula Vista requirements. Impacts related to pollutants from wildfire, infrastructure for fire protection, and/or flooding or landslide risk resulting from wildfire

would be the similar to the project. Both the project and this alternative would be designed for fire safety and impacts associated with wildfire would be similar.

9.3.2 Impact Summary

The No Project (Development Under the Existing Plan) Alternative would reduce the severity of the project's significant impacts associated with GHG and reduce transportation impacts to a less than significant level. Impacts that would be the same or similar under this alternative compared to the project would include: Land Use (physical division of community); Air Quality (plan implementation); Biology (corridors and conflicts with plans); Geology (all thresholds); Health and Safety (airport, emergency plans, and wildfire); Historical Resources (prehistoric and human remains); Noise (airport); Transportation (circulation, hazards, and emergency access); Tribal Cultural Resources; Aesthetics (light/glare); and Wildfire (all thresholds). Potential impacts related to the following issue areas would have the same impact conclusion as the project but would result in incrementally reduced impacts than the project, with or without mitigation: land use (land use plan consistency); air quality (air quality standards, sensitive receptors, and odors); biology (sensitive species and habitats and wetlands); health and safety (hazardous materials); and hydrology and water quality (all thresholds); and utilities. None of the impacts associated with this alternative would be greater than those of the project. Refer to Table 9-1 for a detailed comparison of significant impacts.

9.3.3 Project Objectives

The No Project (Development Under the Existing Plan) Alternative would only meet a single project objective (Objective 5), providing amenities that contribute to the nearby OVRP recreational uses, including an overlook to the park and multi-modal connections. None of the other project objectives would be met. Primarily, this alternative would not provide housing in response to regional housing needs, including affordable housing consistent with the City of Chula Vista's Housing Element goals.

9.4 Reduced Unit Alternative

This alternative is a reduced residential project alternative including construction of up to 200 residential units. This alternative would be processed by the City of Chula Vista. This reduced project alternative is based on the City of Chula Vista's adoption of International Fire Code 2021, Appendix D, Fire Apparatus Access Roads, Section D106 Multiple-Family Residential Developments, which states: "D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system." This fire code requirement would apply if the project were to be developed in the City of Chula Vista. This unit count was selected because a project with 200 dwelling units or less would not require a secondary access road, which would reduce impacts to the drainage located along the eastern edge of the property. Specifically, this alternative would include 200 multi-family dwelling units, ten percent (20 units) of which would be low income. The impacts of this alternative are compared to the impacts of the No Annexation Scenario and Annexation Scenario 2b since those are the scenarios that would involve project implementation by the City of Chula Vista, subject to City of Chula Vista standards.

9.4.1 Impact Analysis

9.4.1.1 Land Use and Planning

Density proposed under this alternative would be similar to the project and would likewise require a General Plan Amendment and rezone to support residential uses. Like the project, this alternative does not have any features that would have the potential to physically divide an established community, and it would be consistent with relevant plans and policies including the City of Chula Vista General Plan, and both the City of San Diego and City of Chula Vista MSCP Subarea Plans. To avoid potential impacts associated with regulatory noise standards, this alternative would include similar project design features requiring noise barriers to be placed where noise levels would be in excess of compatibility standards. Overall, impacts associated with land use compatibility would be the same compared to the project.

9.4.1.2 Air Quality

Impacts to air quality under the No Annexation Scenario and Annexation Scenario 2b would be less than significant. This alternative proposes a reduction of up to 21 dwelling units, which would reduce potential operational air quality impacts further. Although this alternative would develop less homes, it would provide ample housing to accommodate the City of Chula Vista's future growth projections.

All component parts of this alternative would be the same as the project, except for the required construction of the secondary emergency access road from the eastern edge of Private Street D to adjacent property. Therefore, the reduced grading required to construct this road would reduce this alternative's overall construction related air quality emissions. Due to the reduction of housing units, operational emissions would be incrementally less than the project; however, overall impacts would be similar to the project.

9.4.1.3 Biological Resources

As discussed in Sections 4.3.3.1.b and 4.3.3.3.b, the project would result in significant direct and indirect impacts to sensitive species and habitats resulting from construction activities, including impacts to wetlands. Under this alternative, grading requirements would be similar compared to the project, except due to the reduced number of dwelling units, this alternative would not be required to construct the secondary emergency access road and impacts to wetland resources which are mapped along the eastern edge of the project site could be reduced compared to the project. All biological resources impacts would be similar to the project except wetland impacts would be reduced. Wetland impacts would still be required for the primary access roadway; however, wetland impacts would be incrementally less by removing the secondary wetland crossing.

9.4.1.4 Geologic and Paleontological Resources

This alternative would be constructed within the same development footprint as the project. Consistent with City of Chula Vista regulations, this alternative would implement the

recommendations contained within the Geotechnical Study and appropriate building design measures consistent with the CBC to ensure potential impacts from geologic hazards, erosion, and unstable geology. Therefore, impacts associated with geological hazards would be the same compared to the project.

Like the project, construction activities under this alternative activity could uncover and potentially damage paleontological resources resulting in a significant impact. To mitigate impacts to paleontological resources, this alternative would include a mitigation measure like **GEO-CV-1**, which would require steps to be taken should resources be discovered to collect, curate and/or preserve found resources. Through implementation of mitigation, significant impacts to paleontological resources would be reduced to less than significant levels, the same as the project.

9.4.1.5 Greenhouse Gas Emissions

As discussed in Section 4.5.3.1.b, the project, under the No Annexation Scenario and Annexation Scenario 2b, would not exceed the City of Chula Vista threshold of 3,000 metric tons of carbon dioxide equivalent Residential/Commercial Screening Level resulting in a less than significant GHG emission impacts. This alternative would be similar in size and density compared to the project resulting in similar construction emissions and similar but slightly reduced operational level GHG emissions.

This alternative would be consistent with the measures and policy goals of the City of Chula Vista General Plan, San Diego Forward, and the 2008 and 2017 Scoping Plans. However, like the project, this alternative would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan due to the project's loss of open space lands, lack of unbundled parking, and the project's limited affordability including 10 percent of total units. The inconsistency with the 2022 strategies would be considered a significant impact.

Like the project, this alternative would implement project design features and mitigation measures similar to those identified for the project (see Section 4.5.4.1.d); however, it would remain inconsistent with the 2022 Scoping Plan and therefore with statewide GHG emission reduction goals. Impacts related to GHG emission would be incrementally less under this alternative due to reduced unit count and traffic generation; however, impacts would remain significant.

9.4.1.6 Health and Safety/Hazardous Materials

This alternative would have the same potential risks associated with health and safety as the project, as it would be constructed on the same site within the same project footprint as the project. Due to the proximity of the site to known burn ash sites, development of the alternative could result in the accidental release of burn ash into the environment. This alternative would be required to implement mitigation measures similar to the project (see **HAZ-CV-1**) requiring preparation of a Community Health and Safety Plan to address potential burn ash. Similarly, this alternative would be required to comply with existing regulations regarding the use or disposal of hazardous materials and wastes during both construction and operation of the project.

Like the project, this alternative would not result in airport safety hazards, nor would it interfere with adopted emergency response plan or emergency evacuation plans, despite the removal of the secondary fire access road. This alternative would be required to comply with City of Chula Vista Fire Code including construction materials, site access and fire apparatus support, fuel modification zones, and water systems which would ensure impacts associated with wildfire hazards would be less than significant.

Overall, impacts related to health and safety/hazardous materials under this alternative would be the same compared to the project.

9.4.1.7 Historical Resources

The Reduced Project Alternative would be constructed on the same project site and within the same general footprint as the project; there would be a similar potential for an inadvertent discovery of archaeological resources or buried human remains. This alternative would be required to implement mitigation measures like the project (see Sections 4.7.3.1.c and 4.7.4.1.c). With implementation of mitigation measures, impacts would be the same compared to the project.

9.4.1.8 Noise

Noise associated with project construction under this alternative would be similar compared to the project because although this alternative would result in slightly less residences, the same grading and similar construction activities would be required. Like the project under the No Annexation Scenario and Annexation Scenario 2b construction noise and general construction vibration within the portions of the site currently in Chula Vista would be limited to the times specified in the CVMC, which are 7:00 a.m.–10:00 p.m., and would not exceed regulatory levels at adjacent residences. Off-site areas in San Diego would be subject to SDMC construction noise level limits. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of Chula Vista's noise level limits. Therefore, construction noise and vibration impacts would be the same under this alternative compared to the project. Regarding operation, changes in off-site roadway traffic noise would not likely be discernable due to the slight reduction in overall units and project trips. Overall, construction and operational noise associated with this alternative would be similar to the project.

9.4.1.9 Transportation

This alternative would include on and off-site road improvements similar to the project to provide pedestrian, bicycle, and trail connections supporting alternative modes of transportation and would not conflict with any mobility plans and policies. Additionally, no impacts associated with hazardous designs or emergency access would occur. Due to the reduced number of dwelling units, this alternative would not be required to include secondary emergency access.

Like the project under the No Annexation Scenario and Annexation Scenario 2b, this alternative would use the City of Chula Vista Transportation Study Guidelines to determine VMT impacts. Although this alternative would slightly reduce daily trips, it would still result in a significant VMT

impact because it would not meet the City of Chula Vista's threshold of 15 percent below the regional average VMT per capita. Like the project, this alternative would apply VMT reduction strategies, project design features, and mitigation measures; however, VMT impacts would remain significant.

9.4.1.10 Tribal Cultural Resources

The Reduced Project Alternative would be constructed on the same project site and within the same general footprint as the project; there would be a similar potential for an inadvertent discovery of tribal cultural resources. This alternative would implement mitigation measures similar to the project under the No Annexation Scenario and Annexation Scenario 2b (see Sections 4.7.3.1.c and 4.7.4.1.c). Therefore, with the inclusion of mitigation for potential impacts to historical resources, impacts would be the same compared to the project.

9.4.1.11 Aesthetics

Although the number of dwelling units is slightly reduced under this alternative, the general configuration of structures and project design would be similar to the project. Therefore, visual impacts would be the same as the project. Like the project, views through the site to the Otay River and Otay River valley would be maintained and the alternative would comply with all design guidelines in the Nakano Specific Plan relating to height and bulk to ensure no views would be altered, nor would the alternative result in increased light and glare. Therefore, because scenic views, and visual resources and character of the area would be preserved, visual impacts associated with this alternative would be the same compared to the project.

9.4.1.12 Hydrology and Water Quality

The Reduced Project Alternative would be constructed on the same project site and within the same general footprint as the project. Like the project, this alternative would be required to comply with the NPDES permit program during construction ensuring that a Stormwater Pollution Prevention Plan is prepared to identify construction BMPs that conform to the CVMC and City of Chula Vista Jurisdictional Runoff Management Program. Like the project, construction activities could release burn ash to the storm system. Therefore, this alternative would include mitigation measures similar to **HAZ-CV-1** requiring preparation of a Community Health and Safety Plan to address potential burn ash prior to grading, the same as the project under the No Annexation Scenario and Annexation Scenario 2b. Polluted run-off that could be generated during operation of the project would be addressed through project conformance with the City of Chula Vista General Plan, BMP Design Manual, and associated project-level Storm Water Quality Management Plan. The application of site design and source control BMPs project would be consistent with the City of Chula Vista's Threshold Standards and would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality.

Overall, through implementation of state and local mandated measures, and implementation adequate BMPs and mitigation measures during construction, and inclusion of long-term operational BMPs, impacts related to water quality and consistency with water quality plans would be the same compared to the project. Like the project, a significant impact related to potential water

quality effects from burn ash would be avoided through implementation of the mitigation measures detailed in Section 4.6.3.1.d. Impacts would be the same.

9.4.1.13 Public Services and Facilities

The Reduced Density Alternative would result in slightly less units being developed generating an incremental reduction in fire and police service calls, reduced number of students generated, and less usage of parks and recreation facilities and libraries. Any facility improvements that would be required to service this alternative would be reduced compared to the project. Like the project, this alternative would not result in demand for services that require the construction of new facilities. Therefore, impacts related to public services would be the same as the project.

9.4.1.14 Utilities and Service Systems

This alternative would incrementally reduce the demand on potable water supplies due to reduced residential units. While the amount of wastewater generated would be reduced and the demand on other utilities such as electric, and telecommunications would be reduced, a similar level of construction and upgrades to utility systems would be required under this alternative, which would result in similar impacts as the project. Water demand and solid waste generation would be reduced under this alternative compared to the project, resulting in incrementally less impacts on water supply and landfill capacity. Similar to the project, landscaping would include California native, drought-tolerant plant palette that is predominantly consistent with the landscape plan plant palette. Impacts of this alternative would be similar to the project; however, due to the reduction in dwelling units, impacts related to water supply and solid waste, would be incrementally less compared to the project.

9.4.1.15 Wildfire

This alternative would be located on the same site as the project and would be subject to the strategies, procedures, and recommendations found in the project's Evacuation Plan, but would not provide a secondary emergency only access road. Like the project, the alternative would be able to safely evacuate in the event of an emergency and would not interfere with the County or any other local level evacuation plans. Like the project, this alternative would not impair an existing emergency response or evacuation plan. This alternative would result in similar structures and design compared to the project, including the requirement to conform to all relevant City of Chula Vista fire code sections. This alternative would include fuel management and fire protection features incorporated into the project design to ensure that it, like the project, would not exacerbate wildfire risks. Therefore, impacts related to wildfire under this alternative would be the same compared to the project.

9.4.2 Impact Summary

The Reduced Unit Alternative would reduce the incremental severity of the project's impacts related to GHG and Transportation; however, impacts would remain significant and unavoidable under the Reduced Unit Alternative. Potential impacts related to the following issue areas would be reduced

compared to the project, with or without mitigation: air quality (air quality standards); biology (wetlands); utilities and service systems (water supply and solid waste). Impacts for all other issue areas would be the same as the project. None of the impacts associated with this alternative would be greater than those of the project. Refer to Table 9-2 for a detailed comparison of significant impacts.

9.4.3 Project Objectives

The Reduced Unit Alternative would meet Objective 1, as it would redevelop an underutilized property to provide housing in response to housing needs. This alternative would also meet Objectives 3 and 5 because it would provide a residential community conducive to walking and bicycling and provide amenities that contribute to the nearby OVRP recreational uses. Although conceptual in nature, this alternative would likely construct a variety of housing types consistent with surrounding communities per Objective 4. Additionally, construction of this alternative would generate some financial benefits and meet Objective 6. However, this alternative would not meet Objective 2 as it would not require LAFCO and could result in some inefficiencies in public services. Overall, the Reduced Unit Alternative would meet five out of six objectives, and would meet the basic project objectives.

9.5 Reduced Footprint Wetland Impact Reduction Alternative

This alternative would reduce project impacts to wetlands that would occur from construction of the proposed main entrance road from Dennery Road and a gated secondary emergency access road. To reduce project impacts to wetlands from the proposed access roadways, the access would be redesigned to include bridging over the wetlands. To allow for bridging to reduce wetland impacts, and to provide a 100-foot buffer around the wetland area, the development footprint would be reduced and shifted to the west. This alternative is considered potentially feasible; however, additional feasibility analysis would need to be completed prior to adoption of this alternative. The impacts of this alternative are compared to the impacts of the Annexation Scenario 2a and would be subject to City of San Diego standards. The conceptual layout and design of the Reduced Footprint Wetland Impact Reduction Alternative would include the following component parts.

Development Summary

This alternative would develop up to 221 dwelling units at the same design on a reduced footprint compared to the project. To accommodate the reduced footprint, a combination of the unit types would be constructed to three stories instead of two stories. The same deviations to the City of San Diego Land Development Code would be required under this alternative, with an additional deviation for the increased building height.

On-site grading required for this alternative would be reduced compared to the project as the development footprint would be reduced; however, off-site remedial grading (and revegetation) and trail improvements would remain within the OVRP to the north.

Access and Internal Circulation

The access locations to the project site would remain the same as the project; however, this alternative would include the installation of two bridges to provide wetland crossings for the project's primary and secondary emergency access. The bridges would be concrete prefabricated structures sized to meet the minimum needs to span the drainage course. The bridges would be approximately 100 feet in length with an approximately 10 percent grade.

Common Open Space, Landscaping, and Recreational Amenities

This alternative would continue to include several common open space amenity areas in the form of parks and paseos (see Section 3.4.4.1), and public trail connections to the OVRP. Due to the need to condense the development footprint under this alternative, the amount of common open space would be reduced compared to the project; however, this alternative would still provide adequate common open space acreage to satisfy City of San Diego requirements. The common open space provided in this alternative would include similar amenities as the project.

Similar to the project, this alternative would include street trees, and native, drought-tolerant species for water conservation, fire resistance, and erosion control. Likewise, all constructed slopes would be landscaped consistent with City of San Diego regulations.

This alternative would link internal neighborhoods and common park areas via sidewalks, paseos, bicycle lanes, and a continuous and connected road network.

Conservation Open Space

Under this alternative, the entirety of the on-site wetland along with a 100-foot, on-site wetland buffer would be preserved in perpetuity through the dedication of a covenant of easement restricting future development within this area. Due to development constraints, the eastern off-site portion of the wetland buffer would remain between 61 and 113 feet as proposed under the project's development plan.

Fire Management

Brush management zones would be included under this alternative consistent with City of San Diego regulations. The alternative would incorporate fuel modification alongside roadways and generally within 100 feet of residences. Brush management would not be allowed within the drainage area. Where 100 feet of brush management cannot be accommodated, alternative compliance measures are incorporated to provide enhanced fire protection. This alternative would include project design features focused on wildfire safety like the project (see Section 3.6.3.g; PDF-HAZ-1 through PDF-HAZ-6).

Signs, Lighting, Walls, and Fencing

This alternative would include monument signage along the primary entrance and within the private residential areas. Lighting would also be included throughout the development for safety and aesthetic purposes, similar to the project. Although conceptual in nature, this alternative would likely

include fire walls, noise attenuation walls, retaining walls, and split rail fencing along proposed trails and pedestrian paths.

On-Site Utilities

This alternative would require upgraded storm drain and drainage facilities to manage water quality and provide peak flow detention. All BMPs would be sized and developed to adequately reduce site run-off consistent with City of San Diego regulations and standards.

Water services would be provided by City of San Diego via two separate private water systems, one to provide domestic water service to residences and the other for fire protection purposes. Wastewater services would also be provided by City of San Diego. The City of San Diego water and wastewater will-serve letters provided for the project would be applicable to this alternative, as it would not increase residential density water supply demands. Waterline improvements would be similarly placed within Dennery Road. Wastewater services would be provided via improved existing lines to the north.

9.5.1 Impact Analysis

9.5.1.1 Land Use and Planning

Density proposed under this alternative would be the same as the Annexation Scenario 2a. Like the project, this alternative would require a General Plan Amendment and rezone to support the proposed residential uses. Like the project, this alternative does not have any features that would have the potential to physically divide an established community.

This alternative would be consistent with relevant plans and policies of the City of San Diego General Plan and Otay Mesa Community Plan as detailed in Tables 2 and 3 of Appendix B. To avoid potential impacts associated with regulatory noise standards, this alternative would include similar project design features requiring noise barriers to be placed where noise levels would be greater than compatibility standards. Like the project, this alternative would not be consistent with Goal 5, Objective 5 of the City of San Diego Housing Element which states that housing policies should align with state and local emissions reduction and climate adaptation strategies. Because the residential density proposed in this alternative was not accounted for in the City of San Diego CAP, it would need to show net zero or negative GHG emissions. The analysis detailed in Sections 4.5.3.2.b and 4.5.4.2.b for the project would apply to this alternative. As discussed therein, notwithstanding implementation of project design features and mitigation measures **GHG-SD-1** through **GHG-SD-6** (see Table 4.5-6), the project/alternative would not achieve net zero emissions and therefore would not be consistent with the CAP, resulting in a significant GHG emission impact. Therefore, due to the inconsistency with the General Plan Land Use Element, impacts under this alternative associated with land use compatibility would be the same compared to the project.

Under this alternative, a Subarea Plan Amendment would be required to include the site as part of the City of San Diego MSCP Subarea Plan area. The MSCP Subarea Plan does not designate the site or adjacent area as conservation or preserve land; therefore, the development associated with this

alternative would not conflict with the Subarea Plan. Impacts associated with MSCP consistency would be less than significant the same compared to the project.

This alternative would include three deviations to the City of San Diego standard development regulations. Two would be the same as the project: (1) allows reduction of side yard setback; and (2) allows retaining wall heights up to 24 feet. The third deviation required for this alternative would be the allowance of increased structure height to account for a mix of three-story buildings. The alternative would be designed to ensure that retaining walls are not visible from public view and/or landscaped and screened. Due to the topography of the site, approximately 25 feet below I-805, the increased height of buildings would not add to visibility by passing motorists. Likewise, the increased building height may still appear compatible with surrounding land uses. Surrounding residential developments are high density and predominantly two-stories in height. However, this alternative would be designed to vary heights throughout the development to break up massing patterns (see Section 9.5.1.11 below for additional discussion of potential visual impacts). Overall, the requested deviations would not result in a physical impact on the environment and impacts associated with deviations would be less than significant, similar compared to the project.

9.5.1.2 Air Quality

Impacts to air quality under the Annexation Scenario 2a would be less than significant. This alternative proposes the same number of dwelling units at the same density as the project. All component parts of this alternative would be similar compared to the project, except for the construction of two bridges over the wetland area; however, this would not require increased grading or construction activities compared to the project.

Like the Annexation Scenario 2a, this alternative would result in residential units not accounted for in local air quality plans. However, as discussed in Section 4.2.3.2.b, SANDAG Series 13 estimates that the City of San Diego would grow in population by approximately 14,156 people per year from 2020 to 2035. This would equate to an additional 5,435 units per year from 2020 to 2035. Therefore, while the alternative would include residential in an area previously planned for open space, this would accommodate in the regional growth projections and would not conflict with SANDAG's regional growth forecast, which accounts for residential growth in the City of San Diego. Additionally, air quality emissions related to construction and operation associated with the alternative would be similar to Annexation Scenario 2a. Emissions from construction and operation would be less than the applicable thresholds and would not contribute to existing air quality violations, or result in regional emissions than would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards, or result in a cumulatively considerable net increase in criteria pollutants, including ozone precursors (reactive organic gases and oxides of nitrogen [NO_X]). Therefore, the alternative would not conflict with or obstruct implementation of the RAQS, and impacts would be less than significant, the same as the Annexation Scenario 2a.

Because the development footprint would be decreased under this alternative, grading required to prep the site for development would be less than the project. However, due to the need to construct additional stories throughout the development, overall construction assumptions for this alternative are considered to be similar compared to the project. Table 4.2-4 summarizes the potential equipment mix used to generate construction emissions. Also like the project, this alternative would

be required to implement San Diego Air Pollution Control District rules including regulating fugitive dust beyond the construction site, soil watering, and restricted use of architectural coatings. As shown in Table 4.2-5, estimated maximum daily construction emissions associated with construction of the project would be less than the applicable significance thresholds for all criteria pollutants; therefore, these estimates would be less under the alternative. This table would be applicable to this alternative and impacts associated with construction related air quality standards would be less than significant, the same compared to Annexation Scenario 2a.

Likewise, due to the alternative's development of up to 221 units of similar types as Annexation Scenario 2a, operational air emissions would be the same. As discussed in Section 4.2.4.1.b, under Annexation Scenario 2a estimated maximum daily operational emissions for area source, energy, and mobile sources would be less than the applicable significance thresholds for all criteria pollutants. Therefore, the alternative, like the Annexation Scenario 2a, would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant, the same as Annexation Scenario 2a.

The Health Risk Assessment, included in Appendix C, prepared for the project would be applicable to this alternative. As concluded therein, Annexation Scenario 2a would not result in any significant impacts associated with diesel particulate matter or carbon dioxide hotspots. Likewise, the project would not generate or emit smoke, charred paper, soot, grime, carbon, noxious acids, or toxic fumes. Due to the similarities between Annexation Scenario 2a and this alternative's operational emissions and odor generation, impacts associated with sensitive receptors would likewise be less than significant the same compared to Annexation Scenario 2a.

Whether the project would result in substantial alteration of air movement in the project area was evaluated under the Annexation Scenario 2a. Although this alternative would construct structures taller than Annexation Scenario 2a, the project site is set at a lower elevation than surrounding land uses developed areas to the east, west, and south, which would preclude wind tunneling and other significant changes in air movement. Impacts associated with this impact would be similar compared to Annexation Scenario 2a.

9.5.1.3 Biological Resources

The intent of this alternative is to reduce biological impacts, specifically focusing on wetland impacts. Under this alternative, bridges would be constructed to accommodate both the primary and secondary emergency access to reduce impacts to the on-site wetlands. Although wetland impacts would not be completely avoided, mitigation measures **BIO-CV-1** through **BIO-CV-9/BIO-SD-1** through **BIO-SD-10** would require less off-site mitigation. Additionally, the increased buffer could reduce impacts to non-native grassland and Diegan coastal sage scrub, and sensitive plants including San Diego bur-sage (*Ambrosia chenopodiifolia*) and Otay tarplant (*Deinandra conjugens*). Impacts to sensitive wildlife identified within the increased wetland buffer including least Bells's vireo (*Vireo bellii pusillus*) and yellow warbler (*Setophaga petechia*) could also be reduced. Therefore, although impacts to biological resources, including wetlands, would still occur under this alternative, such impacts would be incrementally less than significant with mitigation and less compared to the project.

9.5.1.4 Geologic and Paleontological Resources

This alternative would be constructed within a reduced development footprint compared to Annexation Scenario 2a. Consistent with City of San Diego regulations, this alternative would implement the recommendations contained within the Geotechnical Study (see Appendix E-1) and appropriate building design measures consistent with the CBC to ensure potential impacts from geologic hazards, erosion, and unstable geology would be reduced to less than significant levels. Therefore, although focused in a reduced area, impacts associated with geological hazards would be similar compared to Annexation Scenario 2a.

Like Annexation Scenario 2a, construction activities under this alternative activity could uncover and potentially damage paleontological resources resulting in a significant impact. This alternative would be required to comply with the SDMC and the City of San Diego General Grading Guidelines for Paleontological Resources contained within Appendix P of the Land Development Manual to ensure adverse impacts to paleontological resources during construction are avoided and any fossils discovered are recovered. Impacts under this alternative would therefore be less than significant, and because the graded footprint would be less compared to Annexation Scenario 2a, potential impacts would be incrementally less.

9.5.1.5 Greenhouse Gas Emissions

As discussed in Section 4.5.3.2.b, the project, under the Annexation Scenario 2a, was evaluated to determine its consistency with the City of San Diego CAP. As determined therein, Annexation Scenario 2a would not be consistent with the CAP because the project's residential density was not included in the growth projections and associated GHG emission assumptions used in the development of the CAP. This alternative would be similar in size and density compared to the project resulting in similar construction emissions and operational level GHG emissions. This alternative would apply CAP Consistency Regulations (SDMC Section 143.1410) similar to the project including street shading, pedestrian amenities, electric charging stations for bicycles, and Resilient Infrastructure and Healthy Ecosystems Regulations (SDMC Section 143.1415) including planting requisite amounts of trees. Likewise, this alternative would include PDFs related to reduction of GHG emissions similar to **PDF-GHG-1** through **PDF-GHG-9** (see Section 3.6.3.d). Notwithstanding the implementation of code regulations and PDFs, like the Annexation Scenario 2a, GHG emission impacts associated with this alternative would be significant. This alternative would also include mitigation measures intended to reduce significant emission impacts. These mitigation measures would be similar, if not the same as, **GHG-SD-1** through **GHG-SD-6** (see Section 4.5.3.2.d). Although the implementation of mitigation measures would reduce GHG emissions, like the project, GHG emissions would not be reduced to net zero, as required by the CAP for projects not accounted for in the CAP. Therefore, this alternative would not be consistent with the CAP and impacts would remain significant, the same as the Annexation Scenario 2a.

This alternative would be consistent with the measures and policy goals of the City of Chula Vista General Plan, San Diego Forward, and the 2008 and 2017 Scoping Plans. However, like the project, this alternative would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan due to the project's loss of open space lands, lack of unbundled parking, and the

project's limited affordability including 10 percent of total units. The inconsistency with the 2022 strategies would be considered a significant impact, the same as Annexation Scenario 2a.

9.5.1.6 Health and Safety/Hazardous Materials

This alternative would have the same potential risks associated with health and safety as the project, under Annexation Scenario 2a, as it would be constructed on the same site, although within a reduced footprint. Notwithstanding the on-site grading area, due to the proximity of the site to known hazardous material sites (Davies property and Shinohara II burn site), development of this alternative could result in the accidental release of hazardous materials into the environment. Specifically, release of burn ash into the air or surface water could cause adverse health effects resulting in a significant impact. This alternative would be required to implement mitigation measures like the project (**HAZ-SD-1**) requiring preparation of a Community Health and Safety Plan. Similarly, this alternative would be required to comply with existing regulations regarding the use or disposal of hazardous materials and wastes during both construction and operation of the project.

Like the project, this alternative would not result in airport safety hazards, nor would it interfere with adopted emergency response plan or emergency evacuation plans. This alternative would be required to comply with City of San Diego Fire Code including construction materials, site access and fire apparatus support, fuel modification zones, and water systems which would ensure impacts associated with wildfire hazards would be less than significant.

Overall, impacts related to health and safety/hazardous materials under this alternative would be the same compared to the project.

9.5.1.7 Historical Resources

This alternative would be constructed on the same project site. Notwithstanding the reduced footprint, there would be a similar potential for an inadvertent discovery of archaeological resources. This alternative would be required to implement mitigation like **HIST-SD-1**, requiring the presence of an archaeological and Native American monitor during ground disturbing activities to allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated for significance. Overall, with the inclusion of mitigation measures for potential impacts to historical resources would be less than significant, and since the area of grading would be incrementally less under this alternative, impacts would be less compared to the Annexation Scenario 2a.

9.5.1.8 Noise

Noise associated with project construction under this alternative would be similar compared to the Annexation Scenario 2a because although this alternative would be constructed within a reduced footprint similar construction activity would be required. Like the project under Annexation Scenario 2a, estimated construction noise associated with this alternative would be limited to the times specified in the SDMC, which are 7:00 a.m. to 7:00 p.m. Although residences adjacent to construction areas would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary and would not exceed the City of San Diego's noise level limits.

Additionally, construction related groundborne vibration would not exceed the annoyance level threshold. Therefore, construction noise and vibration impacts would be less than significant, similar under this alternative compared to the project.

Regarding operation, off-site roadway traffic noise would be the same compared to the project. On-site noise generation would likewise be the same. Therefore, operational noise impacts associated with this alternative would be less than significant, the same compared to the project.

9.5.1.9 Transportation

This alternative would include on and off-site road improvements similar to Annexation Scenario 2a to provide primary and secondary emergency access, and pedestrian, bicycle, and trail connections supporting alternative modes of transportation. Like the project, this alternative would not conflict with any plan, ordinance or policy addressing the circulation system.

Like the project under the Annexation Scenario 2a, this alternative would use the City of San Diego Transportation Study Manual to determine VMT impacts. Due to this alternative constructing the same number of residential units, this alternative would generate the same ADT compared to the project. Also like the project, this alternative is located and proposes land uses are within Census Tract 100.14 which is forecasted to generate VMT per capita at 92 percent of the regional mean, which is above 85 percent of the regional mean threshold. The alternative would include VMT Reduction Strategies consistent with California Air Pollution Control Officers Association guidance (see Table 4.9-1). Each of these measures results in incremental reductions in VMT per capita. Like the project, the alternative would also implement project design features and GHG related mitigation measures focused on reducing VMT; however, final VMT would still be above the 85 percent threshold resulting in a significant impact. This alternative would implement mitigation measure **TRA-SD-1** requiring payment of the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101. Notwithstanding implementation of mitigation measure **TRA-SD-1** VMT impacts under this alternative would remain significant, the same compared to the project.

9.5.1.10 Tribal Cultural Resources

This alternative would be constructed within approximately the same development footprint. Notwithstanding the reduced footprint, there would be a similar potential for an inadvertent discovery of tribal cultural resources. This alternative would be required to implement mitigation like **HIST-SD-1**, requiring the presence of an archaeological and Native American monitor during ground disturbing activities to allow for the identification of buried resources to occur so that work can stop, and any resources be evaluated for significance. Overall, with the inclusion of mitigation measures for potential impacts to tribal cultural resources would be less than significant, and since the area of grading would be incrementally less under this alternative, impacts would be less compared to the Annexation Scenario 2a.

9.5.1.11 Aesthetics

Under this alternative two bridges would be constructed at the primary and secondary emergency access to avoid on-site wetland impacts. The bridges would be comprised of concrete prefabricated structures sized to meet the minimum needs to span the drainage course. The bridges would be approximately 100 feet in length with an approximately 10 percent grade. The bridge footing would be approximately 11 to 21 feet in height measures from the slope of the drainage, limiting to visual portion of the bridge. This alternative would construct up to 221 residential units at the same design and density of the project. To accommodate the reduced footprint that would result from providing a 100-foot wetland buffer, this alternative would require an additional deviation to the City of San Diego development regulations to accommodate three stories.

As discussed in Section 4.11.3.2.b, the project site is approximately 25 feet below I-805 and proposed grading would not substantially change the grade on-site, overall site massing would be largely screened from surrounding views. Specifically, views into the project site from I-805 and also from Dennery Road are mostly blocked due to topography and existing eucalyptus trees bordering I-805. Brief views of the Otay River valley are available from the portion of Dennery Road that passes by the site; however, due to the topography of the project site in relation to Dennery Road, in addition to the buffer between the site and the Otay River, even with increased height among a portion of the structures, this alternative would not likely block any view of the Otay River from Dennery Road. Impacts associated with scenic views and resources would be less than significant, similarly compared to the project.

The three-story buildings would be structurally and architecturally designed to ensure that bulk and massing would be visually similar with surrounding residential neighborhoods. Although the residential land uses to the east of the site are two-stories, with this alternative's preservation of wetland habitat including a 100-foot buffer, on-site development would be separated by over 200-feet of native off-site slopes and an average of 160 to 200 feet of preserved habitat. The additional residential building height of this alternative would not be overtly noticeable or in contrast with the adjacent development considering its elevation relative to the surrounding areas. Impacts related visual character would likely be less than significant, similarly to the project.

This alternative would include a lighting design similar to surrounding residential development including interior and exterior security lighting and parking, architectural highlighting, and landscape lighting. Like the project, this alternative would restrict construction activities as required by the SDMC and operational lighting would comply with the City of San Diego's Outdoor Lighting Regulations, which requires that all outdoor light fixtures shall be installed in a manner that minimizes negative impacts from light pollution, including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Through regulatory compliance, this alternative's impacts associated with light and glare would be less than significant, the same compared to the project.

9.5.1.12 Hydrology and Water Quality

This alternative would be constructed on the same project site; however, within a reduced footprint compared to the project. Like the project, off-site remedial grading for trail improvements would be

required. This alternative would be required to comply with the NPDES permit program during construction. Under the NPDES permit program, the project would prepare a Stormwater Pollution Prevention Plans prior to ground-disturbing activities, identifying measures that would be employed during construction to avoid runoff into surface waters. With respect to operations, this alternative would implement site-specific site design, source control, treatment control BMPs consistent with all relevant federal, regional, and local water quality standards including the NPDES permit and Construction General Permit and City of San Diego General Plan policies, SDMC, Drainage Design Manual and Stormwater Standards Manual. Notwithstanding, the project's compliance with regulations, the site is in proximity to known burn ash sites which could result in the accidental release of burn ash into surface water resulting in a significant impact. Like the project this alternative would implement mitigation measure **HAZ-SD-1** requiring preparation and approval of a Community Safety Plan under the oversight of the City of San Diego Local Enforcement Agency prior to ground disturbance. Approval and implementation of the plan would ensure potential release relating to burn ash would be less than significant, the same compared to the project.

Like the project, this alternative would be required to ensure maintenance of drainage patterns and runoff potential. Hydromodification management would be employed similar to the project; however, based on this alternative's reduced footprint biofiltration basins and/or detention vaults would be designed to be sized and placed within the development to allow adequate saturation of stored runoff prior to release. The design of the BMPs would be consistent with the City of San Diego Drainage Design Manual, and it would be ensured that runoff volumes and velocities exiting the site would decrease compared to the existing condition. Therefore, this alternative's impacts related to drainage and changes in stream flow velocities would be less than significant, similarly compared to the project.

9.5.1.13 Public Services and Facilities

This alternative would result in the same number of units being developed compared to the project. Therefore, it would generate the same amount of people, increasing fire and police service calls to the same degree as the project. Likewise, this alternative would generate the same number of students and need for schools, libraries and area parks and recreation facilities. As analyzed in Section 4.13.3.2.b, like the project, existing City of San Diego fire and police services would be able to adequately serve this alternative and would not trigger the need to construct new facilities, the physical impacts of which could be significant. Additionally, this alternative would contribute fair share funding to any future needs for fire, police, and library services.

Like the project, this alternative includes several privately funded park improvements that would be open to the public; however, they are not intended to satisfy the development's population-based park requirements. The alternative would satisfy park impacts by paying the required citywide park development impact fees.

With respect to schools, both the Chula Vista Elementary School District and San Diego Unified High School District have indicated adequate ability to serve the anticipated student population (see Appendix Q). Additionally, school district fees would be paid.

Therefore, under this alternative no physical impacts would occur related to the provision of adequate fire, police, parks, libraries, or school facilities as no such facilities are proposed. The alternative would not result in physical impacts related to the construction of facilities for fire, emergency services, police protection, schools, parks, or libraries and impacts would be less than significant, the same compared to the project.

9.5.1.14 Utilities and Service Systems

This alternative's demand on potable water supplies would be the same as the project. As evaluated in Sections 4.14.4.1.b and 4.14.4.2.b, the Urban Water Management Plan accounts for adequate water under normal, single dry, or multiple dry year conditions. Like the project, this alternative would allow more residential development compared to the adopted land use it is not expected that the increased development would conflict with the City of San Diego's future water demand projections or per capita water use targets. SANDAG Series 13 estimates that the City of San Diego would grow in population by approximately 14,156 people per year from 2020 to 2035. This would equate to an additional 5,435 units per year from 2020 to 2035. Therefore, while this alternative would include additional residential in an area previously planned for open space, this would be accommodated in the regional growth projections and would not conflict with regional growth forecast, which accounts for residential growth in the City of San Diego.

This alternative would result in the same wastewater generation, and the demand on other utilities such as electric and telecommunications as the project. Like the project, landscaping would include California native, drought-tolerant plant palette that is predominantly consistent with the landscape plan plant palette. Overall, impacts related to utility and service systems would be less than significant, the same compared to the project.

9.5.1.15 Wildfire

This alternative would be located on the same site as the project, providing the same secondary emergency only access road. This alternative would not impair implementation of, or physically interfere with, the San Diego Emergency Operations Plan, as access to evacuation routes would be provided from the main project access road, which provides evacuation routes from Dennery Road to other portions of the Otay Mesa community. Additionally, like the project, this alternative would be subject to review by the San Diego Fire-Rescue Department and the San Diego Police Department to ensure compliance with applicable safety standards.

Like the project, post-development brush management zones in conjunction with proper long-term maintenance would substantially lower fire behavior intensity during peak weather conditions. This would provide the existing adjacent residential structures and proposed structures on-site with the ability to survive a vegetation fire on the project site with little intervention of firefighting forces. This alternative would also implement brush management zones and alternative compliance measures, similar to the project, which would not increase hazards to on-site structures from wildland fires and hazards to adjacent properties. In addition, all habitable structures under this alternative would be equipped with automatic alarm and sprinkler systems and would have fire resistance construction per Chapter 7A of the CBC. This alternative would comply with state and City standards associated with fire hazards and prevention. Therefore, this alternative's impacts related to wildfire including

emergency plans, pollutants from wildfire, infrastructure, and flooding or landslide hazards in post-fire conditions would be less than significant, the same as the project.

9.5.2 Impact Summary

The Reduced Footprint Wetland Impact Reduction Alternative would reduce the severity of the project's impacts related to biological resources due to a reduction in wetland impacts; however, impacts to other biological resources would remain significant, the same as Annexation Scenario 2a. Potential impacts related to the following issue areas would be less than the project, with or without mitigation: Paleontological Resources, Historical Resources, and Tribal Cultural Resources. Impacts related to aesthetics, scenic resources and visual character would be greater compared to the Annexation Scenario 2a but continue to be less than significant. Impacts for all other issue areas would be the same. Refer to Table 9-3 for a detailed comparison of significant impacts.

9.5.3 Project Objectives

The Reduced Footprint Wetland Impact Reduction Alternative would meet Objective 1, as it would redevelop an underutilized property to provide housing in response to housing needs. This alternative would also meet Objective 2 because it would require LAFCO action to annex into the City of San Diego. Objectives 3 and 5 would be met because, although the footprint of the development would be reduced, this alternative would provide a residential community conducive to walking and bicycling and provide amenities that contribute to the nearby OVRP recreational uses. Additionally, construction of this alternative would generate some financial benefits and meet Objective 6.

Due to the reduced development footprint and the need to construct three-story residential structures, housing under this alternative would be constructed as single product: row-homes. This would not meet the Objective 4 to provide a variety of housing. Overall, the Reduced Footprint Wetland Impact Reduction Alternative would meet five out of six objectives and would meet the basic project objectives.

9.6 Environmentally Superior Alternative

CEQA Guidelines (Section 15126.6[e][2]) require that an environmentally superior alternative be identified among the alternatives considered. The environmentally superior alternative is generally defined as the alternative which would result in the least adverse environmental impacts to the project site and surrounding area. As summarized in Table 9-1, the environmentally superior project would be the No Project (Development Under the Existing Plan) Alternative as it would avoid many of the environmental impacts compared to the project. However, it would also not achieve the basic project objectives. Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives. The context of an environmentally superior alternative is based on consideration of several factors, including the project's objectives and the ability to fulfill the goals while reducing potential impacts to the environment.

The Reduced Unit Alternative would be the environmentally superior alternative. This alternative would provide housing and amenities to the OVRP. All impacts associated with this alternative would be the same or less compared to the No Annexation Scenario/ Annexation Scenario 2b. A Service Area Plan Agreement to provide City of San Diego Fire and Police Services to the site would be required by the City of Chula Vista. Additionally, because this alternative would not meet the City of San Diego Fire Code, it would remain within the City of Chula Vista, with no possibility of annexation. Therefore, while this alternative would meet most of the project objectives, it would not meet the key project objective of achieving efficient provision of services because this alternative would be a project that remains in the City of Chula Vista with services being provided by the City of San Diego.

Chapter 10.0
Mitigation Monitoring and Reporting Program

California Environmental Quality Act (CEQA) Section 21081.6 requires that a mitigation monitoring and reporting program (MMRP) be adopted upon certification of an Environmental Impact Report (EIR) to ensure that the mitigation measures are implemented. The MMRP specifies what the mitigation is, the entity responsible for monitoring the program, and when in the process it should be accomplished.

The EIR prepared for the Nakano Project (project), incorporated herein as referenced, focused on issues determined to be potentially significant by the City of Chula Vista and the City of San Diego. The issues addressed in the EIR include land use, air quality, biological resources, geologic and paleontological resources, greenhouse gas emissions, health and safety/hazardous materials, historical resources, noise, transportation, tribal cultural resources, aesthetics, hydrology/water quality, public services, utilities and service systems, and wildfire.

Public Resources Code Section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. After analysis, potentially significant impacts were identified for each scenario. The issues found to be significant for each issue and scenario are summarized in Table 10-1 below. No feasible mitigation was identified to address the significant impact in Annexation Scenario 2a related to Land Use (policy consistency) and Transportation (vehicle miles traveled).

Table 10-1
Summary of Issue Areas with Significant Impacts by Scenario

Issue	No Annexation Scenario/ Annexation Scenario 2b	Annexation Scenario 2a
Land Use and Planning	-	X
Biological Resources	X	X
Geologic and Paleontological Resources	X	-
Greenhouse Gas Emissions	X	X
Health and Safety/Hazardous Materials	X	X
Historical Resources	X	X
Transportation	X	X
Tribal Cultural Resources	X	X
Hydrology and Water Quality	X	X

The environmental analysis concluded that the potentially significant impacts associated with all resource areas could be avoided or reduced through implementation of recommended mitigation measures, with the exception that impacts associated with land use policy consistency in Annexation Scenario 2a, greenhouse gas emissions in all scenarios, and transportation (vehicle miles traveled) in all scenarios were determined to be significant.

Due to the three scenarios evaluated throughout the EIR, two MMRPs have been prepared to facilitate implementation of the MMRP in either scenario. The MMRP for the No Annexation Scenario/Annexation Scenario 2b is provided in Table 10-2 and the MMRP for the Annexation Scenario 2a is included as Table 10-3. The MMRP for the No Annexation Scenario/Annexation Scenario 2b would be implemented by the City of Chula Vista and/or the City of San Diego as applicable, while the MMRP for Annexation Scenario 2a would be implemented by the City of San Diego.

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
BIOLOGICAL RESOURCES			
Sensitive Vegetation Communities and Land Cover Types. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in significant direct impacts to 17.25 acres of sensitive upland vegetation communities.	**BIO-CV-1: Sensitive Upland Vegetation in Chula Vista**. Prior to the issuance of any land development permits or development activities by the City of Chula Vista, including clearing, grubbing, grading, and/or construction permits, the owner/permittee shall secure mitigation for direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1:1 mitigation ratio and non-native grassland at a 0.5:1 mitigation ratio if mitigated within the MSCP Preserve , or mitigate direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1.5:1 mitigation ratio and non-native grassland at a 1:1 mitigation ratio if mitigated outside the MSCP Preserve. Mitigation for direct impacts would be pursuant to the City of Chula Vista's Subarea Plan consistent with the ratios listed in Table 5-3 of the Subarea Plan. The applicant may meet this mitigation requirement through purchase of upland mitigation credits (e.g., Tier II credits at San Miguel Conservation Bank or Willow Road Mitigation Bank). The applicant is required to provide proof of mitigation credit purchase to the City of Chula Vista prior to issuance of any land development permits.	Prior to the issuance of any land development permits or development activities.	City of Chula Vista
Sensitive Vegetation Communities and Land Cover Types – Indirect impacts to sensitive vegetation communities. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in indirect impacts to sensitive vegetation communities adjacent to the development areas due to dust, erosion, and runoff generated by construction activities.	**BIO-CV-2: Biological Monitor**. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, for any areas adjacent to the Preserve and the off-site facilities located within the Preserve, the project Applicant shall provide written confirmation that a City of Chula Vista-approved biological monitor has been retained and shall be on-site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all preconstruction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas, and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the Chula Vista MSCP Subarea Plan and/or permits issued by any other agencies having jurisdictional authority over the project. Before construction activities occur in areas containing sensitive biological resources within the off-site facilities area, all workers shall be educated by a City of Chula Vista-approved biologist to recognize and avoid those areas that have been marked as sensitive biological resources.	Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, for any areas adjacent to the Preserve and the off-site facilities located within the City of Chula Vista Preserve.	City of Chula Vista
Same as the above impact	**BIO-CV-3: Best Management Practices**. Best management practices will be implemented during all grading activities to reduce potential indirect effects on special-status species and habitat. Best management practices shall include the following: • Prior to ground disturbance, all permanent and temporary disturbance areas shall be clearly delineated by orange construction fencing and the identification of environmentally sensitive areas with flagging and/or fencing. • All trash will be properly stored and removed from the site daily to prevent attracting wildlife to the construction area. • Vehicles and equipment will be stored only on pre-designated staging areas in disturbed or developed areas. Fueling should be conducted in a manner that prevents spillage of fuel into riparian or wetland habitats. • All maintenance of vehicles and equipment will be conducted in a manner so that oils and other hazardous materials will not discharge into riparian or wetland habitats. • Dust control measures will be implemented to minimize the settling of dust on vegetation.	During all grading activities within the City of Chula Vista.	City of Chula Vista

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	• Appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) will be available on the site during all phases of project construction, and appropriate fire prevention measures will be taken to help minimize the chance of human-caused wildfires. • All construction will be performed between dawn and dusk to the degree feasible to minimize potential indirect effects (e.g., increased depredation) on the species beyond the limits of disturbance.		
Special Status Plants – Otay Tarplant. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in significant direct impacts to 14 Otay tarplant individuals within off-site improvement areas in the City of San Diego.	**BIO-SD-3: Otay Tarplant Mitigation**. Prior to the issuance of land development permits for the off-site improvement areas by the City of San Diego, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including Otay tarplant soils and seed bank, the project applicant shall prepare an Otay Tarplant Mitigation Plan demonstrating mitigation of impacted Otay Tarplant individuals at a 4:1 ratio for a total of 56 plants (see Biology Report; Attachment 17). The Otay Tarplant Mitigation Plan shall be written by a City of San Diego-approved biologist to the satisfaction of the Development Services Director (or their designee). The Otay Tarplant Mitigation Plan shall, at a minimum, evaluate options for plant salvage and relocation, including selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within a suitable receptor site. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site and will be based on the most reliable methods of successful relocation. The Otay Tarplant Mitigation Plan shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, and any relevant contingency measures. The Otay Tarplant Mitigation Plan shall be subject to the oversight of the City of San Diego Development Services Department (DSD) director (or their designee). In lieu of the above Otay Tarplant Mitigation Plan, the applicant may also purchase equivalent mitigation credits at a City of San Diego-approved mitigation bank. The mitigation bank must contain an Otay tarplant population or have the species reintroduced for the purposes of mitigation. The applicant is required to provide proof of mitigation credit purchase to the City of San Diego prior to issuance of any land development permits.	Prior to the issuance of land development permits by the City of San Diego within the off-site improvement areas, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including Otay tarplant soils and seed bank.	City of San Diego
Special Status Plants – California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego sunflower, small-flowered microseris, and ashy spike-moss. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in indirect impacts to special-status plant species including California adolphia, San Diego bur-sage, San Diego barrel cactus, San Diego sunflower, small-flowered microseris, and ashy spike-moss	Refer to **BIO-CV-2** and **BIO-CV-3**, above.	Refer to **BIO-CV-2** and **BIO-CV-3**, above.	Refer to **BIO-CV-2** and **BIO-CV-3**, above.

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
Special Status Wildlife – Least Bell's Vireo. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in direct and indirect impacts to least Bell's vireo.	**BIO-CV-5: Least Bell's Vireo Avoidance**. For any work proposed between March 15 and September 15, a preconstruction survey for the least Bell's vireo shall be performed to reaffirm the presence and extent of occupied habitat. The preconstruction survey area for the species shall encompass all potentially suitable habitat within the project work zone, as well as a 300-foot survey buffer. The preconstruction survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a qualified biologist familiar with the City of Chula Vista MSCP Subarea Plan. The results of the preconstruction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If least Bell's vireo is detected, a minimum 300-foot buffer delineated by orange biological fencing shall be established around the detected species to ensure that no work shall occur within occupied habitat from March 15 through September 15. On-site noise reduction techniques shall be implemented to ensure that construction noise levels do not exceed 60 dB(A) L_{eq} at the location of any occupied sensitive habitat areas. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. If the results of the preconstruction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the preconstruction report.	For any work proposed between March 15 and September 15.	City of Chula Vista
Special Status Wildlife – Coastal California Gnatcatcher. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in direct impacts to the coastal California gnatcatcher.	Direct impacts to coastal California gnatcatcher within the City of Chula Vista would be mitigated through implementation of mitigation measures **BIO-CV-1** and **BIO-CV-4**. See above.	Refer to **BIO-CV-1** and **BIO-CV-4**, above.	Refer to **BIO-CV-1** and **BIO-CV-4**, above.
Special Status Wildlife – Burrowing Owl. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in direct impacts to burrowing owl.	**BIO-CV-6: Preconstruction Burrowing Owl Survey**. Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the project Applicant shall retain a City of Chula Vista-approved biologist to conduct focused preconstruction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the City of Chula Vista-approved biologist shall prepare a passive relocation mitigation plan subject to review and approval by the wildlife agencies and the City of Chula Vista, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.	Prior to issuance of any land development permits, including clearing, grubbing, and grading permits.	City of Chula Vista
Special Status Wildlife – Yellow-Breasted Chat and Yellow Warbler. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in significant impact to the yellow-breasted chat and yellow warbler.	**BIO-CV-4**: **Preconstruction Nesting Bird Survey**. To avoid any direct impacts to raptors and/or any migratory birds protected under the MBTA, including nesting least Bell's vireo, burrowing owl, yellow warbler, and yellow-breasted chat, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species. The breeding season is defined as February 15–August 15 for coastal California gnatcatcher and other non-raptor birds and January 15–August 31 for raptor species. If removal of habitat on the proposed area of disturbance must occur during the breeding season, the project Applicant shall retain a City of Chula Vista-approved biologist to conduct a preconstruction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The preconstruction survey must be conducted within 10 calendar days prior to the start of construction, and the results must be submitted to the City of Chula Vista for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the City of Chula Vista, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City of Chula Vista for review and approval and implemented to the satisfaction of the City of Chula Vista. The City of Chula Vista's mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.	The breeding season defined as February 15–August 15 for coastal California gnatcatcher and other non-raptor birds and January 15–August 31 for raptor species.	City of Chula Vista

Table 10-2
Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
Special Status Wildlife – Crotch's Bumble Bee. As detailed in Biological Resources Section 4.3.3.1.c of this EIR, the project would result in direct impacts to Crotch's bumble bee.	**BIO-CV-7: Direct Impact Avoidance for Crotch's Bumble Bee.** Should this species no longer be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no avoidance measures shall be required. 1. Prior to the Notice to Proceed (NTP) for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the Development Services Department (DSD) Director's Environmental Designee shall verify the following project requirements regarding the Crotch's bumble bee are shown on the construction permit: A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance. B. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee. C. The preconstruction survey shall be conducted during the colony active period between April 1 through August 31 by the Qualified Biologist within 30 calendar days prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and within one year prior to the initiation of project activities (including removal of vegetation). The pre-construction survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (ie, Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained, as described below. The surveys shall consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period. D. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable. E. The Qualified Biologist/owner permittee shall submit the results (including positive or negative survey results) of the pre-construction survey to City DSD (Mitigation Monitoring and Coordination) City Planning Department (MSCP) staff and CDFW for review and written approval prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits. F. If pre-construction surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to determine whether project activities would result in impacts to Crotch's bumble bee, in which case an Incidental Take Permit ITP) may be required. If an ITP is required, it shall be obtained prior to	Outside of the active flight period for this species (April 1 through August 31).	City of Chula Vista

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and all necessary permit conditions shall be fulfilled prior to initiation of project activities. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA. G. Survey data shall be submitted by the Qualified Biologist to the CNDDB in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.		
Wetlands – Jurisdictional Resources. As detailed in Biological Resources Section 4.3.4.1.c of this EIR, the project would result in direct impacts to jurisdictional resources.	**BIO-CV-8: Wetland Restoration/Creation and Permits**. Prior to issuance of land development permits by the City of Chula Vista, including clearing, grubbing, grading, and/or construction permits that impact jurisdictional waters, the project applicant shall provide compensatory wetland mitigation resulting in no overall net loss of wetlands. A total of 0.40 acre of impacts to RWQCB wetland waters, CDFW riparian, and City of Chula Vista wetlands. A total of 1.20 acres of mitigation for permanent impacts shall be provided, at minimum. To ensure no net loss, the mitigation shall include a 1:1 creation component. Prior to issuance of land development permits, including clearing, grubbing, grading, and/ or construction permits by the City of Chula Vista that impact jurisdictional waters, the project applicant shall obtain all necessary permits from RWQCB, and CDFW, and shall mitigate direct impacts pursuant to the City of Chula Vista MSCP Subarea Plan and in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of RWQCB, and CDFW shall be delineated on all grading plans. The applicant shall submit a Final Wetlands Mitigation and Monitoring Plan to the satisfaction of the City of Chula Vista, RWQCB, and CDFW. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; a five-year maintenance, monitoring, and reporting program; an estimated completion time; contingency measures; and shall identify a long-term funding source. A Conceptual Wetland Mitigation Plan has been prepared and is included in Attachment 14 of the Biological Resources Report, which identifies planned wetlands restoration located within the City of San Diego. If restoration occurs in San Diego, the project applicant shall also be required to implement the Wetlands Mitigation and Monitoring Plan subject to the oversight and approval of the City of San Diego Development Services Department director (or their designee), City of San Diego Parks and Recreation Open Space Division, RWQCB, and CDFW and any additional requirements of **BIO-SD-8** detailed in Table 10-3 shall apply. If the restoration is completed in Chula Vista, the applicant shall be required to enter into a Secured Agreement with the City of Chula Vista consisting of a letter of credit, bond, or cash for 100 percent of the estimated costs associated with the implementation of the Wetland Mitigation Plan. The applicant shall provide the endowment for the long-term funding source. Should the purchase of additional mitigation credits be necessary to satisfy permit conditions from RWQCB, and CDFW, applicant shall secure mitigation credits within a City of Chula Vista-approved conservation bank in accordance with the terms and conditions of all required permits. The applicant is required to present proof of mitigation credit purchase to the City of Chula Vista and the Wetland Agencies prior to issuance of any land development permits.	Prior to issuance of land development permits by the City of Chula Vista.	City of Chula Vista
Wetlands – Jurisdictional Resources. As detailed in Biological Resources Section 4.3.4.1.c of this EIR, the project would result in indirect impacts to jurisdictional resources.	**BIO-CV-9: HLIT Permit**. Prior to issuance of any land development permits (including clearing, grubbing, and/or grading permits), the project will be required to obtain a HLIT Permit pursuant to Chapter 17.35 of the Chula Vista Municipal Code for impacts to MSCP Tier II and III habitats and wetland resources.	Prior to issuance of any land development permits by the City of Chula Vista.	City of Chula Vista

Table 10-2
Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
GEOLOGIC AND PALEONTOLOGICAL RESOURCES			
Paleontological or Unique Geologic Feature. As detailed in Geologic and Paleontological Resources Section 4.4.6.1.c of this EIR, construction activity could uncover and potentially damage paleontological resources within the Pleistocene Alluvial Floodplain Deposits and the San Diego and/or Mission Valley Formation.	**GEO-CV-1: Paleontological Resources**: Prior to the issuance of grading permits, the applicant shall provide written confirmation to the City of Chula Vista that a qualified paleontologist has prepared a Paleontological Resources Impact Mitigation Program (PRIMP) and has been retained to carry out the PRIMP. A qualified paleontologist is defined as an individual with an MS or PhD in paleontology or geology who is familiar with paleontological procedures and techniques and has expertise in local geology, stratigraphy, and biostratigraphy. The PRIMP shall be consistent with the Society of Vertebrate Paleontology (2010) guidelines and contain the following components: • Introduction to the project, including project location, description grading activities with the potential to impact paleontological resources, and underlying geologic units. • Description of the relevant laws, ordinances, regulations, and standards pertinent to the project and potential paleontological resources. • Requirements for the qualified paleontologist to attend the preconstruction meeting and provide worker environmental awareness training at the preconstruction meeting as well as at the jobsite the day grading is to be initiated. In addition, the qualified paleontologist shall inform the grading contractor and City Resident Engineer of the paleontological monitoring program methodologies. • Identification of where paleontological monitoring of excavations impacting the San Diego Formation, Old Alluvial Floodplain Deposits, and deep excavations (greater than five feet below the ground surface) in areas underlain by Young Alluvial Floodplain Deposits is required within the project site based on construction plans and/or geotechnical reports. • Procedures for adequate paleontological monitoring (including necessary monitoring equipment), methods for treating fossil discoveries, fossil recovery procedures, and sediment sampling for microvertebrate fossils, including the following requirements: o A paleontological monitor shall be on-site at all times during the original cutting of previously undisturbed sediments of moderately to highly sensitive geologic units (e.g., San Diego Formation, Old Alluvial Floodplain Deposits, and excavations below a depth of five feet below the ground surface in areas underlain by Young Alluvial Floodplain Deposits) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. Monitoring is not required during shallow excavations within Young Alluvial Floodplain Deposits. o Paleontological monitoring is not required in areas underlain by Artificial Fill unless grading activities are anticipated to extend beneath the veneer of fill and impact underlying geological units with moderate to high paleontological sensitivity (e.g., San Diego Formation, Old Alluvial Floodplain Deposits, or deeper excavations into Young Alluvial Floodplain Deposits). o If fossils are discovered, the qualified paleontologist and/or paleontological monitor shall recover them. The paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading within 50 feet of the resource to allow recovery of fossil remains. Because of the potential for the recovery of small fossil remains, it may be necessary in certain instances, and at the discretion of the qualified paleontologist, to	Prior to the issuance of grading permits by the City of Chula Vista.	City of Chula Vista

Table 10-2
Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	set up a screen-washing operation on the project site. Alternatively, sediment samples can be collected and processed off-site. • Paleontological reporting, and collections management: o Prepared fossils along with copies of all pertinent field notes, photos, maps, and the final paleontological monitoring report discussed below shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum within 90 days of completion of monitoring unless the City of Chula Vista and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time. Any curation costs shall be paid for by the applicant. o A final paleontological monitoring report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils, and shall be submitted to the designated scientific institution within 90 days of the completion of monitoring unless the City of Chula Vista and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time.		
GREENHOUSE GAS EMISSSIONS			
Conflicts with the CAP or other Policies. As detailed in Greenhouse Gas Emissions Section 4.5.4.1.c of this EIR, because the project would be inconsistent with several of the key Prioritization Strategies of the 2022 Scoping Plan Update for Achieving Carbon Neutrality. The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, therefore GHG impacts would be significant.	**GHG-CV-1: Transit Passes.** Prior to first occupancy, the Permittee shall implement a transit subsidy program. The subsidy value will be limited to the equivalent value of 25 percent of the cost of an MTS "Regional Adult Monthly/30 Day Pass" (currently $72, which equates to a subsidy value of $18 per month). Subsidies will be available on a per unit basis to residential tenants for a period of five years (five years after issuance of the first occupancy permit). Permittee shall provide an annual report to the City Engineer in each of the first five years demonstrating how the offer was publicized to residents and documenting the results of the program each year, including number of participants and driveway traffic counts.	Prior to the issuance of the first occupancy permit.	City of Chula Vista
Same as above impact	**GHG-CV-2: Commute Trip Reduction Program.** Prior to first occupancy, the Permittee shall develop and implement a commute trip reduction program that requires each homeowner and tenant to be provided with a one-page flyer every year that provides information regarding available transit, designated bicycle routes, local bicycle groups and programs, local walking routes and programs, and rideshare programs.	Prior to the issuance of the first occupancy permit.	City of Chula Vista
Same as above impact	**GHG-CV-3: Bicycle Micro-mobility Fleet.** Prior to first occupancy, the Permittee shall provide one bicycle (up to a $400 value) per unit to the first buyer of each unit.	Prior to the issuance of the first occupancy permit.	City of Chula Vista
Same as above impact	**GHG-CV-4: Energy Star Appliances.** Prior to the issuance of residential building permits, the Permittee shall submit building plans illustrating that residential structures shall have Energy Star rated appliances (clothes washers, dishwashers, refrigerators, and ceiling fans).	Prior to the issuance of residential building permits.	City of Chula Vista
Same as above impact	**GHG-CV-5: Alternative Water Heating.** Prior to the issuance of building permits, the Permittee shall submit building plans illustrating that residential structures shall have non-gas water heaters (e.g., electric or solar water heating).	Prior to the issuance of building permits.	City of Chula Vista
Same as above impact	**GHG-CV-6: Water Efficient Landscaping.** Prior to the issuance of building permits, the Permittee shall submit landscaping plans illustrating that the project would provide low-water use/drought tolerant plant species with low water use irrigation (e.g., spray head or drip), where required.	Prior to the issuance of building permits.	City of Chula Vista

Table 10-2
Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
HEALTH AND SAFETY/HAZARDOUS MATERIALS			
Accidental Release. Although no burn ash was identified within the Nakano site or within areas of the Davies property proposed for remedial grading, the potential for burn ash to be encountered during grading would be a significant impact.	**HAZ-CV-1: Community Health and Safety Plan.** Prior to any ground disturbance, the Permittee/Owner shall prepare a Community Health and Safety Plan (CHSP) to be reviewed and approved by the San Diego County Department of Environmental Health and Quality, Local Enforcement Agency. The CHSP shall include a site description, the scope of work to be conducted, responsibilities and key personal and contact information, analysis of hazards present, and procedures and protocols based on current regulatory standards and guidance to be utilized in the event any hazardous condition is encountered. The CHSP shall include information informing all personnel of the potential presence of burn ash and procedures to follow if any is encountered during construction activities. The County LEA shall be invited to any preconstruction meetings and the approved CHSP shall be distributed to all contractors and implemented by the Permittee/Owner, the Contractor, and subcontractors prior to and during all soil excavation activities. The Contractor shall serve as the Site Safety Manager and oversee the implementation of the CHSP. The Permittee/Owner shall provide the City of Chula Vista evidence of completion and approval of the CHSP prior to issuance of grading permits and to the City of San Diego prior to issuance of grading permits for the off-site improvement areas.	Prior to ground disturbance within the City of Chula Vista.	City of Chula Vista
Same as above impact.	Grading within the off-site improvement areas within the City of San Diego would require implementation of **HAZ-SD-1.** Refer to Table 10-3 for details of the measure.	Prior to ground disturbance within the off-site improvement areas in the City of San Diego.	City of San Diego.
HISTORICAL RESOURCES			
Prehistoric/Historic Resources. As detailed in the Historical Resources Section 4.7.3.1.c, potentially significant impacts to unknown prehistoric/archaeological resources could result during ground disturbance.	**HIST-CV-1: Archaeological Monitoring.** To mitigate impacts to historical resources to a level that is less than significant, procedures for proper treatment of unanticipated archaeological finds must comply with the State CEQA Guidelines. Adherence to the following requirements during initial earth-disturbing activities will assure the proper treatment of unanticipated archaeological or Native American cultural material: 1. An archaeological monitor and a Kumeyaay Native American monitor shall be present full-time during all initial ground-disturbing activities. If proposed project excavation later presents evidence suggesting a decrease in cultural sensitivity, the monitoring schedule can be reduced pending archaeological, Native American, and City of Chula Vista consultation. 2. In the event that previously unidentified potentially significant historical resources are discovered, the archaeological monitor, Native American monitor, construction or other personnel shall have the authority to divert or temporarily halt ground disturbance operations in the area of the find. The archaeological monitor shall evaluate and minimally document isolates and clearly non-significant deposits in the field. More significant deposits shall be evaluated by the cultural Primary Investigator in consultation with the Native American monitor and City of Chula Vista staff. For significant historical resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the qualified archaeologist and approved by the City of Chula Vista, then carried out using professional archaeological methods. The Research Design and Data Recovery Program shall include (1) reasonable efforts to preserve (avoidance) "unique" historical resources or Sacred Sites pursuant to CEQA Section 21083.2(g) as the preferred option; (2) the capping of identified Sacred Sites or unique historical resources and placement of development over the cap, if avoidance is infeasible; and (3) data recovery for non-unique historical resources. Construction activities will be allowed to resume in the affected area only after proper evaluation.	During initial earth-disturbing activities.	City of Chula Vista

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
Same as above impact.	Grading within the off-site improvement areas within the City of San Diego would require implementation of **HIST-SD-1.** Refer to Table 10-3 for details of the measure.	Prior to permit issuance, prior to start of construction, during construction, and post construction within the off-site improvement areas in the City of San Diego.	City of San Diego
Human Remains. As detailed in the Historical Resources Section 4.7.4.1.c, there is a potential for buried human remains to be disturbed by grading and construction activities.	**HIST-CV-2: Discovery of Human Remains.** To mitigate impacts to human remains to a level that is less than significant, procedures for proper treatment of unanticipated finds must comply with the State CEQA Guidelines. In the event of discovery of unanticipated human remains, personnel shall comply with Public Resources Code Section 5097.98, CEQA Guidelines Section 15064.5, and Health and Safety Code Section 7050.5 during earth-disturbing activities: 1. If any human remains are discovered, the construction personnel or the appropriate representative shall contact the County Coroner and City of Chula Vista. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the Most Likely Descendant regarding their recommendations as required by California Public Resources Code Section 5097.98 has been conducted. California Public Resources Code Section 5097.98, CEQA Guidelines Section 15064.5 and Health & Safety Code Section 7050.5 shall be followed.	During grading and construction activities.	City of Chula Vista
TRANSPORTATION			
Vehicle Miles Traveled (VMT). As detailed in the Transportation Section 4.9.4.1.c, even with the application of project design features and GHG mitigation measures that support VMT reductions, project VMT impacts would not be reduced below the 85th percentile mean VMT per capita.	**TRA-CV-1**: Prior to issuance of the first building permit, the Owner/Permittee shall pay the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101 as mitigation to the greatest extent feasible. The Owner/Permittee shall provide evidence to the City of Chula Vista that the fee has been paid.	Prior to issuance of the first building permit.	City of Chula Vista
TRIBAL CULTURAL RESOURCES			
Tribal Cultural Resources. As identified in the Tribal Cultural Resources Section 4.10.3.2.c, there is the potential for inadvertent discovery of a tribal cultural resource to be impacted by project implementation.	Implementation of mitigation measure **HIST-CV-1** within the project site and remedial grading area within the City of Chula Vista as detailed in Section 4.7.3.1.d, requires Native American monitoring during ground disturbance activities consistent with the results of tribal consultation.	During ground disturbing activities.	City of Chula Vista
Same impact as above.	Consistent with the requests of the tribes during consultation and to ensure the protection of tribal cultural resources, **HIST-SD-1** would be required to reduce potential impacts to tribal cultural resources.	During ground disturbing activities within the off-site improvement areas in the City of San Diego.	City of San Diego

Table 10-2 Mitigation Monitoring and Reporting Program for the No Annexation Scenario/Annexation Scenario 2b			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
HYDROLOGY AND WATER QUALITY			
Water Quality. As identified in Section 4.12.3.1.c, due to the RECs on-site and within the Davies property, and the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a potentially significant impact to water quality.	To mitigate impacts associated with the accidental release of potential burn ash during ground disturbance within the project site and within the off-site components located within the City of Chula Vista under the No Annexation Scenario and Annexation Scenario 2b, mitigation measure **HAZ-CV-1** Community Health and Safety Plan would be required.	Prior to ground disturbance and during grading within the project areas located within the City of Chula Vista.	City of Chula Vista
Same impact as above	To mitigate impacts associated with potential burn ash release during ground disturbance within the off-site improvement areas located within the City of San Diego under the No Annexation Scenario and Annexation Scenario 2b, mitigation measure **HAZ-SD-1** Community Health and Safety Plan, as detailed in Section 4.6.3.1.d, would be required.	Prior to ground disturbance and during grading within the off-site improvement areas in the City of San Diego.	City of San Diego

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
LAND USE AND PLANNING			
Land Use Plan Consistency. As detailed in the Land Use section, 4.1.4.2.c of this EIR, the project. would conflict with goals, objectives and policies contained within the City of San Diego General Plan Housing Element that requires housing to be consistent with the City of San Diego's CAP.	Implementation of **GHG-SD-1** through **GHG-SD-6** would minimize impacts related to CAP inconsistency to the extent feasible.	Prior to the issuance of any land development permits or development activities.	City of San Diego
BIOLOGICAL RESOURCES			
Sensitive Vegetation Communities and Land Cover Types. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in direct impacts to a total of 17.25 acres of sensitive upland vegetation communities.	**BIO-SD-1: Sensitive Upland Vegetation**. Prior to the issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions by the City of San Diego for Annexation Scenario 2a, the owner/permitee shall mitigate for impacts to sensitive upland vegetation in accordance with the City of San Diego's 2018 Biology Guidelines. The project owner/permitee shall mitigate direct impacts to Diegan coastal sage scrub and Diegan coastal sage scrub: *Baccharis*-dominated at a 1:1 mitigation ratio and non-native grassland at a 0.5:1 ratio inside the MHPA. Mitigation for 3.43 acres of Diegan coastal sage scrub (Tier II), 0.17 acre of Diegan coastal sage scrub: *Baccharis*-dominated (Tier II), and 13.65 acres of non-native grassland (Tier IIIB) will be achieved through the preservation of 10.43 acres of Diegan coastal sage scrub habitat (Tier II) at the Pacific Highlands Ranch Restoration and Mitigation Credit Area. The applicant shall provide proof of mitigation credit purchase to the City of San Diego via a mitigation ledger prior to issuance of any land development permits.	Prior to the issuance of any land development permits or development activities.	City of San Diego
Sensitive Vegetation Communities and Land Cover Types. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in indirect impacts to sensitive habitat.	**BIO-SD-2: Biological Resource Protection During Construction** **I. Prior to Construction** A. **Biologist Verification -** The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2018), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project. B. **Preconstruction Meeting -** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage. C. **Biological Documents -** The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, ESL, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state or federal requirements. D. **BCME -** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall	Prior to construction, during construction, and post construction.	City of San Diego

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents. E. **Resource Delineation -** Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site. F. **Education -** Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.). **II. During Construction** A. **Monitoring -** All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the preconstruction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery. B. **Subsequent Resource Identification -** The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna onsite (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist. **III. Post Construction Measures** A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.		
Special Status Plants – Otay Tarplant. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in direct impacts to 14 individuals of Otay tarplant located in the City of San Diego off-site improvement areas.	**BIO-SD-3: Otay Tarplant Mitigation Plan.** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, shall incorporate the following mitigation measures into the project design and include them verbatim on all appropriate construction documents. **Prior to Permit Issuance** A. Land Development Review (LDR) Plan Check 1. Prior to NTP or issuance for any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, whichever is applicable, the ADD environmental designee	Prior to the issuance of land development permits by the City of San Diego.	City of San Diego

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	shall verify that the requirements for the revegetation/restoration plans and specifications, including mitigation of direct impacts to Otay tarplant individual plants at a 4:1 ratio. While the number of individual plants present may vary year-to-year, it is estimated 14 individuals would be impacted and mitigation would include 56 Otay tarplant individuals. The landscape construction documents and specifications must be found to be in conformance with the Otay Tarplant Mitigation Plan for the Nakano Project prepared by RECON 2022, the requirements of which are summarized below: B. Revegetation/Restoration Plan(s) and Specifications 1. Landscape Construction Documents (LCD) shall be prepared on D-sheets and submitted to the City of San Diego Development Services Department, Landscape Architecture Section (LAS) for review and approval. LAS shall consult with Mitigation Monitoring Coordination (MMC) and obtain concurrence prior to approval of LCD. The LCD shall consist of revegetation/restoration, planting, irrigation and erosion control plans; including all required graphics, notes, details, specifications, letters, and reports as outlined below. 2. Landscape Revegetation/Restoration Planting and Irrigation Plans shall be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Revegetation/Restoration Plans) of the City of San Diego's LDC Biology Guidelines. The Principal Qualified Biologist (PQB) shall identify and adequately document all pertinent information concerning the revegetation/restoration goals and requirements, such as but not limited to, plant/seed palettes, timing of installation, plant installation specifications, method of watering, protection of adjacent habitat, erosion and sediment control, performance/success criteria, inspection schedule by City staff, document submittals, reporting schedule, etc. The LCD shall also include comprehensive graphics and notes addressing the ongoing maintenance requirements (after final acceptance by the City). 3. The Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Construction Manager (CM) and Grading Contractor (GC), where applicable shall be responsible to insure that for all grading and contouring, clearing and grubbing, installation of plant materials, and any necessary maintenance activities or remedial actions required during installation and the 120-day plant establishment period are done per approved LCD. The following procedures at a minimum, but not limited to, shall be performed: a. The RMC shall be responsible for the maintenance of the *upland* mitigation area for a minimum period of 120 days. Maintenance visits shall be conducted on a *weekly* basis throughout the plant establishment period. b. At the end of the 120-day period the PQB shall review the mitigation area to assess the completion of the short-term plant establishment period and submit a report for approval by MMC. c. MMC will provide approval in writing to begin the *five-year* long-term establishment/maintenance and monitoring program. d. Existing indigenous/native species shall not be pruned, thinned or cleared in the revegetation/mitigation area. e. The revegetation site shall not be fertilized. f. The RIC is responsible for reseeding (if applicable) if weeds are not removed, within one week of written recommendation by the PQB.		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	g. Weed control measures shall include the following: (1) hand removal, (2) cutting, with power equipment, and (3) chemical control. Hand removal of weeds is the most desirable method of control and will be used wherever possible. h. Damaged areas shall be repaired immediately by the RIC/RMC. Insect infestations, plant diseases, herbivory, and other pest problems will be closely monitored throughout the *five-year* maintenance period. Protective mechanisms such as metal wire netting shall be used as necessary. Diseased and infected plants shall be immediately disposed of off-site in a legally-acceptable manner at the discretion of the PQB or Qualified Biological Monitor (QBM) (City approved). Where possible, biological controls will be used instead of pesticides and herbicides. 4. If a Brush Management Program is required the revegetation/restoration plan shall show the dimensions of each brush management zone and notes shall be provided describing the restrictions on planting and maintenance and identify that the area is impact neutral and shall not be used for habitat mitigation/credit purposes. C. Letters of Qualification Have Been Submitted to ADD 1. The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the PQB, Principal Restoration Specialist (PRS), and QBM, where applicable, and the names of all other persons involved in the implementation of the revegetation/restoration plan and biological monitoring program, as they are defined in the City of San Diego Biological Review References. Resumes and the biology worksheet should be updated annually. 2. MMC will provide a letter to the applicant confirming the qualifications of the PQB/PRS/QBM and all City Approved persons involved in the revegetation/restoration plan and biological monitoring of the project. 3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the revegetation/restoration plan and biological monitoring of the project. 4. PBQ must also submit evidence to MMC that the PQB/QBM has completed Storm Water Pollution Prevention Program (SWPPP) training. **Prior to Start of Construction** A. PQB/PRS Shall Attend Preconstruction (Precon) Meetings 1. Prior to beginning any work that requires monitoring: a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB or PRS, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the revegetation/restoration plan(s) and specifications with the RIC, CM and/or GC. c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB/PRS, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the revegetation/ restoration phase of the project, including site grading preparation.		

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	2. Where Revegetation/Restoration Work Will Occur a. Prior to the start of any work, the PQB/PRS shall also submit a revegetation/restoration monitoring exhibit (RRME) based on the appropriate reduced LCD (reduced to 11"x 17" format) to MMC, and the RE, identifying the areas to be revegetated/restored including the delineation of the limits of any disturbance/grading and any excavation. b. PQB shall coordinate with the construction superintendent to identify appropriate Best Management Practices (BMPs) on the RRME. 3. When Biological Monitoring Will Occur a. Prior to the start of any work, the PQB/PRS shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur. 4. PQB Shall Contact MMC to Request Modification a. The PQB may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the revegetation/restoration plans and specifications. This request shall be based on relevant information (such as other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present. **During Construction** A. PQB or QBM Present During Construction/Grading/Planting 1. The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, excavation, landscape establishment in association with (insert project-related impacts i.e., construction and/or grading activity) which could result in impacts to sensitive biological resources as identified in the LCD and on the RRME. **The RIC and/or QBM are responsible for notifying the PQB/PRS of changes to any approved construction plans, procedures, and/or activities. The PQB/PRS is responsible to notify the CM, LA, RE, BI and MMC of the changes.** 2. The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVRs shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC. 3. The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other than that of associated with biology). 4. All construction activities (including staging areas) shall be restricted to the development areas as shown on the LCD. The PQB/PRS or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance as shown on the approved LCD. 5. The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance adjacent to (or at the edge of) all sensitive habitats (include names of		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	specific species to be protected and/or identify the specific habitat type to be protected), as shown on the approved LCD. 6. The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly 7. The PQB or QBM shall oversee implementation of BMPs, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMPs upon completion of construction activities. Removal of temporary construction BMPs shall be verified in writing on the final construction phase CSVR. 8. PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area. 9. The long-term establishment inspection and reporting schedule per LCD must all be approved by MMC prior to the issuance of the Notice of Completion (NOC) or any bond release. B. Disturbance/Discovery Notification Process 1. If unauthorized disturbances occurs or sensitive biological resources are discovered that where not previously identified on the LCD and/or RRME, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate. 2. The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMPs). After obtaining concurrence with MMC and the RE, PQB and CM shall install the approved protection and agreement on BMPs. 3. The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation). C. Determination of Significance 1. The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs. 2. MMC shall review this letter report and provide the RE with MMC's recommendations and procedures. **Post Construction** A. Mitigation Monitoring and Reporting Period 1. *Five-Year* Mitigation Establishment/Maintenance Period		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	a. The RMC shall be retained to complete maintenance monitoring activities throughout the *five-year* mitigation monitoring period. b. Maintenance visits will be conducted twice per month for the first six months, once per month for the remainder of the first year, and quarterly thereafter. c. Maintenance activities will include all items described in the LCD. d. Plant replacement will be conducted as recommended by the PQB (note: plants shall be increased in container size relative to the time of initial installation or establishment or maintenance period may be extended to the satisfaction of MMC. 2. Five-Year Biological Monitoring a. All biological monitoring and reporting shall be conducted by a PQB or QBM, as appropriate, consistent with the LCD. b. Monitoring shall involve both qualitative horticultural monitoring and quantitative monitoring (i.e., performance/success criteria). Horticultural monitoring shall focus on soil conditions (e.g., moisture and fertility), container plant health, seed germination rates, presence of native and non-native (e.g., invasive exotic) species, any significant disease or pest problems, irrigation repair and scheduling, trash removal, illegal trespass, and any erosion problems. c. After plant installation is complete, qualitative monitoring surveys will occur monthly during year one and quarterly during years two through five. d. Upon the completion of the 120-days short-term plant establishment period, quantitative monitoring surveys shall be conducted at 0, 6, 12, 24, 36, 48 and 60 months by the PQB or QBM. The revegetation/restoration effort shall be quantitatively evaluated once per year (in spring) during years three through five, to determine compliance with the performance standards identified on the LCD. All plant material must have survived without supplemental irrigation for the last two years. e. Quantitative monitoring shall include the use of fixed transects and photo points to determine the vegetative cover within the revegetated habitat. Collection of fixed transect data within the revegetation/restoration site shall result in the calculation of percent cover for each plant species present, percent cover of target vegetation, tree height and diameter at breast height (if applicable) and percent cover of non-native/non-invasive vegetation. Container plants will also be counted to determine percent survivorship. The data will be used to determine attainment of performance/success criteria identified within the LCD. f. Biological monitoring requirements may be reduced if, before the end of the fifth year, the revegetation meets the fifth-year criteria and the irrigation has been terminated for a period of the last two years. g. The PQB or QBM shall oversee implementation of post-construction BMPs, such as gravel bags, straw logs, silt fences or equivalent erosion control measure, as needed to ensure prevention of any significant sediment transport. In addition, the PBQ/QBM shall be responsible to verify the removal of all temporary post-construction BMPs upon completion of construction activities. Removal of temporary post-construction BMPs shall be verified in writing on the final post-construction phase CSVR.		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	C. Submittal of Draft Monitoring Report 1. A draft monitoring letter report shall be prepared to document the completion of the 120-day plant establishment period. The report shall include discussion on weed control, horticultural treatments (pruning, mulching, and disease control), erosion control, trash/debris removal, replacement planting/reseeding, site protection/signage, pest management, vandalism, and irrigation maintenance. The revegetation/restoration effort shall be visually assessed at the end of 120-day period to determine mortality of individuals. 2. The PQB shall submit two copies of the Draft Monitoring Report which describes the results, analysis, and conclusions of all phases of the Biological Monitoring and Reporting Program (with appropriate graphics) to MMC for review and approval within 30 days following the completion of monitoring. Monitoring reports shall be prepared on an annual basis for a period of five years. Site progress reports shall be prepared by the PQB following each site visit and provided to the owner, RMC and RIC. Site progress reports shall review maintenance activities, qualitative and quantitative (when appropriate) monitoring results including progress of the revegetation relative to the performance/success criteria, and the need for any remedial measures. 3. Draft annual reports (three copies) summarizing the results of each progress report including quantitative monitoring results and photographs taken from permanent viewpoints shall be submitted to MMC for review and approval within 30 days following the completion of monitoring. 4. MMC shall return the Draft Monitoring Report to the PQB for revision or for preparation of each report. 5. The PQB shall submit revised Monitoring Report to MMC (with a copy to RE) for approval within 30 days. 6. MMC will provide written acceptance of the PQB and RE of the approved report. D. Final Monitoring Reports(s) 1. PQB shall prepare a Final Monitoring upon achievement of the fifth-year performance/success criteria and completion of the five-year maintenance period. a. This report may occur before the end of the fifth year if the revegetation meets the fifth-year performance/success criteria and the irrigation has been terminated for a period of the last two years. b. The Final Monitoring report shall be submitted to MMC for evaluation of the success of the mitigation effort and final acceptance. A request for a pre-final inspection shall be submitted at this time, MMC will schedule after review of report. c. If at the end of the five years any of the revegetated area fails to meet the project's final success standards, the applicant must consult with MMC. This consultation shall take place to determine whether the revegetation effort is acceptable. The applicant understands that failure of any significant portion of the revegetation/restoration area may result in a requirement to replace or renegotiate that portion of the site and/or extend the monitoring and establishment/maintenance period until all success standards are met. E. Management and Maintenance in Perpetuity The Otay tarplant mitigation area shall be protected and managed/maintained in perpetuity. The Otay tarplant mitigation site shall be addressed through a long-term management plan. The Otay tarplant mitigation area shall be covered by a Covenant of Easement to the benefit of the City of San Diego or dedicated in-fee title to the City of San Diego. The project		

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	proponent shall provide funding in an amount approved by the City based on a Property Analysis Record (PAR; Center for Natural Lands Management ©1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the off-site mitigation area pursuant to the long-term management plan by an agency, nonprofit organization, or other entity approved by the City of San Diego.		
Special Status Wildlife. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in impacts to least Bell's vireo, burrowing owl, coastal California gnatcatcher, yellow-breasted chat, and yellow warbler.	**BIO-SD-4: Avian Protection Requirements.** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for least Bell's vireo, burrowing owl, coastal California gnatcatcher, yellow-breasted chat, and yellow warbler (February 1 to September 15) or a preconstruction survey shall be completed by a Qualified Biologist to determine the presence or absence of nesting least Bell's vireo, burrowing owl, coastal California gnatcatcher, yellow-breasted chat, and yellow warbler on the proposed area of disturbance. The preconstruction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the preconstruction survey to City of San Diego DSD for review and written approval prior to initiating any construction activities. If nesting birds are detected, a letter report in conformance with the City of San Diego's Biology Guidelines and applicable state and federal law (i.e., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City of San Diego for review and written approval and implemented to the satisfaction of the City of San Diego. The City of San Diego's MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.	Outside of the breeding season (February 1 to September 15).	City of San Diego
Special Status Wildlife – Least Bell's Vireo. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in direct impacts to least Bell's vireo.	**BIO-SD-5: Direct Impact Avoidance and Noise Restrictions for Least Bell's Vireo**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the City of San Diego Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans: No clearing, grubbing, grading, or other construction activities shall occur between March 15 and September 15, the breeding season of the least Bell's vireo, until the following requirements have been met to the satisfaction of the City of San Diego Manager: A. A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) Recovery Permit) shall survey those wetland areas that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the least Bell's vireo. Surveys for this species shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of construction. If the least Bell's vireo is present, then the following conditions must be met: 1. Between March 15 and September 15, no clearing, grubbing, or grading of occupied least Bell's vireo habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and 2a. Between March 15 and September 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied least Bell's vireo or habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the City of San Diego Manager at least two weeks prior to the	Prior to the preconstruction meeting.	City of San Diego

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	commencement of construction activities. Prior to the commencement of any of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or 2b. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring* shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16). *Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the Qualified Biologist and the City of San Diego Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment. B. If least Bell's vireo are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the City of San Diego Manager and applicable resource agencies for review and written approval which demonstrates whether or not mitigation measures such as noise walls are necessary between March 15 and September 15 as follows: 1. If this evidence indicates the potential is high for least Bell's vireo to be present based on historical records or site conditions, then condition A.III shall be adhered to as specified above. 2. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary. Also, refer to **BIO-SD-7** and **BIO-SD-4**.		
Special Status Wildlife – Burrowing Owl. As detailed in Biological Resources Section 4.3.3.2.c of this EIR, the project would result in impacts to burrowing owl foraging habitat.	**BIO-SD-6: Burrowing Owl Preconstruction Survey and Avoidance in the City of San Diego**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the City of San Diego Manager (or appointed designee) shall verify that the following project requirements regarding burrowing owl are shown on the construction plans: PRECONSTRUCTION SURVEY ELEMENT **Prior to Permit or Notice to Proceed Issuance**: 1. As this project area has been determined to be burrowing owl occupied or to have burrowing owl occupation potential, the Applicant Department or Permit Holder shall submit evidence to the ADD of Entitlements and MSCP staff, to the satisfaction of the City, verifying that a Biologist possessing qualifications pursuant to the "Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency Department of Fish and Game. March 7,	Prior to permit or notice to proceed issuance, prior to start of construction, during construction, and post construction.	City of San Diego

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	2012" (hereafter referred as CDFG 2012, Staff Report), has been retained to implement a burrowing owl construction impact avoidance program. 2. The qualified burrowing owl biologist (or their designated biological representative) shall attend the preconstruction meeting to inform construction personnel about the City of San Diego's burrowing owl requirements and subsequent survey schedule. **Prior to Start of Construction:** 1. The Applicant Department or Permit Holder and Qualified Biologist must ensure that initial preconstruction/take avoidance surveys of the project "site" are completed between 14 and 30 days before initial construction activities begin, including brushing, clearing, grubbing, or grading of the project site; regardless of the time of the year. "Site" means the project site and the area within a radius of 450 feet of the project site. The report shall be submitted and approved by the Wildlife Agencies and/or City of San Diego MSCP staff prior to construction or burrowing owl eviction(s) and shall include maps of the project site and burrowing owl locations on aerial photos. 2. The preconstruction survey shall follow the methods described in CDFG 2012, Staff Report - Appendix D-3. 24 hours prior to commencement of ground disturbing activities, the Qualified Biologist shall verify results of preconstruction/take avoidance surveys. via review of the Survey Report (see report requirements in CDFG 2012, Staff Report - Appendix D-3) that is to be provided to the City and Wildlife Agencies. Written verification via the Survey Report shall be provided to the City of San Diego's Mitigation Monitoring and Coordination (MMC) and MSCP Sections, and to the satisfaction of these sections. If results of the preconstruction surveys have changed and burrowing owl are present in areas not previously identified, immediate notification to the City of San Diego and Wildlife Agencies shall be provided prior to ground disturbing activities. **During Construction:** 1. Best Management Practices shall be employed as burrowing owls are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are burrowing owl occupied and have followed all protocol in this mitigation section, or sites within 450 feet of occupied burrowing owl areas, should undertake measures to discourage burrowing owls from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms. 2. Ongoing Burrowing Owl Detection - If burrowing owls or active burrows are not detected during the preconstruction surveys, Section "A" below shall be followed. If burrowing owls or burrows are detected during the preconstruction surveys, Section "B" shall be followed. NEITHER THE MSCP SUBAREA PLAN NOR THIS MITIGATION SECTION ALLOWS FOR ANY BURROWING OWLS TO BE INJURED OR KILLED OUTSIDE OR WITHIN THE MHPA; in addition, IMPACTS TO BURROWING OWLS WITHIN THE MHPA MUST BE AVOIDED. A. **Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are Not Detected During the Initial Preconstruction Survey** - Monitoring the site for new burrows is required using CDFG Staff Report 2012 Appendix D methods for the period following the initial preconstruction survey, until construction is scheduled to be complete and is complete (NOTE - Using a projected completion date [that is amended if needed] will allow development of a monitoring schedule).		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	1) If no active burrows are found but burrowing owls are observed to occasionally (1–3 sightings) use the site for roosting or foraging, they should be allowed to do so with no changes in the construction or construction schedule. 2) If no active burrows are found but burrowing owls are observed during follow up monitoring to repeatedly (4 or more sightings) use the site for roosting or foraging, the City of San Diego's MMC and MSCP Sections shall be notified and any portion of the site where owls have been sited and that has not been graded or otherwise disturbed shall be avoided until further notice. 3) If a burrowing owl begins using a burrow on the site at any time after the initial preconstruction survey, procedures described in Section B must be followed. 4) Any actions other than these require the approval of the City of San Diego and the Wildlife Agencies. B. **Post Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are detected during the Initial Preconstruction Survey -** Monitoring the site for new burrows is required using Appendix D CDFG 2012, Staff Report for the period following the initial preconstruction survey, until construction is scheduled to be complete and is complete (NOTE - Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol). 1) This section (B) applies only to sites (including biologically defined territory) wholly outside of the MHPA – all direct and indirect impacts to burrowing owls within the MHPA SHALL be avoided. 2) If one or more burrowing owls are using any burrows (including pipes, culverts, debris piles, etc.) on or within 300 feet of the proposed construction area, the City of San Diego's MMC and MSCP Sections shall be immediately contacted. The City of San Diego's MSCP and MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist appropriate City of San Diego biologist for on-going coordination with the Wildlife Agencies and the qualified consulting burrowing owl biologist. No construction shall occur within 300 feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography, and other physical and biological characteristics. a) **Outside the Breeding Season** - If the burrowing owl is using a burrow on-site outside the breeding season (i.e., September 1–January 31), the burrowing owl may be evicted after the qualified burrowing owl biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFG 2012 Staff Report, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies and City of San Diego (MMC and MSCP). Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation. b) **During Breeding Season** - If a burrowing owl is using a burrow on-site during the breeding season (February 1–August 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the burrowing owls can be evicted. Eviction requires preparation of an Exclusion Plan prepared in accordance with CDFG 2012 Staff Report, Appendix E (or most recent guidance available) for review and submittal to Wildlife Agencies and City of		

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	San Diego (MMC and MSCP). Written concurrence from the Wildlife Agencies is required prior to Exclusion Plan implementation. 3. **Survey Reporting During Construction** - Details of construction surveys and evictions (if applicable) carried out shall be immediately (within 5 working days or sooner) reported to the City of San Diego's MMC, and MSCP Sections and the Wildlife Agencies and must be provided in writing (as by e-mail) and acknowledged to have been received by the required Agencies and DSD Staff member(s). **Post Construction:** 1. Details of all surveys and actions undertaken on-site with respect to burrowing owls (i.e., occupation, eviction, locations etc.) shall be reported to the City of San Diego's MMC Section and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries off all previous reports for the site; and maps of the project site and burrowing owl locations on aerial photos.		
Special Status Wildlife – Crotch's Bumble Bee. Direct impact avoidance for Crotch's bumble bee shall be implemented to avoid potential impacts to Crotch's bumble bee during construction should this species be a state candidate for listing or state listed as threatened or endangered at the time of project construction as detailed in **BIO-SD-7**. If the California Department of Fish and Wildlife (CDFW) finds that the candidacy is not warranted and the species is removed from the list of candidate species, then no avoidance measures shall be required.	**BIO-SD-7: Direct Impact Avoidance for Crotch's Bumble Bee**. Should this species no longer a be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no avoidance measures shall be required. Prior to the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits, the following Crotch's Bumble Bee Avoidance Requirements shall be implemented: A. To avoid impacts to Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance. B. A Qualified Biologist must demonstrate the following qualifications, or those of an adopted CDFW protocol for Crotch's bumble bee: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee. C. The preconstruction survey shall be conducted during the colony active period between April 1 through August 31 by the Qualified Biologist prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and within one year prior to the initiation of project activities (including removal of vegetation). The preconstruction survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained, as described below. The surveys shall consist of three separate visits spaced two to four weeks apart. Survey results will be considered valid until the start of the next colony active period. D. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee,, then the qualified biologist shall be required authorization via a	Prior to permit or notice to proceed issuance, prior to start of construction, during construction, and post construction.	City of San Diego

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable. E. The Qualified Biologist/owner permittee shall submit the results (including positive or negative survey results) of the preconstruction survey to City DSD (Mitigation Monitoring and Coordination), City Planning Department (MSCP) staff and CDFW for review and written approval prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits. F. If preconstruction surveys identify Crotch's bumble bee individuals onsite, the Qualified Biologist shall notify and consult with CDFW to determine whether project activities would result in impacts to Crotch's bumble bee, in which case an Incidental Take Permit ITP) may be required. If an ITP is required, it shall be obtained prior to issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits and all necessary permit conditions shall be fulfilled prior to initiation of project activities. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, § 786.9) under the CESA. G. Survey data shall be submitted by the Qualified Biologist to the CNDDB in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.		
Wetlands – Jurisdictional Resources. As detailed in Biological Resources Section 4.3.4.2.c of this EIR, the project would result in indirect impacts to jurisdictional resources.	**BIO-SD-8: Wetland Restoration/Creation and Permits**. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions the owner/permittee shall provide compensatory wetland mitigation in accordance with the City of San Diego Land Development Code Biology Guidelines, resulting in no overall net loss of wetlands. To offset the loss of 0.40 acre of impacts to USACE and RWQCB wetland waters, CDFW riparian, and City of San Diego wetlands (a total of 0.80 acre of mitigation for jurisdictional impacts) shall be provided. To ensure no net loss, this shall include a 1:1 creation or restoration component (0.40 acre of creation or restoration). Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits by the City of San Diego that impact jurisdictional waters, the project applicant shall obtain all necessary permits from USACE, RWQCB, and CDFW, and shall mitigate direct impacts in accordance with the terms and conditions of all required permits. Areas under the jurisdictional authority of USACE, RWQCB, and CDFW shall be delineated on all grading plans. The applicant shall prepare a Final Wetlands Mitigation and Monitoring Plan and submit it for review and approval to the satisfaction of the City of San Diego, USACE, RWQCB, and CDFW. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; contingency measures; and identify long-term funding. The project applicant shall implement the Wetlands Mitigation and Monitoring Plan subject to the oversight and approval of the City of San Diego DSD director (or their designee), RWQCB, and CDFW. The project proponent shall provide funding in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (PAR) (Center for Natural Lands Management ©1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the off-site wetland mitigation area by an agency, nonprofit organization, or other entity approved by the City and the Wildlife Agencies.	Prior to issuance of land development permits.	City of San Diego

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	A Conceptual Wetland Mitigation and Long-term Management Plan has been prepared and is included in Attachment 13 of the Biological Resources Report.		
Wetlands – Protection and Management Element.	**BIO-SD-9: Protection and Management Element.** Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the remaining environmentally sensitive lands (ESL) shall be placed in a covenant of easement (Figure 6-1) per Section 143.0140(a) of the City of San Diego Municipal Code ESL regulation (City of San Diego 2022). These lands will not be used towards mitigation and will be protected from future development. Long-term management of the wetlands within the covenant of easement would be managed by the Homeowners Association in accordance with the Long-term Management Plan (see SD-BIO-9).	Prior to issuance of land development permits.	City of San Diego
Same as above impact	**BIO-SD-10:** Prior to the issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, a long-term management plan shall be prepared to the satisfaction of the City of San Diego DSD director (or their designee), USFWS, and CDFW to address the ongoing maintenance of the on-site wetland mitigation lands to remain. This plan shall require (1) yearly inspection and enforcement of lighting within the site to be directed and shielded away from the wetland area; (2) yearly maintenance of the 6-foot block wall that separates the development from the wetland area to reduce intrusion into the wetlands; (3) control invasive species appearing within the wetland three times a year; (4) brush management once a year with techniques that protect habitat quality; and (5) trash removal once a year. The project proponent shall provide funding in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (Center for Natural Lands Management 1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the on-site wetland mitigation area by the Owner/Permittee. A Conceptual Long-term Management Plan for the On-site Wetlands at the Nakano Project has been prepared and is included in Attachment 15 of the Biological Resources Report	Prior to issuance of land development permits.	City of San Diego
GREENHOUSE GAS (GHG) EMISSIONS			
Climate Action Plan Consistency. As detailed in Greenhouse Gas Emissions Section 4.5.3.2.c of this EIR, because the project would not be consistent with the growth projections used in the development of the Climate Action Plan, cumulative GHG impacts would be significant.	**GHG-SD-1: Transit Passes.** Prior to the issuance of the first occupancy permit, the Owner/Permittee shall implement a transit subsidy program. The subsidy value will be limited to the equivalent value of 25 percent of the cost at the time of occupancy permit issuance of an MTS "Regional Adult Monthly/30-Day Pass" (currently $72, which equates to a subsidy value of $18 per month). Subsidies will be available on a per unit basis to residential tenants for a period of five years (five years after issuance of the first occupancy permit). Owner/Permittee shall provide an annual report to the City Engineer in each of the first five years demonstrating how the offer was publicized to residents and documenting the results of the program each year, including number of participants and driveway traffic counts.	Prior to the issuance of the first occupancy permit.	City of San Diego
Same as above impact	**GHG-SD-2: Commute Trip Reduction Program.** Prior to the issuance of the first occupancy permit, the Owner/Permittee shall develop and implement a commute trip reduction program that requires each homeowner and tenant to be provided with a one-page flyer every year that provides information regarding available transit, designated bicycle routes, local bicycle groups and programs, local walking routes and programs, and rideshare programs.	Prior to the issuance of the first occupancy permit.	City of San Diego
Same as above impact	**GHG-SD-3: Bicycle Micro-mobility Fleet.** Prior to the issuance of the first of occupancy permit, the Owner/Permittee shall provide one bicycle (up to a $400 value) per unit to the first buyer of each unit.	Prior to the issuance of the first occupancy permit.	City of San Diego
Same as above impact	**GHG-SD-4: Energy Star Appliances.** Prior to the issuance of building permits, the Owner/Permittee shall submit building plans illustrating that residential structures shall have Energy Star rated appliances (clothes washers, dishwashers, refrigerators, and ceiling fans).	Prior to the issuance of residential building permits.	City of San Diego

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
Same as above impact	**GHG-SD-5: Alternative Water Heating.** Prior to the issuance of building permits, the Owner/Permittee shall submit building plans illustrating that residential structures shall have non-gas water heaters (e.g., electric or solar water heating).	Prior to the issuance of building permits.	City of San Diego
Same as above impact	**GHG-SD-6**: **Water Efficient Landscaping.** Prior to the issuance of building permits, the Owner/Permittee shall submit landscaping plans illustrating that the project would provide low-water use/drought tolerant plant species with low water use irrigation (e.g., spray head or drip), where required.	Prior to the issuance of building permits.	City of San Diego
HEALTH AND SAFETY/HAZARDOUS MATERIALS			
Accidental Release. Although no burn ash was identified within the Nakano site or within areas of the Davies property proposed for remedial grading, the potential for burn ash to be encountered during grading would be a significant impact.	**HAZ-SD-1: Community Health and Safety Plan**. Prior to issuance of any construction permits, including but not limited to: the first Grading Permit, Demolition Permits and Building Permits or a Notice to Proceed for Subdivisions, the Owner/Permittee shall prepare a Community Health and Safety Plan (CHSP) to address the project site and potential burn ash contamination to be reviewed and approved by the City of San Diego Local Enforcement Agency (LEA). The CHSP shall include a site description, the scope of work to be conducted, responsibilities and key personal and contact information, analysis of hazards present, and procedures and protocols based on current regulatory standards and guidance to be utilized in the event hazardous conditions related to burn ash is encountered. Such conditions can include visual observations that indicate evidence of burn ash such as heat frosted glass shards, or stained or discolored soil. The CHSP shall include information informing all personnel of the potential presence of burn ash and procedures to follow if any is encountered during construction activities. The City of San Diego LEA shall be invited to any preconstruction meetings and the approved CHSP shall be distributed to all contractors and implemented by the Owner/Permittee, the Contractor, and subcontractors prior to and during all soil excavation activities. The Contractor shall serve as the Site Safety Manager and oversee the implementation of the CHSP. The Owner/Permittee shall provide the City of San Diego evidence of completion and approval of the CHSP prior to issuance of grading permits.	Prior to permit issuance, prior to start of construction, during construction, and post construction.	City of San Diego
HISTORICAL RESOURCES			
Prehistoric/Historic Resources. As detailed in the Historical Resources Section 4.7.3.2.c, potentially significant impacts to unknown prehistoric/archaeological resources could result during site grading.	**HIST-SD-1: Archaeological and Native American Monitoring** I. Prior to Permit Issuance A. Entitlements Plan Check 1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process. B. Letters of Qualification have been submitted to ADD 1. The applicant shall submit a letter of verification to the Mitigation Monitoring and Coordination (MMC) office identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation. 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.	Prior to permit issuance, prior to start of construction, during construction, and post construction.	City of San Diego

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program. II. Prior to Start of Construction A. Verification of Records Search 1. The PI shall provide verification to MMC that a site specific records search (¼-mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from the South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed. 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities. 3. The PI may submit a detailed letter to MMC requesting a reduction to the ¼-mile radius. B. PI Shall Attend Precon Meetings 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified archaeologist and Native American monitor shall attend any grading/excavation related precon meetings to make comments and/or suggestions concerning the archaeological monitoring program with the CM and/or Grading Contractor. If the PI is unable to attend the precon meeting, the applicant shall schedule a focused precon meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring. 2. Identify Areas to be Monitored a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits. b. The AME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation). 3. When Monitoring Will Occur a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur. b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	III. During Construction A. Monitor(s) Shall be Present During Grading/Excavation/Trenching 1. The archaeological monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities that could result in impacts to archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances Occupational Safety and Health Administration (OSHA) safety requirements may necessitate modification of the AME. 2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B–C and IV.A–D shall commence. 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present. 4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVRs shall be faxed or emailed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (Notification of Monitoring Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC. B. Discovery Notification Process 1. In the event of a discovery, the archaeological monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate. 2. The monitor shall immediately notify the PI (unless monitor is the PI) of the discovery. 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible. 4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered. C. Determination of Significance 1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section IV below. a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP), which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC.		

Table 10-3 Mitigation Monitoring and Reporting Program for Annexation Scenario 2a			
Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	Impacts to significant resources must be mitigated before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Guidelines Section 21083.2 shall not apply. c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the final monitoring report. The letter shall also indicate that no further work is required. IV. Discovery of Human Remains If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.3(e), the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) shall be undertaken: A. Notification 1. Archaeological monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the monitor is not qualified as a PI. MMC will notify the appropriate senior planner in the Environmental Analysis Section of the Development Services Department to assist with the discovery notification process. 2. The PI shall notify the medical examiner after consultation with the RE, either in person or via telephone. B. Isolate discovery site 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the medical examiner in consultation with the PI concerning the provenance of the remains. 2. The medical examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance. 3. If a field examination is not warranted, the medical examiner will determine with input from the PI, if the remains are or are not most likely to be of Native American origin. C. If human remains ARE determined to be Native American 1. The medical examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, ONLY the medical examiner can make this call. 2. NAHC will immediately identify the person or persons determined to be the most likely descendent (MLD) and provide contact information. 3. The MLD will contact the PI within 24 hours or sooner after the medical examiner has completed coordination, to begin the consultation process in accordance with CEQA Guidelines Section 15064.3(e), and the California Public Resources and Health & Safety Codes. 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods. 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR; b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC Section 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN c. To protect these sites, the landowner shall do one or more of the following: (1) Record the site with the NAHC; (2) Record an open space or conservation easement; or (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by Section PRC 5097.98. The document shall be indexed as a notice under the name of the owner. V. Night and/or Weekend Work A. If night and/or weekend work is included in the contract: 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting. 2. The following procedures shall be followed. a. No Discoveries In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8 a.m. of the next business day. b. Discoveries All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery. c. Potentially Significant Discoveries If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV – Discovery of Human Remains shall be followed. d. The PI shall immediately contact MMC, or by 8 a.m. of the next business day, to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made. B. If night and/or weekend work becomes necessary during the course of construction: 1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	2. The RE, or BI, as appropriate, shall notify MMC immediately. C. All other procedures described above shall apply, as appropriate. VI. Post Construction A. Preparation and Submittal of Draft Monitoring Report 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met. a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program shall be included in the Draft Monitoring Report. b. Recording Sites with State of California Department of Parks and Recreation The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms—DPR 523A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City of San Diego's HRG, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report. 2. MMC shall return the Draft Monitoring Report to the PI for revision or, for preparation of the Final Report. 3. The PI shall submit the revised Draft Monitoring Report to MMC for approval. 4. MMC shall provide written verification to the PI of the approved report. 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals. B. Handling of Artifacts 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and cataloged. 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate. 3. The cost for curation is the responsibility of the property owner. C. Curation of artifacts: Accession Agreement and Acceptance Verification 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable. 2. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.		

Table 10-3
Mitigation Monitoring and Reporting Program for Annexation Scenario 2a

Potentially Significant Impact	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
	3. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection 5. D. Final Monitoring Report(s) 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved. 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.		
TRANSPORTATION			
Vehicle Miles Traveled (VMT). As detailed in the Transportation Section 4.9.4.2.c, even with the application of VMT reduction measures and project design features, project VMT impacts would not be reduced below the 85th percentile mean VMT per capita.	**TRA-SD-1:** Prior to issuance of the first building permit, the Owner/Permittee shall pay the City of San Diego Active Transportation In Lieu Fee consistent with SDMC Section 143.1101. as mitigation to the greatest extent feasible, satisfactory to the City of San Diego Engineer. The Owner/Permittee shall provide evidence to the City of San Diego that the fee has been paid.	Prior to issuance of the first building permit in the City of San Diego.	City of San Diego
TRIBAL CULTURAL RESOURCES			
Tribal Cultural Resources. As identified in the Tribal Cultural Resources Section 4.10.3.2.c, there is the potential for inadvertent discovery of a resource that could be impacted by project implementation.	Consistent with the requests of the tribes during consultation and to ensure the protection of tribal cultural resources**,** **HIST-SD-1** would be required to reduce potential impacts to tribal cultural resources.	During ground disturbing activities.	City of San Diego
HYDROLOGY AND WATER QUALITY			
Water Quality. As identified in Section 4.12.3.2.c, due to the RECs on-site and within the Davies property, and the potential for burn ash to be encountered during site grading, pollutants could be released during construction and runoff into surface water, resulting in a potentially significant impact to water quality.	To mitigate impacts associated with the accidental release of potential burn ash during ground disturbance, mitigation measure **HAZ-SD-1** Community Health and Safety Plan would be required.	Prior to ground disturbance and during grading activities.	City of San Diego

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Chapter 12.0
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Chapter 13.0
Certification

This document has been completed by the City of Chula Vista under the direction of the City of Chula Vista Development Services Department, as the lead agency, in coordination with the City of San Diego, Development Services Department, as a responsible agency. A list of contributing City of Chula Vista and consultant staff members, their titles, and affiliations, is provided below. Refer to Chapter 12 for City of San Diego and other agency staff consulted during the preparation of the Environmental Impact Report.

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